Learning to Live with an Unruly Consuming Body

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ABSTRACT

Past research shows that successful consumer learning takes place in environments that support cooperative communities of practice, that enable access to refined didactic resources, and that provide a safe, sympathetic backstage for a controllable and able learning body to durably transition from one repertoire to another. This study complements existing research by investigating a group of lactose-intolerant consumers who must learn to transition to a new consumption repertoire because of socially embarrassing symptoms. Consumers must engage in high-risk, unguided, experiential learning pathways in a less than sympathetic frontstage, without the support of a cooperative community or a well-developed vocabulary, and while grappling with an impaired and unruly body in a dynamic marketplace. The findings demonstrate that consumers adapt to this hostile learning environment by surfing between different consumption repertoires in a fluid, impermanent manner.

Keywords: consumer learning, fecal habitus, learning environments, consumer transitions, consumption repertoires

INTRODUCTION

People need to learn how to consume to effectively participate in the marketplace. As part of this learning process, they need to acquire the right consumption repertoires—practices, knowledge sets, skills, tools, symbols, stories, gestures, and conduct—to correctly interpret and act upon marketing-related information and accomplish other consumer activities (Alba and Hutchinson 2000). Extant research on consumer learning has primarily focused on the outcomes of learning, such as accurate consumer appraisals of a product's benefits, attributes, or price (Maheswaran, Sternthal, and Gürhan 1997; Moorman et al. 2004; Ryle 1945). In this paper, we examine how the consumer learning process takes place, and more specifically, how experiential learning occurs within hostile learning environments.

Past research has showcased consumer learning in environments that support cooperative communities of practice—groups of people who share common concerns, problems, or interests and who collaborate to acquire consumption-centric knowledge and skills (Wenger 1999). Such learning environments provide access to didactic resources and to a safe, sympathetic space (LaTour and Deighton 2019; Maciel and Wallendorf 2017) whose design and pedagogical effectiveness often take for granted a controllable and able learning body. We label such environments hospitable learning environments. In such environments, social support and cooperation serve as vital mechanisms for consumer learning (Arsel and Bean 2013; Phipps and Ozanne 2017). Expert members offer instructions and guidance to scaffold the learning of the community (Moschis and Churchill 1978). In these environments, a capable, physically functional body serves as a shared starting point for all members that helps create consensus and convergence (Maciel and Wallendorf 2017). Finally, hospitable learning environments provide a

safe space removed from a public gaze that helps consumers engage in deliberate practice and rehearsal without the worry of negative social exposure.

Yet not all learning environments are hospitable. There are situations in which consumers cannot find a pre-existing community of practice, where didactic resources are negligible, where the consuming body is unruly, and where consumers must learn in exposed, unsympathetic front stages (Baker 2006; Baker, Stephens, and Hill 2001; Llewellyn 2021). By an unruly body, we mean a consumer body constrained by physical, cognitive or other factors that inhibit an individual's easy participation in the marketplace. Under such circumstances, the marketplace becomes a "minefield [for consumers] where the flipside of help, clarification and learning is embarrassment, misunderstanding, and ... offence" (Llewellyn 2021, 213). Learning in this kind of context takes place in what we term a hostile learning environment. Given the existence of such environments and the obstacles they create for consumer learning, we ask: How do consumers learn new consumption repertoires in hostile learning environments while simultaneously mitigating the risks inherent to learning processes?

To better understand how consumer learning occurs in hostile learning environments, we study a group of consumers learning to live with lactose intolerance (LI). Commonly understood as the inability to digest lactose (the sugar in milk) due to a missing enzyme (lactase) in the small intestine, LI manifests as an unpredictable combination of symptoms. Some are relatively private, such as abdominal cramps. Others are publicly observable, such as bloated bellies, flatulence, and loose stools. These observable manifestations become especially problematic in the context of the modern fecal habitus—the normative expectations surrounding how people engage with the remnants of their digestive activity (Inglis 2001; Thompson 2013). Such norms include expectations of the right place, time and frequency for defecation and flatulence. The effects of LI can lead consumers to transgress norms of the fecal habitus, making the most

To theorize our findings, we draw on experiential learning theories (ELTs) as a conceptual enabling lens (Kolb 1984). ELTs conceptualize learning as a set of transformative interactions between concrete individual experience and the learning environment (Kolb and Kolb 2009). Such theories emphasize a holistic, continuous process which incorporates uncertainty, complexity, risk, and discomfort, and in which learning is a way of challenging existing ideas and perspectives.

Our study contributes to scholarship on consumer learning in two ways. First, our account of consumer learning complements the existing literature by identifying the presence of hostile learning environments that lack scaffolding, guidance, predictability, or safety nets and that make learning risky. This study thus offers a new way of thinking about consumer learning that foregrounds the bodiliness of learning as well as its risks, missteps, and frustrations. Second, we contribute to the literature on repertoire transitions by providing theoretical insights into how consumers learn to navigate the transition between one consumption repertoire (lactose-inclusive) and another (lactose-free). We extend work that frames thresholds between transitions as states of limbo or inescapable labyrinths (Appau, Ozanne, and Klein 2020; Mimoun and Bardhi 2022; Schouten 1991), by showing how consumer-learners continuously surf between different repertoires.

We pause here to review the theoretical foundations behind consumer learning and the fecal habitus. Then, after outlining our methods, we expand on key themes that emerge from our empirical material and discuss the implications of our findings.

THEORETICAL BACKGROUND

The Fecal Habitus: Making Human Waste "Dirty"

Rarely a topic of polite conversation and little analyzed in consumer research (Bradshaw and Canniford 2010), products of the digestive process foreground themselves mainly during moments of dysfunction. Consumers with LI live with dysfunctional digestion daily and face continual fear of transgressing norms set out by the fecal habitus. The fecal habitus governs existing human dispositions to think and act regarding human fecal output (Inglis 2001). We understand habitus as the set of culturally accepted techniques, styles of action, and knowledge that help people act in a manner congruent with existing social norms (Mauss 1973). The fecal habitus shapes bodily practices around fecal output, and alerts people to the social costs of transgressions from these norms.

The key tenet of the fecal habitus is to make excrement invisible (Inglis 2001). This principle can be seen in the social organization and linguistic norms through which people distance themselves from excrement (Weinberg and Williams 2005). Indeed, adult body waste is one of the last great taboos, a "universal disgust substance" whose "sight and smell ... are little tolerated" (Inglis 2001; Rozin, Haidt, and McCauley 1993, 579). A regime of "social silence and invisibility" ensures that even talking about excrement revolts us (Inglis 2001, xvii). Excreta in any form in public is matter out of place that threatens the distinction between private and public

Despite the social importance of the fecal habitus, disability, infirmity, or digestive dysfunctions like lactose intolerance can compromise consumers' ability to conform to its normative demands. Such dysfunctions can undo the "delicate airs and graces that support our social selves, reducing us to disgusting food processing machines" (Bradshaw and Canniford 2010, 108). The unpredictability of bodily reactions torments consumers with the dread of public fecal occurrence or that of being forced to publicly discuss their symptoms (Thompson 2013). Consumers vigilant to the "the threshold of embarrassment" (Elias 1978, 420) must learn how to conform to the fecal habitus or face indignity and humiliation. In order to do so, they must adopt novel consumption repertoires. Yet how do consumers learn to manage these unfamiliar consumption situations? In the following section, we review the literature on consumer learning for insights into different approaches to the learning process.

Consumer Learning

Discretionary Learning in Hospitable Learning Environments. Consumers require knowledge and expertise to correctly engage in consumption (Alba and Hutchinson 2000). When it comes to how consumers acquire such knowledge and expertise, much of the scholarly literature proposes a linear, analytic, life-stage model of learning (Alba and Hutchinson 1987; Carlson et al. 2009; Clarkson, Janiszwski, and Cinelli 2012; Moorman et al. 2004; Ratchford 2001) in which expertise and knowledge result from the "analysis of experience over sequential learning episodes" (LaTour and Deighton 2019, 2). Other models view learning as driven by life stages, notably, the process of socialization "by which young people acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace" (Ward 1974, 2).

In the life-stage approach, consumer expertise and knowledge are demonstrated by high degrees of accuracy, confidence, and calibration, where "accuracy reflects what we know, confidence reflects what we think we know and calibration reflects their correspondence" (Alba and Hutchinson 2000, 123). Accuracy involves propositional, descriptive knowledge about a specific product category or market (Moorman et al. 2004; Ryle 1945) that takes the form of declarative statements about stored information, such as "I know that ..." (Moorman et al. 2004). For instance, consumers can have propositional knowledge that probiotic pills and bacteria in certain fermented foods help break down lactose and prevent unpleasant gas and diarrhea (Fassio et al. 2018). Yet propositional knowledge can be invalidated when market categories change, new products enter an existing category, or a consumer is pushed to participate in an unfamiliar product market. Such circumstances can lead to a miscalibration between consumers' confidence and accuracy, an event which should provoke learning.

An alternate research stream takes a more situated perspective on consumer learning wherein consumers learn by negotiating "socially constituted systems of activity" (Arsel and

Bean 2013; Maciel and Wallendorf 2017; Packer and Goicoechea 2000, 229; Phipps and Ozanne 2017). This approach conceptualizes learning as a "complex social phenomenon ... distributed—stretched over, not divided among—mind, body, activity and culturally organized settings" (Lave 1988, 1). From the situated view, consumers scaffold their learning through participation in focal communities that help stabilize learning practices (Maciel and Wallendorf 2017). While specific learning practices may differ, the situated approach foregrounds analytical skill-development by consumers, such as the acquisition of a more granular and specific vocabulary to scaffold learning (West et al. 1996; LaTour and Deighton 2019).

The situated learning perspective highlights three key characteristics of learning processes. First, the learning projects that structure learning processes are often discretionary in nature. For example, middle-class beer drinkers with time and money may develop new consumption repertoires and vocabularies after volitionally embarking on a learning project to become beer aficionados (Maciel and Wallendorf 2017). Second, learning takes place in environments that offer access to experts and institutionalized resources (Arsel and Bean 2013; LaTour and Deighton 2019; Schouten and McAlexander 1995). For instance, consumers may refer to apps, magazines, and marketer-organized educational offerings that essentially provide a syllabus for learning, a guided path toward increasingly advanced knowledge (Arsel and Bean 2013). Third, the learning pathway is structured by aesthetically legitimate goals that take for granted the learning body's capabilities to assimilate new knowledge without difficulty. According to this characterization, the civilized consumer-learner is always able to use their body as a pedagogical tool to develop expertise while exercising socially sanctioned bodily control.

Despite these insights, the processes behind consumer learning in hostile learning environments, learning that is involuntary, and learning by individuals who struggle with bodily control and capability remain understudied. Indeed, past research does not adequately theorize context-dependent risks that can make learning environments hostile. Context-dependent risks are "multi-faceted in their genesis, highly fluid, processual and thus more or less open to constant revision" (Monaghan 2003, 14). Such risks can manifest as a lack of access to a permissive, safe space where consumers can learn and make mistakes away from a public gaze; the absence of shared discursive or material resources to scaffold learning; or a lack of access to expert community members who can guide potential learners. Context-dependent risks can also arise from significant changes in consumption contexts, such as trans-national immigration, or emerge in response to an immediate and urgent need for learning, as with bodily dysfunctions such as LI. In the latter instance, loss of bodily control or incapability can prevent consumers from using their bodies as effective pedagogical tools, hampering their learning attempts even in cases where discursive resources are available (Thompson and Hirschman 1995).

We argue that insights into discretionary consumer learning that presume a capable, unimpaired learning body within a hospitable learning environment show only one side of the coin of consumer learning. To build a more robust and well-rounded understanding of consumer learning across a variety of environments, we draw on adult learning theories to develop a model of experiential consumer learning in hostile learning environments.

Experiential Learning Theories. Experiential learning theories (ELTs) propose a dynamic, multilinear, process model of learning (Davis 1991). They view learning as a holistic process of adapting to a specific lifeworld where the emphasis is on integrating subjective feelings with emic knowledge and linking observations to actions (Kolb and Kolb 2009). ELTs

share a few fundamental propositions. They conceptualize learning as a continuous process of examining, testing, and integrating new beliefs and ideas alongside existing ones. They also incorporate elements of risk and discomfort into learning pathways and emphasize the role of "conflict, differences and disagreement" as drivers of the learning process (Kolb and Kolb 2009, 43). From an ELT lens, then, the social context of learning, i.e., the learning environment, does not necessarily have to be hospitable for learning to occur.

ELTs ground learning in the "personal knowledge of the learner" (Kolb 1984, 44), meaning knowledge that results from a "combination of grasping and transforming experience" (41). This personal knowledge is located at "the interface between mind, society, and culture, rather than in one or even in all of them ... [it] does not preexist in any one place or form but is enacted in particular situations" (Varela, Rosch, and Thompson 1993, 179). The ELT view of learning as continuous and dynamic is particularly fruitful for theorizing marketplace phenomena in which unpredictability and dynamism are high and in which consumption situations and interpersonal interactions can be capricious. LI is one such instance. Unlike learning to be a wine connoisseur (LaTour and Deighton 2019) or a beer aficionado (Maciel and Wallendorf 2017), learning to live with LI can exert a high cost of failure.

In contrast to linear models of learning, ELTs define learning pathways as emerging from a holistic, resilient learning process that can withstand complexity and non-linearity. While early iterations of ELT emphasized a sequential or cyclical pattern to learning (Kolb 1984), later theorists challenged the idea of sequential linearity and showed that "non-linear routes to learning are perfectly possible" (Dyke 2017, 25; Jarvis 1987). ELTs accommodate the possibility of unsuccessful learning pathways, since not all learning pathways lead to the creation and accumulation of new knowledge. Each learning pathway can have its own risk and reward

profile; in some, learning may be difficult and risky but offer high rewards, while in others, learning might seem smooth and risk-free.

ELTs are especially appropriate for analyzing cases in which a concrete community of practice either does not exist or in which participation is negligible. For such a community to flourish, it "needs to generate and appropriate a shared repertoire of ideas, commitments and memories" (Goulding, Shankar and Canniford 2013, 825). However, when learners' shared ideas and memories concern things and practices considered taboo, such as transgressions of the fecal habitus, communal formation may be impeded. Consumers living with LI, for example, do not have access to guidance and socialization which would help them progress from novice to expert consumers.

We draw on ELTs to theorize how consumers learn in such hostile learning environments. We observe that in settings where established communities of practice are absent, consumers turn to concrete subjective experience as their primary and often only raw material for learning. Moreover, learning happens through tangible episodes of transgressions and mistakes. Learners must reflect individually on these episodes and mine them for insights in the pursuit of MOL 2 dignity and normalcy.

CONTEXT

The dairy industry is one of the largest sectors in the modern food marketplace, on track to reach more than a thousand billion USD in market valuation in 2024 (Statista 2019). Especially for Western consumers, milk products are almost everywhere—in their coffees and toast, in their cakes and ice creams, in the hundreds of varieties of cheeses and yogurts at

supermarkets, and in countless processed foods, including sauces, cereals, breads, snack foods, deli meats, and protein powders. The Western food landscape is saturated with lactose.

Unfortunately, lactose's domination of the food landscape is only matched by the dominance of lactose intolerance in the domain of food intolerances. Currently, 65% of the world's population lives with lactose intolerance (Orenstein 2017), including 30 to 50 million Americans and millions more people across the globe (Miskovitz and Betancourt 2005). Worse, the underlying causes of LI remain unclear. Lactose intolerance can be genetic, with symptoms presenting from birth, or may arise later in life when digestive systems malfunction in response to environmental factors or illness. For instance, damage to the small intestine from gastrointestinal infections, celiac disease, Crohn's disease, irritable bowel syndrome, or even poorly treated drinking water can trigger lactose intolerance and sensitivity to dairy foods in adulthood (Orenstein 2017). The discomfort that results, ranging from abdominal pain to uncontrollable bowel movements, makes LI a problem that cannot be ignored.

One possible solution available to every intolerant consumer is to give up lactose-containing foods. Given that the food marketplace catering to lactose-intolerant consumers has grown significantly, this option would seem promising. Consumers living with LI no longer seek out "special diet foods" in the back of local natural health stores (Thompson and Troester 2002; Thompson 2004). Instead, they can enjoy lactose-free lattes at Starbucks and dairy-free pizzas at Dominos, find a host of low-lactose and lactose-free dairy-based products in supermarkets, and eat at restaurants offering a wide variety of lactose-free dishes. This vibrant lactose-free marketplace should enable consumers living with LI to transition to lactose-free consumption repertoires.

However, going lactose-free is not as straightforward as it sounds. Consumers may have to travel to places where lactose-free product categories are not as well developed or where

labeling at bars and restaurants is inaccurate. They may face situations in which they have no option but to consume lactose, or in which they accidentally consume lactose that is hidden from sight or smell in processed food or baked goods. They may find themselves in unpredictable social situations, with little control over or knowledge of food ingredients. Moreover, adhering to a lactose-free regimen can conflict with the desire to fully enjoy consumption in the company of others (Heaton, Räisänen and Salinas 2016). By limiting themselves to lactose-free products, consumers may struggle with feelings of missing out on hedonic pleasures or with cravings for "the real thing."

In sum, the pervasiveness of lactose in dairy products, its less visible but equally consequential presence in processed foods, and the continuous contextual unpredictability that consumers face can make going fully lactose-free difficult. These challenges are heightened by a lack of access to well-established guidelines about how to become a proficient lactose-free consumer as well as a lack of access to experts in an existing community. In addition, the culture of silence around fecal output undermines consumers' development of an advanced vocabulary to express their feelings and experiences. Ultimately, consumers are left to navigate hostile learning environments and risky experiential learning pathways on their own.

METHODS

This research investigates how people learn to manage the digestive dysfunction brought on by lactose intolerance and its impact on their consumption repertoires. In the coming sections, we explain the fieldwork setting and our approach to collecting and analyzing empirical material.

Fieldwork Setting

We conducted the fieldwork in Finland, a country renowned for milk production and consumption. Finnish people consume more dairy per person than anywhere else in the world and milk is often depicted as the national drink of Finland (Steinson 2011). However, a significant number of Finns—1 in every 5—are lactose intolerant (O'Sullivan 2015). The abundance of dairy in the country's food landscape makes instances of lactose intolerance more pronounced and symptoms more prevalent. This unique setting offers greater variation and nuance in peoples' struggles to align with the fecal habitus while managing LI than might be found in a population with a low level of dairy consumption.

Empirical Material

The primary source of empirical material for this paper is 42 audio-recorded, semi-structured interviews with consumers living with LI, conducted between autumn 2013 and spring 2021. Interviews ranged from 45 to 190 minutes in length (Arsel 2017), with a mean duration of 90 minutes. Each interview was transcribed in full, resulting in 1,984 double-spaced pages of transcripts in total. Participants came from diverse walks of life and were a balanced mix of age, gender and lifestyles (see table 1 for participant characteristics), enabling us to paint a well-rounded picture of LI consumers.

TABLE 1: STUDY PARTICIPANTS

Pseudonym*	Gender	Age	Profession	Education	Relationship to LI and approx. time
					span
Juho	Male	48	Manager	Polytechnic	Medically diagnosed, 6 years
Saara	Female	36	Student	Vocational school	LI and autoimmune disease, 1-2 years
Eevi	Female	34	Energy specialist	University	Self-diagnosed linked to IBS, 27 years
John	Male	62	Manager	University	LI linked to IBS, 50+ years
Hugo	Male	30	Nurse	Polytechnic	LI connected to diabetes, 20 years

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	Mirka	Female	40	Nurse	University	Medically diagnosed, 10 years

Each participant provided their informed consent in accordance with a recommendation laid out by the Finnish National Board on Research Integrity. Transcripts of these interviews contain only anonymized information. We refer to individual excerpts using pseudonyms to protect the anonymity of participants.

We were interested in informants' accounts of the challenges in learning to live with LI, but also the insights and positive surprises they described. We began with grand-tour questions such as "What is it like to be lactose intolerant?" We inquired into informants' consumption

repertoires and encouraged them to share memorable anecdotes and express their ideas and concerns at length. We probed deeper into experiences that related to their dysfunctions and anxieties to get a fuller understanding of the phenomenon.

Data Analysis

Data analysis was performed over the life of the research project in a multi-stage process (Denzin and Lincoln 2011). First, while data collection was still ongoing, we regularly discussed emergent themes and interpretations amongst ourselves (Figueiredo, Gopaldas, and Fischer 2017). Second, we iteratively read and re-read transcripts and coded relevant excerpts (Denzin and Lincoln 2011), looking for codes about diagnosis, sickness, bodily ideals, healthcare, consumption knowledge, skills, and habits. We also engaged in continual iterations between the data and our conceptual framework, trying to find an equilibrium between the two.

Our findings do not offer an exhaustive account of informants' experiences with LI (Denzin and Lincoln 2011). For example, we avoid detailed discussion of consumer narratives of embodied experiences, which would only echo previous research on the socialized body, illness narratives, and chronic illness (Thompson and Hirschman 1995; Thompson 2004, 2005; Wong and King 2008). Instead, we focus on those experiences that are relevant to theory-building about the role of consumer learning in hostile learning environments.

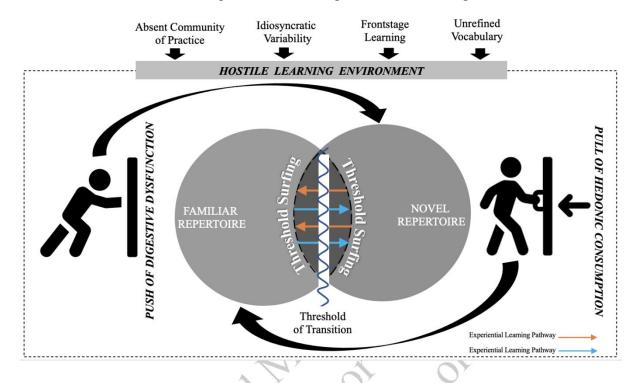
FINDINGS

Lactose-intolerant consumers discover that they possess unruly bodies predisposed to social embarrassment. To minimize the risk of fecal transgression and maximize possibilities for hedonic, sociable consumption, these consumers need to learn new repertoires.

The following figure (figure 1) encapsulates the learning process for our informants. The threat of digestive dysfunction pushes consumers to master a novel consumption repertoire (left side, figure 1). Consumers' learning is complicated by (1) an absent community of practice and thus the lack of expert agents of socialization; (2) idiosyncratic variability of their consuming bodies; (3) the front-staged socio-spatial location of learning; and (4) unrefined and unfit-for-purpose shared vocabulary. This particular configuration of a learning environment transforms learning new consumption repertoires into a risk-laden process where consumers must embrace failure and mistakes. At the same time, the accessible fantasy of hedonic enticement continually pulls them back towards familiar repertoires (right side, figure 1). Consumers resolve this push-and-pull dynamic by continuously surfing the threshold between familiar and novel repertoires, a phenomenon we expand on in greater depth later. Note that we organized the empirical themes to mirror the lived reality of our research participants and subsequently theorize more abstractly from the empirical material as we progress through the findings.

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FIGURE I: Experiential Learning in Hostile Learning Environments



Discovering the Unruly Body

Before the onset of LI, our informants' knowledge related to food repertoires was well-calibrated, with confidence and accuracy in sync. Following the onset of LI, their knowledge now suffers from miscalibration. If they continue with familiar, habitual repertoires, they risk transgressing the fecal habitus. Thus, they are pushed to acquire new subjective knowledge.

Frontstage learning. We first distinguish between frontstage and backstage consumption environments. We understand the backstage as a time and place in which consumers' actions and preparation are shielded from the public gaze and where people can be relatively free of the constraints of social expectations (Goffman 1959). In contrast, the frontstage is a space that exposes consumers' actions to the public gaze and in which they must be cognizant of social norms and expectations and of how others evaluate them. A backstage implies that the consumer

is not being observed, while in the frontstage they are watched. The awareness of being watched gives consumers guidelines on how to behave and how to present themselves and their bodies (Goffman 1959). To conform to the social norms enforced in the frontstage, however, consumers must have control over their bodies. When our informants find themselves in a frontstage consumption environment, they risk experiencing public embarrassment if they consume in habitual ways, through a repertoire that includes lactose. The strong normative force exerted by the fecal habitus should push consumers living with LI away from their habitual consumption repertoires.

Yet some over-confident consumers, relying on incorrect "beliefs about their knowledge" (Carlson et al. 2009), miscalculate the risk and intensity of fecal transgression provoked by foods they have habitually consumed in the past. Such miscalculations expose consumers to embarrassing episodes in the frontstage, in full public view. While these experiences of humiliation provoke consumer learning, they can also extract significant personal cost. For instance, Tiina recognized that she needed a novel consumption repertoire when the experience of going out with her friends for coffee became one of social alienation instead of enjoyable sociality (Johar 2005). Having encountered personal experiences of embarrassment and humiliation, Tiina realized the need to shift to low-lactose or lactose-free dairy after "living in foreign countries for a longer time," where "[My friends] didn't like to be near me if I was drinking milk. If I ate something which included milk, people noticed straightaway. I would get awful gas and everything." Here, the experience of being 'noticed' is a negative one; Tiina received "a surprising rebuff from a friend" instead of "receiving the warm greeting one expected" (Fiske and Taylor 1991, 22). The promise of intimacy and proximity Tiina expected with her friends diminished when her unruly body began to emit discomfiting sounds and smells.

She anticipated the warm glow of friendship but instead experienced alienation and self-abasement. Repeated, public consumption of dairy invited experiences of degradation she would find difficult to erase (Weinberg and Williams 2005; Goffman 1963). This set of incidents made her aware of the miscalibration of "confidence and accuracy" (Alba and Hutchinson 2000, 123) in her habitual food consumption repertoires. If unacknowledged, this miscalibration would have made her vulnerable to further vexing situations in frontstage environments.

Other informants recounted similar experiences in which they recognized that habitual lactose-inclusive consumption repertoires would invite social embarrassment. Sampo explained, "Initially, [lactose intolerance] changed pretty much my whole eating style because everything with white color was suspicious. I didn't try any low-lactose before the test. Those days we didn't have that much lactose-free stuff." To hold suspicion is to acknowledge that one inhabits a potentially unsafe situation; it is to admit a loss of confidence in one's knowledge, calling for constant vigilance (Thompson 2005). Stripped of the safety net offered by well-calibrated knowledge, consumers like Sampo fall back on suspicion (Cronin, McCathy, and Delaney 2015). If Sampo and others are to transition to a more calculated consumption repertoire that mitigates the risk of embarrassment, they must either adopt an attitude of suspicion and stop consuming a large proportion of familiar foods altogether, or they must collect new, subjective, idiosyncratic knowledge about their bodies' reactions on an ongoing basis. In either case, LI consumers recognize their vulnerability to embarrassing episodes in full public glare.

Relatedly, a key genre of vignettes shared by informants was the 'close shave' vignette. Informants narrated experiences which made them starkly aware of the idiosyncratic variability of their consuming bodies springing unwelcome surprises while they were immersed in habitual consumption activities. Jaska narrates one such close shave:

I was out fishing. And then [suddenly] I got a stomachache, stopped, and started going back home. On the way, I felt like, "Okay, I have to get to the toilet immediately." I remembered that one of my friends lived nearby. I rang their doorbell and asked, "Can I use your toilet?" He had some guests at home, and he said, "No, you can't." ... Oh, thank god I got home, like, safely, but yeah, that was some experience. (Jaska)

Jaska was a teenager at the time of this episode, finding his place in high school and engaging in popular recreational activities such as fishing. This episode was troubling for Jaska on two counts. It showed him that safe, familiar occasions such as a fishing trip could turn into precarious situations full of jeopardy. It also reiterated that disgust towards human feces is so deeply entrenched that it overpowered any duty of care his friend might have felt for him. Rather than allowing Jaska inside the house and being potentially tainted by the proximity to fecal matter, Jaska's friend chose not to risk embarrassment in front of his guests. Both Tiina and Jaska struggle with episodes of embarrassment when their unruly bodies come in the way of being with friends. These experiences taint their entire self and jolt them into taking stock of their habitual food repertoires, which have clearly become problematic and pregnant with humiliation.

Despite such challenging experiences, some consumers defer acknowledging the risks posed by their habitual consumption repertoire and deny the lack of calibration between their confidence and accuracy. They cling to the hope that the underlying problem will self-correct and that it is not their impaired bodies causing digestive dysfunction, but something else. This often-misplaced hope can sustain consumers' false confidence in their existing knowledge claims (St. James, Handelman, and Taylor 2011), which then hinders subsequent experiential learning.

Sampo's quote below illustrates how hope props up false confidence and delays the start of experiential learning.

What surprised me is that on vacation, especially in another country, I can eat yogurt. In hotels in Spain and Germany, I can eat yogurt without a problem. Is it because I'm on vacation? Is it because I am stress-free or what? Are the yogurts different in Spain and Germany? (Sampo)

Sampo's questions illustrate the difficulties involved in accurately identifying risks when there is idiosyncratic variability in how consuming bodies react to marketplace offerings. We can interpret them as a kind of magical thinking that helps him achieve a "reduction of uncertainty and enhancement of one's sense of control" (St. James et al. 2011, 636). Sampo's hope that he can still consume habitual repertoires offers a coping mechanism as he confronts the enormous task of transitioning between repertoires. Such an approach can lock consumers into a holding pattern, preventing them from embarking on useful learning pathways that will move them from habitual to novel consumption repertoires. We would argue that the absence of a community of practice, and therefore of an expert who could disabuse consumers of these harmful notions, contributes to the prevalence of such magical thinking.

In summary, transgressing the fecal habitus in a front stage through loss of fecal control compels consumers to reflect on habitual repertoires, which then sets them on learning pathways towards novel consumption repertoires. Yet when consumers settle into a sustained attitude of suspicion, focus on managing social impressions without experimenting with repertoires, or fall prey to hopeful, magical thinking, they become distracted or impeded from embarking on a new path to learning (Duhachek 2005).

Inhabiting Risky Environments. Habitual repertoires are not the only factor that make LI consumers vulnerable to embarrassment in the frontstage. The material conditions of consumption environments can also 1) accentuate the risk of frontstage embarrassment and 2) hinder risk mitigation. Environments that are more social and more sedentary accentuate risk by increasing the accumulation of bodily reactions and limiting possibilities for their release. Aaro describes:

I was going to university, and we had a lesson for three hours. I thought that there was one break in-between. If you want to be there like normally, you need to rethink your sitting place when you are going somewhere where there is no bathroom or anything. (Aaro) Aaro's prolonged inhabitation of the space ("three hours") provides time for LI symptoms to emerge. Since lactose resides in the digestive system, it ferments and produces gas that can be trapped in the stomach while sitting. Trapped gas can lead to the feeling of the stomach bloating. As Aaro is packed into close proximity with others, the risk of embarrassment becomes particularly poignant. While some spaces offer the possibility of maneuvering to reduce embarrassing fallout, other spaces, like the classroom, limit any kind of risk mitigation.

Environments that substantially impede risk mitigation become particularly uninviting. Jaska, a younger informant, reflects on the risks posed by outside venues without convenient access to toilets, as well as the risks of inside venues that possess only a single toilet—both of which increase the odds of embarrassing fallout.

I was afraid of going to the ice hockey fields because there was no toilet nearby. I remember always thinking, if I was going somewhere else outside, like cycling or fishing or something, where is the nearest toilet if I get diarrhea? In that sense, it was pretty irritating ... I remember we were in a church at a confirmation, and I got stomach aches,

and there was only one toilet. And, usually, when I poop, it doesn't smell too good. I remember a girl went to the bathroom right after me, and I was really embarrassed because I knew it smelt so bad. (Jaska)

In the Helsinki region, ice hockey fields are often located next to schools and are only available once schools are closed. School toilets are often not available and reaching one in times of urgent need is challenging. To be able to quickly run to a far-off toilet, Jaska would either need to take his skates off or place protective covers on the blades. To compound the challenge, ice hockey players wear extensive protective gear which he would need to remove before being able to use the toilet.

Jaska was forced to inhabit another risky environment when he went on a summer trip to a friend's mökki, a summer cottage or log cabin usually in a remote area of the Finnish countryside, where the idea is to spend time outdoors. The cottages are sparse, with minimal creature comforts, and often have small, cramped toilets that lack running water. Jaska remembers being

at my friend's summer place ... and then I went to the toilet, and I made it smell really bad. My friend went to the toilet [immediately] after me. When he came out, he said that I could be like a test person for some air freshener. I felt a bit bad about it, because I couldn't do anything about it. (Jaska)

Going to a mökki is a celebrated summer activity, especially for Finnish teenagers who often go in groups to their parents' cottages for days on end, making bonfires, swimming in the lake and eating together outdoors. Being thrown into such an environment, especially as a visitor, significantly increases the difficulties for impaired consumers to mitigate risks associated with digestive dysfunction. Inevitable transgressions from public norms induce feelings of fear and

shame and, in this case, even provoke public ridicule. Such experiences become drivers for learning a new repertoire.

LI consumers often view themselves as "spectacles of otherness" when in environments that hinder risk mitigation (Garland-Thomson 1997, 8). This insight extends past research that demonstrates how built environments can heighten feelings of disability through their design, architecture or placement (Baker 2006; Beudaert and Nau 2021; Kaufman-Scarborough 2001; Kaufman-Scarborough and Baker 2005). Where past research often conceptualizes consumption environments according to a binary accessible-inaccessible approach, we propose an alternate conception that foregrounds degrees of risk. Consumers understand access to such consumption environments as a risk calculus. Locations like the hockey field do not categorically deny access in the way a staircase rather than an elevator denies upper-floor access to wheelchair-bound consumers. Instead, Jaska's fear of the hockey fields depends on answers to many interconnected questions that help him calculate risk, including, is there a toilet? How far? How much gear do I need to take off to get there? Would my relatively lengthy absence hinder my co-players or the rhythm of the game? And perhaps most urgently, will I make it to the toilet in time?

In sum, possibilities of embarrassment in the frontstage, combined with environments that amplify risk, produce a dysfunctional consumer experience of a particular space (Leder 1990). Instead of enjoying an immersive game, concentrating on a course at university, attending an important church ritual or revelling in the beautiful Finnish outdoors at a friend's summer cottage, consumers experience bodily dysfunction as the salient experiential guidepost when inhabiting these consumption-scapes. The church where Jaska went for confirmation became a place associated with high risk of transgression and consequential embarrassing fallout because it only had one, under-ventilated toilet for scores of churchgoers. The ice-hockey rink became a

source of dread because of the surrounding physical layout and the amount of gear players must wear. In short, LI consumers are forced to reinterpret familiar consumption environments, including shopping malls, restaurants, schools, cars, and even the home, through the dysfunctional prism of the fecal habitus.

In the next section, we explore how consumers learn to mitigate these newly discovered risks of transgression through idiosyncratic trial and error, and how they discover new connections between food choices, bodily reactions and social responses.

Aligning Risk and Reward

We find that LI consumers are hindered in their learning attempts by an absence of institutional and relational resources. Consequently, they find it quite challenging to determine the scope and boundaries of changes needed to their repertoires. They also have limited codified reserves of discursive knowledge to draw upon and little guidance from experts in an existing community of practice. Consumers also struggle with resisting the pull of inertia toward familiar consumption repertoires that often skew towards hedonic consumption which could aggravate symptoms. This inertia exists in tension with the risk of public transgression and dysfunction. Consumers must continually make a proverbial Hobson's choice between indulgence and self-sacrifice, between vigilance and absorption, and between assimilating new repertoires or abandoning the attempt to do so. To overcome this inertia, they must embark on experiential learning pathways.

Embracing Malfunctions. Consumers living with LI must learn to balance the risk of transgression with the appeal of hedonic consumption. They must find solutions that balance novel self-sacrifice with familiar, sociable, pleasurable consumption possibilities (Weijo, Martin,

and Arnould 2018). This balancing act takes on special significance in a food culture that celebrates hedonic dairy consumption and that offers a cornucopia of lactose-containing delights, from ice creams and yogurts to cakes and desserts. In such a scenario, episodes of loss of fecal control become instances of "reflection in action" (Jarvis 1987, 18) that can trigger learning pathways.

We find that consumers adopt one of two approaches in response to this challenge. They either follow strict rules that are context-independent or they disregard the risks and let themselves be seduced by the lure of hedonic consumption experiences (Holbrook and Hirschman 1982). Consider the following account where a recently diagnosed informant gives in to hedonic enticement.

I was at my friend's birthday party and had forgotten to mention lactose intolerance beforehand ... People were feasting on big cakes there, and I had [some] slices as well ... Not immediately, but after a couple of hours, I had to run to the toilet. It was quite unpleasant...The cakes there were made with regular milk. (Ilmari)

The tug of war here is between the allure of socially enjoyable, experiential hedonism on one side and the warning of potential transgression on the other. Ilmari should have known that the desserts at this party would contain lactose, but he did not notify his host about his condition, thus reducing the chances of lactose-free treats being provided. Seductive consumption fantasies ("big cakes," "people feasting") pulled Ilmari towards risky lactose-inclusive consumption (Holbrook and Hirschman 1982). He indulged himself. It turned out to be an error.

Such failures are not always "undesirable outcomes to be avoided" (Ng, Dyne, and Ang 2009), however. By continuing with his habitual repertoire, Ilmari exposed himself to public embarrassment. Irrespective of his hedonic motivations, he received unimpeachable evidence

that he needed to make significant changes to his consumption repertoire. He learned to be wary of lactose, even in cases when it might be hidden out of sight or smell.

Skewing to Extremes. Striking a balance between the risk of digestive dysfunction and the allure of hedonic consumption is difficult. We find that consumers living with LI often start their learning process by being bluntly attentive to one side of the spectrum at the expense of the other. In these cases, experiential learning tends to be difficult, complex and slow rather than strategic and timely. Consumers who are more attentive to the risk of digestive dysfunction tend to follow context-independent, black-and-white rules that minimize the source of risk but that inhibit more nuanced learning (Dreyfus and Dreyfus 1999). For instance, some informants ban all milk products from their repertoire, irrespective of the consumption context, in the immediate aftermath of dysfunctional episodes. They lose confidence in their reserves of knowledge (Dreyfus and Dreyfus 1999). Though these consumers minimize negative outcomes, their rule-based caution and self-sacrifice prevent them from embarking on experiential learning pathways.

Such an example is seen with Heidi, who follows a strict regimen of lactase pills to manage her recently diagnosed, adult-onset LI.

I've been prescribed this lactase pill every day in the morning. I could try to leave it and see if there's any change, but I don't dare to [laughs]. I hate these stomach problems. My mornings are difficult anyway, and then they can be even more difficult if I have to run to the toilet like ten times. (Heidi)

Heidi follows a blunt rule based on directions from her doctor. She views medical knowledge as a legitimate set of "guidelines to which rational individuals should scrupulously adhere" (Thompson and Hirschman 1995, 145). A doctor's objective assessment and recommendations do not always match the subjective idiosyncrasy of a consumer's intolerances or sensitivities, but at this stage, Heidi lacks the confidence necessary to embark on potentially risky, experiential

learning pathways that might involve deviating from the prescribed medical regimen. Without embarking on an experiential learning pathway, though, how can she gain the subjective knowledge to build her reserves of confidence? Bound to a non-learning loop, Heidi remains trapped by the strict rule of one-pill-every-morning, without developing an understanding of how to consume lactose without undue risk if lactose pills are unavailable.

Henrikki, another recently diagnosed informant, followed a similarly blunt rule. If he forgot his lactase pills at home, he "just avoided milk" (Henrikki). Here, avoidance can be understood as curtailing the risk appetite, but it simultaneously impedes the generation of more refined, idiosyncratic knowledge. With both Heidi and Henrikki, we see an interesting catch-22. Strict adherence to a regimen of lactase enzyme pills reduces the likelihood of flatulence and diarrhea, but by inviting consumers to reproduce habitual consumption repertoires, it hinders experiential learning that might, paradoxically, allow them to become less dependent on the pills.

Such a catch-22 situation contrasts with other categories of impaired consumers, such as those who must learn to navigate retail consumption spaces using wheelchairs (Papadimitriou 2008). First, the lactase pill cannot be assimilated as a bodily appendage in the same way as a wheelchair, which over time becomes an "extension and integral part of the lived body" (Papadimitriou 2008, 699). Second, while the lactase pill gives consumers access to "normal" marketplace offerings (Baker 2006), it discourages other forms of more subjective learning.

In contrast to those who skew towards cognizance of digestive dysfunction and embrace strict rules to manage their symptoms, others skew towards hedonic consumption, despite medical advice. Consider Mikael, who, after receiving a definitive diagnosis for LI, was given medical recommendations to avoid all lactose or to start a lactase pill regimen. Compared to Heidi and Henrikki, his learning pathway was much more complex and idiosyncratic.

First, there was this period of, kind of, denial. The doctor said I have lactose intolerance, but I said, "I am all right." I refused to accept that I was lactose intolerant. There was this kind of period of only having certain products that were lactose-free. I would have lactosefree milk but then have regular cream in a cup of coffee or have a big cream cake which had regular cream in it and then have symptoms and then claim that lactose-free milk is not doing anything. I would use this [the symptoms] as a weapon and say, "You see, I was drinking lactose-free milk for a week, and I still have these symptoms." [And my wife would say,] "You have to think about the big cream cake that you ate" or "What about the block of cheese" ... For me, there was a much clearer connection between lactose-free and milk. When I thought of lactose-free, I thought of milk. Those two seemed to correlate. I did not think of yogurt, cheese, butter, cream, all those things. I was not making the right connection. Eventually, over time, I started to figure these things out. "Oh, the cream has lactose," and "Oh yeah, cheese has lactose." Then, when I finally realized that everything has to be lactose-free, I did not have any symptoms whatsoever. This was a very long process for me. (Mikael)

Lured by hedonic consumption, Mikael initially refuses to accept the LI diagnosis and the self-sacrifice it mandates. Such denial can be understood as an anti-learning disposition (Ward 1974) through which consumers can sustain familiar consumption repertoires that include certain preferred foods. Such a deliberate anti-learning disposition can lead to incorrect interpretations of symptoms and lead consumers towards a string of mishaps.

Mikael makes an unlearned, incomplete connection between lactose intolerance "symptoms" and the product category of "milk"; he has not yet made the connection between non-milk product categories and the presence of lactose. Confident in the accuracy of his understanding, he acts on this incomplete but subjectively clear connection by making only

minimally invasive changes to his consumption repertoire. It is this initial confidence, facilitated by denial, that gives him permission to eat a "big cream cake" or two, as well as "blocks of cheese." This confidence is based on a lack of product expertise and leads to a continuation of problematic symptoms. He has underestimated the ubiquity of lactose in cream, yogurt, cheese, and various processed foods in the product category of dairy foods. Since he gains this understanding through personal experience and trial and error, rather than through propositional knowledge easily accessible in the market, his learning pathway is complex, slow, and accidental, rather than strategic and timely ("this was a very long process for me").

Sensing Bodily Idiosyncrasies. Learning pathways grounded in consumers' idiosyncratic bodily reactions are often riskier and more complicated, but also ultimately more rewarding because they offer more personalized, subjective learning. Consumers must yo-yo back and forth between learning novel repertoires and unlearning existing knowledge. Since LI symptoms do not manifest with the same degree or intensity for each consumer or in response to the same products, drawing sense from auto-ethnographic, idiosyncratic accounts of bodily reactions helps consumers better synthesize already existing and newly acquired knowledge (Strauss 1985). Timo explains how he sensed his way to a more refined understanding:

At first, I was really rigid about it, but then I noticed that taking small quantities at times didn't have much of an effect ... I've discovered that a lot of times, a small quantity won't cause anything, but I don't go overboard ... Sometimes I might eat some ice cream or something without trying to find out [if it has lactose]. It might sometimes be really difficult to find lactose-free versions of the best products ... I keep the pills with me though, the ones that have the lactase enzyme. (Timo)

We can see that Timo attempts an "uncomfortable negotiation of conflicts" (Hampson and Junor 2005, 175), between two intersecting knowledge claims, one often followed by novices and one

by those with an intermediate level of expertise (Strauss 1985). Even though Timo is formally diagnosed as intolerant, he pushes the limits of that diagnosis to garner idiosyncratic, subjectively true knowledge.

For the novice LI consumer, context-free blunt rules ("I was really rigid") are the norm. Timo's initial rigidity stems from his basic belief in generalized knowledge propositions that all lactose-containing foods are risky and should be excluded from the consumption repertoire. Doctors foreground such knowledge by frequently offering blunt recommendations that lactose-intolerant consumers completely exclude lactose from their consumption repertoire or that they unfailingly take lactase pills if they want to consume lactose. However, Timo realizes that such secondary propositional knowledge about the category is not sufficient to establish his body's specific reactions to lactose and their intensity. By extending and challenging propositional knowledge through calculated risk-taking (e.g., starting with small quantities), Timo can generate more refined, idiosyncratic experiential knowledge, embarking on more proficient and rewarding pathways to discover his body's consumption limits. Ultimately, he mitigates risks with a fail-safe mechanism in the form of lactase enzyme pills, which would offer respite from an unpleasant transgression if the risk became real.

Context-free, blunt rules ("I was really rigid") are the norm in the social world of the novice LI consumer, but not in the social world of the proficient LI consumer. Timo sets himself on the path to becoming a more proficient LI consumer by realizing that secondary, propositional knowledge is not enough. Note that his statement, "a small quantity won't cause anything," is only subjectively accurate; it is only true for Timo's consuming body within the product offerings and geographic confines of Finland. This remark is by no means generalizable, propositional knowledge which could create convergent learning pathways. This statement is context-bound theorizing, meaning that any insights it generates would not necessarily hold if

some of the underlying conditions were to be changed. Increased subjective, contextualized knowledge is therefore a fruitful element of rewarding learning pathways.

Like Timo, Eevi illustrates how she navigates potential risks and rewards by developing experiential knowledge:

I'm trying to work out the things with my stomach, and the doctor said that lactose bacteria pills can help balance it ... I'm not really that familiar with them. I'm not sure if they really have an effect. I sometimes take them, and sometimes I don't. Maybe I should write down how I feel because it's not such an immediate effect that, "Wow, I feel really good right now" when I take the pills. (Eevi)

Moving away from blunt rule-following sets Eevi onto a more rewarding, though initially ambiguous, learning pathway. The ambiguity is heightened because the object of learning is her body's idiosyncratic reactions ("I'm trying to work out things") as opposed to propositional knowledge statements, such as, "cheese contains lactose." Eevi's experience-centric account differs from accounts of consumer learning in which consumers and other institutional stakeholders codify embodied, subjective knowledge into technical, discursive knowledge, as in consumption domains such as coffee or wine connoisseurship (LaTour and Deighton 2019). In contrast to consumers who "use their bodies atomistically to dissect their sensory experiences and increase their discursive skills" to achieve "more specific, dispassionate attribute descriptions" (Maciel and Wallendorf 2017, 737), Eevi continues to use blunt labels such as 'good'. She has not yet codified her learning outcomes ("Maybe I should write [it] down") and her idiosyncratic information still exists in a crude, unrefined vocabulary ("I feel really good").

Sublimating Learning in Dynamic Frontstages. Learning in the frontstage can increase risk exposure. Sublimation reduces risk exposure through learning pathways that synthesize the familiar and the newly acquired.

The doctor said that I have really bad lactose intolerance and my stomach is very sick, and he said that I have to quit everything that has lactose. I have understood that I have lactose intolerance ... [but] I don't always have problems with it, I don't know why. It's not quite clear. I have seen that if I combine some foods, like ice cream and coffee, that's not good. But I can drink coffee [without additionally consuming ice cream] every day, and it doesn't affect me, and I can eat ice cream [on its own], but when I eat ice cream and drink coffee at the same time, that's bad. And when I eat my lunch and drink milk, that's also a bad thing. (Juho)

Juho goes beyond the doctor's blunt recommendation to "quit" lactose with a more contingent reading of the dysfunction and its attendant restrictions. He does not focus on answering the 'why' behind his reactions, which is a key step in rigorous scientific processes. Instead, like a good experiential learner, he focuses on the 'what,' observing what happens to his body when he drinks only coffee (good) versus what happens when he has coffee and ice cream (bad). Here, Juho's solitary, uncomfortable, and staccato learning pathway stands in sharp contrast to past research that showcases a collective, enjoyable and seamless learning process (LaTour and Deighton 2019). In this brief quote, Juho speaks of at least two food combinations he has tried that led to 'bad' outcomes. It is safe to assume that these bad outcomes had to do with the transgression of taboos surrounding the fecal habitus. Moreover, the bad episode involving lunch and milk may have taken place in the relative frontstage of the office cafeteria. Juho thus had to divine the limits of his digestive dysfunction in a risky, possibly public environment where he had little control.

Even when consumers can engage in rewarding learning pathways in risky environments, sublimation remains difficult. The dynamic nature of front-staged consumption environments thwarts effective sublimation. For instance, travel outside one's home country can introduce new

elements into the consumption environment that have to be sublimated again. Consider how Iiro accounts for the misalignment between Finnish and non-Finnish food servicescapes.

There are so many lactose-free products [in Finland], you can see most of the restaurants use lactose-free products ... [But abroad,] the difference is that when you go to a restaurant, most of the time it doesn't say if things are lactose-free or not. Here it says that this product has low lactose or is lactose-free ... you can pretty much eat anything because every restaurant makes things lactose-free by default. You know that anything you order, you can get it lactose-free. When you go abroad, you don't know if you can eat it or not ... [plus] you have a limited number of options. I think it's more of a problem when you go abroad than in Finland. (Iiro)

Iiro had learned to trust the accuracy of Finnish food labeling and thus has an expansive food consumption repertoire ("you can pretty much eat anything") when in Finland. Yet each time a consumer embarks on a new learning pathway, their ability to embody expertise and to sublimate learning is challenged. The need for additional sublimation becomes salient for Iiro as soon as he accesses a new marketplace and its offerings (Kaufman-Scarborough and Baker 2005). Iiro regresses to being a novice consumer, unable to discern the appropriate level of risk tolerance ("you don't know if you can eat it or not"). In an unfamiliar, dynamic consumption environment, consumers must embark on new, rewarding learning pathways which are then sublimated.

As consumers try to resolve different knowledge gaps, they start to combine insights from different learning pathways. Even so, they rarely reach a level of consumption expertise that allows them to become fully immersed into socio-spatial consumption contexts. A degree of unpredictability and complexity persists that keeps consumers wary. Moreover, the consuming LI body remains dynamic and idiosyncratic (Cronin et al. 2015). On some occasions, LI consumers can still digest lactose without any observable symptoms (Miskovitz and Betancourt 2005), while at other times, an ill-timed burp or odorous wind serves as a reminder of their precarious circumstances. At best, LI consumers can embody bounded certainty in consumption. They attempt to rise above bodily discomfort, discover appropriate times and places for indulging in hedonic consumption, while monitoring and evaluating their risk exposure. This constant attention to their bodily reactions means they can rarely become fully immersed in consumption.

Maintaining Relaxed Vigilance. Certain spatio-temporal combinations necessitate vigilance, which helps consumers correctly assess the risk of embarrassing consequences even within unpredictable consumption spaces. Vigilance is the cost that consumers must pay to attain bounded certainty. The following quote details the vigilance required to consume with reasonable certainty when consumption settings are unfamiliar and loosely monitored.

Olli: It's a little bit laborious. Yeah, travel is not that easy. So, she [Olli's wife] sometimes takes her own products with her. Of course, it's very often that she chooses the meals because I say to her, "Okay, you look first and see what you like that is lactose free." ... [Plus] if you go to a restaurant that would have a capacity of 100 guests, 120 guests, it would have one toilet. Very common.

Interviewer: Is that a big problem?

Olli: Absolutely. That can cause real pressure. It actually makes a difference. She knows the cafeterias which have good toilets. We choose those ones.

Olli's wife must invest in a significant amount of planning just to have a decent, nontransgressive consumption experience when on the road. This planning follows from experiential learning—for example, working out that highway restaurants are often susceptible to errors in food labeling. Consumers living with LI need to be able to access cues which might be invisible to others without the necessary experiential knowledge, such as the number of toilets in a restaurant. Being able to access these cues helps them identify risks more accurately and formulate more attuned risk appetites when consuming. However, accessing these cues requires constant vigilance. Olli's wife finds out-of-home consumption "laborious"—a not-unexpected result for consumers who can rarely fully lose themselves in enjoyable consumption occasions, such as on holiday (Freeman 2006). While non-LI consumers would probably choose cafes or restaurants based on taste or décor, Olli's wife has to resist any such hedonic or experiential claims and draw on a selection criterion more resonant with her condition ("good toilets").

The degree of risk increases in unpredictable socio-spatial contexts. When the fallout from failed risks could be significant, consumers combine multiple learning pathways to mitigate risks, e.g., learning about their body's reactions to marketplace offerings, or observing reaction times to lactose consumption and their intensities. Tiffany relates:

If I'd had one scoop of ice cream or something similar that wasn't lactose-free, it'd be okay. My stomach would hurt for a while, but it wouldn't be that bad. ... If I knew that I was going to, let's say, a restaurant where I know that I might not have any choices available, or like parties where I don't know what was in the food or where most of the baked stuff has whipped cream, the pills help so that I don't have to be the picky one

who's going like, "No sorry, I can't eat anything here." [Laughter.] I think it helps, and it's easier if I'm going to a party or a dinner at a restaurant to just take the pill beforehand. Then I don't have to worry about anything or be the guest that goes [snotty tone] "Oh, I can't eat that, sorry do you have anything else?" [Laughter.] It's easy for me, I just take the pill, and I'm fine. Or then I just don't make a big deal out of it because I feel like, "OK, I can eat whatever now, and then I'll be home in a few hours." Even if my tummy's going to hurt or if I have some symptoms, it'll be easier for everyone if I'm already back home by that time. (Tiffany)

Tiffany balances the pull to consume in a more celebratory, indulgent way with the nagging reminder of fecal habitus transgression. She has acquired fine-grained subjective knowledge about the digestive limits of her consuming-excretory body and the efficacy of lactase enzyme pills. She embodies a risk appetite that calibrates social enjoyment with social embarrassment. Her experiential learning pathway helps her move beyond the strict rules of a novice consumer who might refrain from hedonic, risky consumption altogether ("No sorry, I can't eat anything here"). Tiffany has experientially learned her body's tolerance and timeframe for when the most uncomfortable or embarrassing transgressions might manifest, which then informs her decisions about what to eat and when to leave the public environment. She can balance the rewards from festive, risky consumption with the danger of symptoms manifesting publicly. Ultimately, she is able to considerably increase her risk appetite because of the multiple learning pathways that she can draw on.

A minimum degree of vigilance becomes the new normal because of unpredictability in consumption situations. One way to embody vigilance is to be "prepared" for potential sources that heighten the risk of transgression, as Tiina does.

In some situations, I have to be prepared ... If I know I have to be in some restaurants or [with] relatives, I have to be prepared ... In my everyday life, I don't want to use normal milks and foods that contain lactose because they don't work for me 100 percent of the time. Those tablets for breaking down lactose, I have used them especially if I have to go somewhere and need to be prepared. For example, if there's like [food made with] normal dairy in a place, I can drink or eat without worry. Like, when I go to Christmas dinner at my stepmother's, she always uses normal [lactose-containing] milk in the Christmas porridge. [There,] I use those tablets because she never remembers to use the lactose-free milk for Christmas porridge. She always says that it makes the porridge red and the taste is not good. (Tiina)

For most, Christmas dinners are a time for unrestrained, sociable, indulgent consumption (Hirschman and LaBarbera 1989), but Tiina can rarely lose herself in the festivities and must remain vigilant. Similar enjoyable and indulgent, yet vigilant dynamics play out in the other consumption situations she enumerates ("restaurants," "with relatives"). She has experientially learned that the festive, public nature of such consumption situations can extract a higher-than-usual social cost in cases of transgression. Yet succumbing to the pull to reproduce habitual consumption repertoires—to eat the Christmas porridge and enjoy festivities with family—promises significant rewards.

De-Regimenting Repertoires. For consumers to work out the right risk calculus, they must learn to identify socio-spatial contexts where they can enjoy hedonistic rewards without significant consequences—or in other words, occasions where the odds are in their favor. To make public hedonic consumption work, these consumers must learn to assess the risk profile of consumption episodes correctly. For instance, how, where and when can LI consumers indulge in the organoleptic pleasures offered by dairy treats such as desserts, cakes, ice creams? Can they

indulge only in private or also in more public, celebratory contexts? The answers depend on several factors, such as sensitivity to public embarrassment, existing product category expertise, degree of alignment between the felt and feeling idiosyncratic body in consumption, and an understanding of contextual elements such as the accuracy of food labels.

Along this learning journey, consumers learn relatively safe pathways to deviate from the regimen of lactose-free consumption when they can respond to the siren call of indulgent consumption. They can learn to master some discomfort and pain and when to keep their reactions private. Consider Jaska, who has mapped a spatial and temporal calculus of consumption so he can recalibrate the risk-reward equation in favor of hedonic consumption. He has learned to identify spaces that can offer favorable risk-reward equations and support higher risk appetite. When asked about potential "cheating" instances, he says:

Interviewer: Did you switch over completely to lactose-free foods?

Informant: Not always. At a party or a restaurant, I would be more careful, but not at home... If people were having [lactose-based] ice cream at my home, and I knew I was going to stay at home, I would eat the ice cream anyway even though I knew I would face stomach problems. I may fart a few times, but it's not so intense. I will eat a bowl of Ben and Jerry's, and I'll fart a few times, and that's it... My eating is more restricted when I am outside, but at home, I do not care so much about symptoms. Sometimes I eat chocolate [at home] even though I would get symptoms ... I feel left out of things, or I don't get the full experience. I like to go to restaurants, and then if the food is already made and they are using all available ingredients, then I don't get the full experience. It is like if you are a vegetarian and you go to a restaurant, and they are serving meat, and to compensate, they just serve the dish without the meat portion. You don't get the full experience, and my situation is a lot like that where someone else is getting the full

experience of eating ice cream, and I get juice ice cream or dairy free ice cream made of soy or something, and they are not as good as the proper ones. I get the feeling I am left out. Other people are enjoying the food 100 percent, and I get like 75 percent...I remember once my cousin was at our place, and his dad had given him money to buy ice cream. My uncle told him that I have lactose intolerance and he should only buy juice ice cream (sorbet) [for me], but I wanted to have regular ice cream. I didn't want to have the juice ice-lolly. My cousin said, "My dad told me that we cannot buy the regular one," and I was like, "God damn it, just do it!" (Jaska)

Finnish restaurants are particularly expensive, and most families rarely go out. When people go to restaurants, they want to truly profit from the moment. However, for LI consumers, these luxurious, indulgent environments show up as risks to be mitigated, which takes the sheen off the pleasurable excesses and extravagances intrinsic to going out. Even though most Finnish restaurants have a separate menu section for lactose or gluten intolerant eaters and take extreme caution with food labeling, Jaska's experience shows that these enjoyable occasions can also turn into instances of othering. Being constrained to lactose-free options limits the sensorial experience Jaska can access, which he poignantly quantifies ("75 percent" versus "100 percent"). Though Jaska has learned to mitigate risk by making strategic temporal and spatial choices, this prevents him from seeing restaurants as places of pleasure.

However, Jaska has worked out that he can compensate for not getting the full experience in environments outside of home by intensifying the pursuit of hedonic consumption at home. He amplifies his risk appetite when at home. Other informants reported a similar spatio-temporal proclivity to cheat on their lactose-free regimen when at home, for instance, by eating large amounts of their favorite lactose-containing ice creams. Tanja admits that "If I eat them in the evening and nobody sees me [laughter]... then it's worth a little suffering." In the privacy of

evenings alone at home, the only consequence to be considered is the intensity of discomfort that Tanja can endure. Her characterization of the consequences of her hedonic pursuit shows that she has progressed significantly in her ability to endure discomfort in private. But she has not yet developed the confidence to risk public embarrassment over enjoyable but transgressive consumption choices. Similarly, Jaska's compelling demand for risky but hedonic consumption ("god damn it, just do it") is built on an experiential understanding of the home as a refuge where the fallout from failed risks can be minimized (McCracken 1989). His profanity shows an intense desire for non-vigilant consumption, the emotional intensity signaling the heavy toll of remaining painstakingly suspicious while others consume at their whims. At home, Jaska can embody a higher risk appetite and can enjoy vigilance-free consumption. This occasional cheating can help consumers immerse themselves in enjoyable consumption contexts, in ways that help them feel immersed in enjoyable consumption.

Consumers must find the right contexts where the risk-reward equation skews in favor of more risks, more adventure and less regimentation. Discovering the right combination helps them temporarily enact a more relaxed, less vigilant consumption experience, such as the one Aaro shares.

Interviewer: Are there times when you are more relaxed?

Informant: Yeah, of course, when I am around the home. Sometimes my reaction is more powerful and sometimes I don't even feel it. I don't know why that is, I don't know. ...

When I'm at home, I can drink or eat anything I want, and I'm always in like a safe area.

Easy to deal with. ... Yeah. Every time I eat the whole one-liter ice cream, I go, "Oh my god, I shouldn't do this." (Laughter) ... At home I can eat like that but not when I'm outside. (Aaro)

Aaro, like many consumers living with LI, has not yet fully worked out the idiosyncrasies of his lactose-intolerant consuming body; the causes of his LI symptoms remain unclear and variable (Oak and Jha 2019). His body's wildly varying reactions to lactose consumption should diminish his risk appetite. When the potential fallout from risks is unpredictable, the ideal strategy would be avoidance. Aaro knows this intellectually when he concedes, "Oh my god, I shouldn't do this." However, he has learned to distribute the risk between different elements of being at home. He has discovered a relatively "safe area" where he can draw on implicit knowledge of people and places and confidently increase his risk appetite. He has thus learned how to choose times and places to temporarily engage in high-risk, hedonic, and vigilance-free consumption. We theorize such actions as an instance of threshold surfing between novel and familiar repertoires.

Consumers also learn to manipulate the socially embarrassing fallout from dysfunction by engaging in high-risk, hedonic consumption in the presence of those who are more tolerant of certain transgressions.

For me it's kind of interesting because I'm not looking too much for signs like "lactose-free." I don't mind it. But sometimes, like with the coffee, and if I have something important to do after that, I ask if I can get the lactose-free milk or stuff like that. But definitely, when I'm eating some snacks, like in the evening at home, like I have these quarks ... I use them a lot, but I don't mind if they include lactose. So, kind of bad for me and bad for the others. [Laughter.] But I don't mind it. [Laughter.] (Aaro)

In some contexts, the costs of transgression are steep enough to inhibit risk-taking, as when the unsolicited call of nature might interrupt "something important to do." In such circumstances, when his risk appetite could influence immediate and future consequences, Aaro has learned to respect the dominance of the fecal habitus by maintaining heightened vigilance and risk avoidance ("lactose-free milk or stuff"). However, Aaro's major conceptual discovery is that the

normative force of the fecal habitus is unevenly distributed across different socio-spatial contexts. This force can be temporarily loosened in certain socio-spatial contexts in the presence of sympathetic, intimate others, with whom the fallout of transgression does not carry the same humiliation. This liberating discovery is why Aaro utters the phrase "bad for me, bad for others," accompanied by laughter. He does not mind the transgressions so much because he has identified a set of people who might find bowel mishaps funny and laughable rather than revolting and disgusting. Note that the "other" that Aaro refers to in the above quote is not the hostile public "other" of the frontstage but his sympathetic life partner with whom he can take more liberties (Goffman 1959). Once again, Aaro seems to have successfully surfed back to the more enjoyable but high-risk lactose inclusive consumption repertoire.

Yet even in the company of intimate, sympathetic others, consumers must subjectively diagnose where the boundaries lie between more acceptable and less acceptable transgressions. A few loud farts in private or in the company of a spouse at home after a pint of ice cream might be acceptable, but other combinations might end in significant embarrassment and stigma. For example, soiling furniture, even at home, would be problematic. Thus, the normative force exerted by the fecal habitus never disappears completely, even in protected, permissive, sympathetic contexts.

In sum, the unruly bodies of lactose-intolerant consumers risk becoming odorous, bloated and runny, forcing consumers into closer contact with their waste than is mandated by socio-cultural norms, which demand the removal of all traces of excreta from discourse and action. Bodily dysfunctions such as lactose intolerance make it imperative for consumers to reflect on habitual consumption repertoires, especially when they appear in adult life. Although supermarket shelves are packed with a bewildering array of lactose-free and low-lactose products (e.g., soy, oat, almond, or rice milk), making one's consumption repertoire lactose-free is far

from straightforward. Some lactose-intolerant consumers might choose to "withdraw from society rather than risk embarrassment and humiliation" (Toombs 1992, 133) as they try to maintain a psychological sense of coherence and potency in coping with impairment (Bury 1991). Our informants, in contrast, display a more learning-centric approach whereby they draw on marketplace resources to maximize favorable outcomes through "a greater degree of...calculation in everyday life" (Bury 1991, 462). Consumers learn to balance the desire to enjoy consumer society and societal expectations about bodily regulation. They learn to optimize the risk-reward equation between social embarrassment and collective enjoyment, as their bodies OTHE CHO teeter on the precipice of degrading and uncontrollable excretion.

This study focused on the question of how consumers learn and gain expertise in novel consumption repertoires. It adds to existing literature by introducing the concept of hostile learning environments and distinguishing them from *hospitable* learning environments. These insights problematize the view of learning as an elective, communal, largely enjoyable pursuit and spotlight the challenges and struggles largely absent from past theorization on consumer learning (Celsi, Rose and Leigh 1993; LaTour and Deighton 2019; Maciel and Wallendorf 2017). In the coming sections, we explore how our theorizing of hostile learning environments and threshold surfing deepens our understanding of past consumer research and offers valuable future research opportunities. To strengthen our argument, we offer a table (table 2) that highlights theoretical implications.

Distinguishing between Hostile vs Hospitable Learning Environments

We identify four foundational elements of learning environments (figure 1) and argue that differences in these elements and in how they interrelate result in two distinct categories of learning environments—hostile vs. hospitable learning environments (see table 2).

Table II: HOSPITABLE AND HOSTILE LEARNING ENVIRONMENTS

Elements	Manifestations in Hospitable Learning Environments	Manifestations in Hostile Learning Environments	Observed Learning Dynamics (in this study)	Relevant, Illustrative Consumption Contexts
Socio-linguistic scaffolding mechanism	Refined, convergent, shareable vocabulary	Coarse, divergent vocabulary	Sensing bodily idiosyncrasies	Menstruation, breastfeeding, changing religions etc.
Agent of socialization	Experts in an existing community of practice	Self-taught	Embracing malfunctions	Fatshionistas, Divorcees
Mode of embodiment	Controllable and disciplined	Unruly and idiosyncratic	Inhabiting risky environments	Alternative sexual encounters, consumer health narratives
Spatial context of learning	Collaborative and benevolent backstage	Evaluative frontstage	Encountering embarrassment in the frontstage	Impaired or disabled consumers
Directionality of learning	Unidirectional (from familiar to novel repertoire)	Bi-directional	Achieving relaxed vigilance	Diets, weight loss, immigration

The first element that we identify is the socio-linguistic scaffolding mechanism. In a hospitable learning environment, the acquisition and refinement of a shared vocabulary helps "establish a common ground" (Loewenstein, Ocasio, and Jones 2012, 44) and is "instrumental in the social construction of meaning" (42; Maciel and Wallendorf 2017; LaTour and Deighton 2019). Easily shareable, refined, and accessible vocabularies scaffold and accelerate learning. For instance, wine consumers who want to become afficionados can consult discursive resources such as wine wheels, which codify and standardize the subtlest of differences in taste and texture (Cronin et al. 2015; LaTour and Deighton 2019; Tian et al. 2014; Wong and King 2008). In hostile learning environments, however, consumers are hamstrung by imprecision, coarseness, and divergence of vocabulary (Dyke 2017). For instance, we found that euphemisms impede

terminological refinement and precision, while social taboos impede shareability. Phrases such as "symptoms" could refer to anything from minor discomfort to full-blown diarrhea. Our informants shy away from discussing minute, specific details of their dysfunctional experiences, taking refuge instead in laughter or jokes to defuse the tension around taboo topics. Such linguistic practices reduce the pace of learning and make it fraught with risk and uncertainty when compared to hospitable environments that have strong socio-linguistic scaffolding mechanisms.

The presence of coarse, divergent and difficult-to-share vocabularies can explain why many consumers struggle to adapt to contextual changes, even when such changes are voluntary. For instance, when certain Mormons attempt to make the move to a new consumption repertoire that encapsulates a less intense belief in Mormonism, a significant divergence in vocabulary emerges (McAlexander et al. 2014). Are the leavers to be understood as disbelievers who imperil everyone's salvation, as doubters influenced by scientific rationalism, or as liberals who want to enjoy the pleasures of consumption? While McAlexander and colleagues offer an explanation based on the socializing role of institutions, our insights underscore "the myriad everyday interactional matters that constitute social problems on a smaller scale" (Holstein and Miller 2003, 71). We argue that the experience of leaving becomes especially "unbearable," "insufferable," or "impossible to deal with" (McAlexander et al. 2014, 868) for those who cannot access a refined, shared vocabulary. In other words, the process of leaving Mormonism demonstrates an instance of an especially hostile learning environment in which a shared vocabulary of leaving created by institutional stakeholders could make the transition more bearable. Our work thus offers new insights into the degree to which the socio-linguistic elements of learning environments impact individuals making institutional shifts (such as detraditionalization) or taking on new repertoires.

A second foundational element of learning environments is the agent of socialization.

Learning environments become more hospitable when learners can be guided by experts from an existing community of practice (Arsel and Bean 2013; Maciel and Wallendorf 2017; Schouten and McAlexander 1995). Our informants faced a hostile learning environment because social taboos around the fecal habitus prevent a community of practice from coalescing. In such a context, consumers must learn in isolation by making their own mistakes, instead of being socialized by expert members.

Learning from one's own mistakes without a community of practice can be especially debilitating when consumers undergo larger "lifestyle discontinuities," as in the case of newly divorced women (Thompson, Henry, and Bardhi 2018, 579). These women see themselves as "inadequate" or "blindsided" (580) and report "intense frustration" (581) and "devastating disruption" (579), to the extent that even something as familiar and habitual as shopping for clothes can turn into the "biggest and hardest thing" (583). We contend that the absence of expert agents of socialization for newly divorced women in this particular context renders the learning environment hostile, contributing to their feelings of inadequacy as they try to adapt to their new circumstances. If these women consumers had access to experts who could signpost transitions from married consumption repertoires to divorced repertoires, their outcomes would be significantly improved. Without access to expertise, the only path left to them is to accumulate experiential "risk-taking confidence" (585), so that a challenge that seems insurmountable at one time might begin to seem more doable. This experiential path in the absence of a community of practice echoes our informants' methods of dealing with their own repertoire transitions.

A third foundational element of learning environments is the mode of embodiment of learning bodies. When learners inhabit controllable and disciplinable bodies, learning pathways become more predictable, which contributes to a hospitable learning environment. A common

pool of problems and solutions develops for learners who share this bodily baseline. However, when learning bodies are unruly and idiosyncratic, when they resist discipline, when they possess "malevolent possibilities capable of causing deep humiliation and shame" (Leder 1990, 9; Thompson and Hirschmann 1995), learning environments turn hostile. Learners with unruly and idiosyncratic bodies must account for unstable, idiosyncratic learning pathways in addition to dynamic environmental contexts. For instance, our informants must continually keep track of how their bodies react to old and new repertoires in familiar and foreign locations.

Our study's focus on such unruly, undisciplinable bodies offers a counterview to scholarship on consumer discipline predicated on the understanding that consumer selves can gain "meticulous control of the operations of the body" (Foucault, 1995, 137). In most marketplaces, consumers can rely on disciplinable bodies to settle on a "secure constellation of familiar products" (Cronin et al. 2015, 1913). However, when bodies are unruly, their obdurate materiality complicates learning and impedes the stabilization of new consumption repertoires.

The fourth foundational element that we identify is the socio-spatial location of learning (See table 2). Learning environments become hospitable when consumers can access a benevolent backstage to learn, where they are shielded from public evaluation as they train for a "seamless front stage presentation" (Bowker and Star 1999, 9; Goffman 1959; Linton 1998). Consider learning environments offered to discretionary learners in taste-based consumption contexts such as whisky, wine, or coffee connoisseurship (Maciel and Wallendorf 2017; LaTour and Deighton 2019). These consumers learn in backstage, classroom-like settings which offer smoothed-out learning pathways and where the costs of making mistakes are minimized.

However, when learners are forced to learn in the frontstage, where any mistakes are exposed to public evaluation, the cost of mistakes is accentuated and learning environments turn hostile. For instance, when some visually impaired consumers are suddenly forced into the

"disabled" dressing room, they find the experience so challenging that they either become "really mad" or refuse to "try anything on" in the store (Baker 2006, 43). In both cases, consumers express their frustration with a hostile learning environment that does not give them access to a safe, evaluation-free backstage where they can learn how to reduce the "impact of their disability" on their social lives with others (Kaufmann-Scarborough 2001, 438).

While we have outlined the struggles and challenges that manifest when learning environments turn hostile, we highlight a redeeming outcome that arises from having to navigate a hostile learning environment. Elements of a hostile learning environment can interlock in ways that make experiential learners more agile and flexible when it comes to the directionality of their learning pathways (See table 2). We expound on this discovery in the following section.

Threshold Surfing Through Agile Consumption Repertoires

Most accounts of consumer learning delineate a unidirectional, linear process of learning (Maciel and Wallendorf 2017; Phipps and Ozanne 2017). Such a process shows a shift from a less expert to more expert standing within the same consumption domain—for instance, from an unsophisticated wine consumer to a wine aficionado, or from an average coffee drinker to a coffee connoisseur (LaTour and Deighton 2019). A similarly linear process can be seen in those who acquire "new" bodies, such as women who have undergone breast-augmentation surgery (Schouten 1991). These consumers acquire and sublimate new knowledge to permanently and durably shift from one repertoire to another, often on a hierarchy of expertise. We argue that elective learning within a hospitable learning environment facilitates a permanent transition to a new repertoire.

By contrast, our analysis uncovers a non-linear, multi-directional pattern of movement between different repertoires which are not necessarily arranged on a hierarchy of expertise (see table 2). Our informants who navigate the hostile learning environment associated with LI consumption repertoires do not permanently give up lactose-containing foods and do not permanently transition to a lactose-free consumption repertoire, meaning they do not irreversibly transition to a new state.

We conceptualize this pattern of movement as consumers continuously surfing the threshold between two discrete consumption repertoires through high-risk experiential learning in a hostile learning environment. Consumption repertoires can sometimes exclude lactose and other times include it. This choice of inclusion or exclusion becomes more refined as consumers discover the idiosyncratic limits of their own bodies by making mistakes and learning from them, while drawing upon a complex, socio-spatial-temporal risk calculus. Their learning does not have a logical end point or bookend, as is often demonstrated by elective learning in a hospitable learning environment through the form of certifications or expert achievements.

Our insight helps explain how some consumers resist the enforced transition from one consumption repertoire to another, such as when consumers resist being pigeonholed into the category of "elderly" consumers (Barnhart and Peñaloza 2013) or when recently divorced women resist being stereotyped as "divorcees" (Thompson, Henry, and Bardhi 2018). Our finding complements existing research on consumer transitions, which tends to focus either on consumers engaged in continuous liminality and variety-seeking between different lifestyle groups (Mimoun and Bardhi 2022) or on consumers who are attempting to give up one consumer lifestyle to attain another but who are caught in suspended animation, never able to fully cross the threshold (Appau, Ozanne, and Klein 2020). In the former case, consumers cross many distinct thresholds by embarking on an endless, variety-seeking pathway, while in the latter case,

consumers have the desire to clearly and permanently move in one specific direction but are frustrated in their attempts.

Our findings illustrate a third, distinct pattern of transition, in which consumers figuratively surf the threshold between two distinct repertoires and can move in both directions, from novel to familiar repertoires and vice versa. These consumers can surf the threshold when they do not seek to avert risk entirely and do not seek repertoire stability (Weinberger et al., 2017). For example, the behavior of Australian consumers who continuously rework their material water-consumption practices in tune with water availability can be understood as an instance of threshold surfing between water-intensive and drought-tolerant water-consumption repertoires (Phipps and Ozanne 2017).

From a theoretical standpoint, consumers who learn how to surf the threshold skillfully never fully give in to either the push or pull that operates in a learning environment. When it comes to LI consumers, the likelihood of embarrassing transgressions of the fecal habitus pushes them to learn new repertoires. Simultaneously, the desire for hedonic, sociable consumption pulls them back towards familiar repertoires. In surfing this threshold, consumers identify the right times, places, and social situations in which to give in to the hedonic pull and take risks, like eating whole-milk ice cream at home with their partner, without permanently committing to a habitual repertoire in all contexts.

The concept of threshold surfing can help us understand the continuous tug of war consumers demonstrate when it comes to strategies for healthy eating and concomitant risk management (Kristensen, Askegaard, and Jeppesen 2013; St. James et al. 2011; Moisio and Beruchashvili 2010). Threshold surfing can explain the increasingly popular practice of having "cheat days" from specific diets or consumption repertoires. Cheat days involve "giving yourself calculated, planned permission to temporarily break strict diet rules" (Hill 2018). Consumers

who practice cheat days temporarily abandon their target diet and revert to a non-regimented diet. Threshold surfing can also account for the more flexible form of vegetarianism practiced by millions of Hindu Indians who do not make a permanent shift from vegetarianism to non-vegetarianism, or vice versa (Samraat 2019). Much like our informants, these individuals practice a complex calculus for determining what repertoire to adopt, based on the day of the week, the kind of meat, and the place of consumption.

Exhortations for Future Research

Our analysis attempts to make visible that aspect of consumption which "remains unspoken and unacknowledged in everyday public life" (Cahill 2016, 74) and to examine that which remains "deviant and feared as a source of contamination" (Weinberg and Williams 2005, 317). We invite future research to fill the critical silence around soiled consumption (Bradshaw and Canniford 2010; Thompson 2013). Another powerful avenue for future research would be to investigate the relationship between gender and soiled consumption. Gender was not a focal domain for this study, but we noticed an unequal push from the fecal habitus along gender lines. Men unequivocally tested the limits of the fecal habitus more than women, an observation bolstered by popular representations of adult women amid episodes of fecal transgression (SATC 2008).

Finally, it does not seem coincidental that hostile learning environments often manifest in domains where marginal, disempowered social groups face an imperative to learn. Future research can engage more fruitfully with questions of power and control when it comes to how consumers learn in hostile or hospitable learning environments.

DATA COLLECTION STATEMENT

The second author started the in-person fieldwork in autumn of 2013 with consumers suffering from lactose intolerance in a large city in Finland. From 2017, the first author also collected primary empirical material in the form of long interviews. The second author did a further round of long interviews till fall 2021. Both authors conducted the fieldwork independently. The empirical material including fieldnotes from shopping visits with consumers, was initially Led project folder on ResearchE discussed and analyzed on multiple occasions by the first and second authors and then amongst the full group of authors. The final ethnography was jointly authored. All notes, images, and data are currently stored in a password-protected project folder on ResearchBox.

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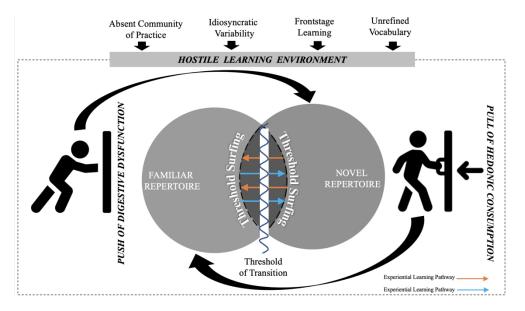


FIGURE I: Experiential Learning in Hostile Learning Environments $362 \times 203 \text{mm}$ (144 x 144 DPI)