Qualia of Stress and Bodily Enregisterment in Ice Swimming

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ABSTRACT
Combining an ethnographic account of the Finnish national pastime of ice swimming and its remediation through the Wim Hof Method with an analysis of media representations, this article expands linguistic and semiotic anthropological scholarship on the enregisterment of bodily and affective qualia by looking at how practitioners of this therapeutic technology elaborate on their corporeal and semiotic selves and the transformations of those selves after indulging in full-body contact with freezing cold water. Laying particular emphasis on stress as a discursive hub and an intensely circulating quasisign within vernacular and institutionalized health discourses, the article discusses how pedagogical ice swimming exegesis is contributing to the enregisterment of emergent forms of personhood through metasemiotic regiments of the body that draw from natural and holistic as well as scientific and technical registers.

During the season when the thermometer hits the lower numbers, it is well-nigh impossible to escape the topic of ice swimming in Finnish popular media. In newspaper articles, (micro)celebrity profiles, and social media artifacts, people of all ages describe—in casual, self-exoticizing, and curiously scientific-sounding registers—how they dip into an ice hole, steady their breath for a time (anywhere from a few seconds to a few minutes), and recalibrate their physiological and psychological selves. They appear to describe a late modern therapeutic technology of the body gone subzero.

Consider the national newspaper Helsingin Sanomat at the turn of the 2020s. On January 7, one of its articles described the TV personality and village...
shop vendor, Sampo Kaulanen, as finding salvation from alcohol and substance abuse through ice swimming, breathing exercises, and meditation (Ala-Kivimäki 2020). On January 9, the newspaper featured a long-form profile article, titled “Frozen but Happy,” on Australian-born Leigh Ewin.¹ Having moved to Finland after dating a Finnish woman, Ewin, we are told, had his first contact with icy water at a party, to the apparent amusement of his Finnish peers. Ultimately deciding to teach himself “the technique,” Ewin became hooked on the adrenaline rush and energetic sociality that ice swimming stirred up in him. Presented as a “living example of how it is possible to teach oneself to endure freezing temperatures,” Ewin is portrayed as someone who integrated ice swimming into his daily life and newfound identity, eventually becoming a certified instructor in the increasingly popular Wim Hof Method (Maksimainen 2020; for a similar account from the same newspaper one year later, see Rantavaara 2020).

Ice swimming is not only a national Finnish pastime, as metasemiotically formulated in domestic and foreign media (e.g., Mallonee 2018), it is also a bodily technology readily favored and adopted by contemporary health-and-wellness enthusiasts, biohackers, and other international communities devoted to “self-optimization.” The brightest star of the communities who now swear by “cold exposure” is arguably the Dutch extreme athlete Wim Hof, also known as the “Iceman.” Wim Hof is a Guinness World Record holder for “swimming under ice and prolonged full-body contact with ice”² with a tragic yet relatable life story. Moreover, he is the originator of the aforementioned Wim Hof Method, a reflexive somatic technology (see Crossley 2006) that combines three “Pillars”: frequent cold exposure; Tibetan Tummo-inspired breathing practice (controlled hyperventilation with extended breath holds); and mindfulness meditation (Hof and Rosales 2012). While ice swimming is conventionally held to relieve stress, bolster the immune system, improve sleep quality, and give rise to calmness by “grounding” one in the present moment, Wim Hof has taken claims of the alleged health benefits of ice swimming to the next level, asserting that ice swimming can be used to teach anyone to access one’s autonomic nervous system and thereby to influence one’s immune and bodily function (see, e.g., Carney 2017; Hof 2017, 2020; Moravčíková 2017).³

¹ In this article, quotes from Finnish sources are presented in English translation. All translations from Finnish sources are my own.
² He also holds records in over twenty other categories, mostly having to do with freezing temperatures.
³ A crucial factor in the fame of Hof and his method is a narrative built on the fact that Hof has subjected himself and his student groups to various scientific, clinical tests in support of his somewhat lofty rhetoric. In an especially noteworthy effort, Hof and a group of his trainees were injected with E. coli bacteria, which would normally occasion an overreaction of the immune system with symptoms of fever, aches, and shivers in the subject. However, Hof’s trainees (the test group) reported fewer signs of influenza, and their measured blood...
The Wim Hof Method is an exemplary representation of what scholars have called therapeutic cultures, which, they argue, are increasingly important indices of changing values, political contexts, and contemporary understandings of the self (see, e.g., Madsen 2014, 2015; Foster 2015, 2016; Salmenniemi et al. 2020). Acknowledging the influence of the figure of Wim Hof within the glocal ice swimming communities, I am concerned in this article with ice swimming as practiced, prescriptively rationalized, and (commercially) reappropriated through the Wim Hof Method in Finland. I trace a semiotic rationale (and attendant ideology) associated with cold exposure that is often encountered in personal accounts and prescriptive dicta related to ice swimming. Upon plunging into an ice hole, neophyte ice swimmers and “Hoffers” (the in-group epithet used by Wim Hof Method practitioners) are instructed to acknowledge the cold, relax into it, and breathe with it rather than to confront or “fight” it. Through such revalorization of coldness (see Munn 1986), one’s relationship with the cold (and with one’s own bodily responses to it) is reflexively rationalized and thereby transformed. According to these accounts, nonreactive engagement with the cold teaches swimmers to acknowledge, face, and adapt to their (negative) emotions and to deal with stressful encounters in day-to-day life more generally. For instance, in the abovementioned newspaper article, Leigh Ewin reiterates the metapragmatic emblem of emotional expressivity and acceptance: “People use alcohol or drugs because they do not want to feel their emotions or they want to move their attention from things they do not wish to deal with. I want to feel. When I feel what is happening in the body, I feel alive” (Maksimainen 2020). Indeed, although seemingly a matter of brute physiological sensation, cold exposure is frequently presented as a holistic technology of body and mind. For example, for the Wim Hof instructor Hannele Alanko (the first female instructor in Finland), who discovered the Method while seeking alleviation for long-term stress and anxiety, ice swimming is a mental discipline that relies on willful surrender of control, on accepting one’s state of being regardless of one’s environment, as she explained to me in an interview.

I became fascinated by accounts through which ice swimming is pedagogically and pragmatically turned from a heightened sensory event into a significant ritual site “for the semiotic ordering and representation of experience” (Harkness 2013, 12). The ritual functions metonymically to concentrate relations across values “indicated far less inflammatory proteins than the control group.” Incorporated into an increasingly dense intertextual web of narratives surrounding Hof, this experiment (and others just as courageous or outrageous) is often celebrated by in-group publications as “unequivocally” demonstrating “that the autonomic nervous system and immune system can be regulated,” contrary to the conventional wisdom of medical discourse (Hof 2016, 14; see also Hof and Rosales 2012; Hof 2020).
(microcosmic) sensuous realms and (macrocosmic) social orders (Stasch 2011; Harkness 2015, 580). How exactly does cold exposure teach one to deal with the ailments and stresses of postindustrial capitalism? Why would one need pedagogical exegesis to appreciate the (beneficial) effects of cold? More precisely: by what kind of semiotic logic is one’s relation to cold construed as comparable (iconic) with one’s relations to people, for example to social peers? How are these comparisons mediated by different kinds of political or moral projects and ideologies of the body in stress?

Such concerns quickly led me to an exploration of stress as a generalized metaphor in narratives of modern selfhood and sociality and as a causal explanation for a host of mental and physiological symptoms (see Watkins 2014). As Elizabeth Watkins (2014, 50–51) shows, the contemporary concept of stress has been framed by medical theories, starting with the work of Hungarian-Canadian experimental physiologist Hans Selye in the 1930s, and, equally significantly, by cultural and historical frameworks associated with mind-body relations and disease causality. My aim is to use such frameworks to clarify the (semiotic) ideologies of the body through which ice swimmers and Hoffers rationalize their chosen practice.

**Qualia, Enregisterment, and Somatic Ethics**

By engaging with how specific tactile, affective, and bodily qualia (such as stress and its associated nervous systems) become the basis for broader frameworks of sensation and sociality within ice swimming communities, my purpose is to expand linguistic and semiotic anthropological scholarship on enregisterment of bodily and affective qualia. Qualia have emerged as the chosen analytic for semiotic and linguistic anthropologists working on the broad array of senses, materiality, embodiment, aesthetics, and affect (see Chumley and Harkness 2013; Harkness 2015, 2017, 2020). One strand of this research has been specifically interested in enregisterment of certain qualia—through elaborate forms of indexical and diagrammatic iconicity—into influential cultural models that link diverse objects across scales, chronotopes, and sensory modalities.

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4. As a brief terminological gloss, while *qualities* refer to (abstract) material properties of entities in the world, *qualia* refer to their real-time embodiments and experiential occurrences (Chumley and Harkness 2013, 5–6; see also Dewey [1934] 1987, 219). Qualia are thus experientially and semiotically mediated sensations, for example, the sensations of cold water as experienced by an ice swimmer. However, given that such embodiments and experiences are necessarily shaped by conventions and cultural frameworks (including biographical history), qualia are also by necessity conventionalized into *qualisigns*, in which the abstracted property itself rather than its material embodiment comes to signify something: for example, when valorizing cold as one’s “teacher” (Hof and Rosales 2012) or a “mental and physical mirror for seeing ourselves in a state of fight-or-flight” (Hof 2017).
into typified networks of signs. For instance, Susan Gal (2013, 2016) and others (e.g., Munn 1986; Agha 2007; Manning 2012; Harkness 2013; Gal and Irvine 2019) have shown how qualia unify different modalities of experience by indexically associating images of expressive registers with typified practices, objects, and forms of personhood, and historical and political conditions.

In this article, I examine the manner in which practitioners of the Wim Hof Method describe their corporeal states, functions, and transformations before and after contact with cold water, and I link these changes to indexical signs which have broader significance. I discuss the qualic differentiations and bodily or affective orientations which are formulated and recirculated in explanatory discourses of ice swimming. To complement existing scholarship in this area, my analysis highlights a form of bodily enregisterment and diagrammatic iconicity that turns on analogical relations between affective interpretants. In particular, I analyze how the formulation of iconicity between the way one responds to an environmental stressor (such as cold water) and the way one responds to an emotional stressor (such as a social encounter) appeals to dispositions and ideologies of the body that draw on both natural and holistic as well as (neuro)scientific discourses.

Emphasis on stress discourses aligns my work with an interest in what anthropologists Fernando Vidal and Francisco Ortega (2017) have termed “neurocentrism,” which they have analyzed as an influential ideology of human bodies and conduct and a framework through which an array of social projects and technologies of the self are rationalized, motivated, and naturalized. As an increasing number of scholars are noting (e.g., Choudhury and Slaby 2012; Rose and Abi-Rached 2013), brain sciences and popular neuroscientific notions (such as the functioning of the sympathetic and parasympathetic nervous systems, the metaphoric “gas” and “brake pedals” of our bodies) are currently influencing or giving rise to a host of cultural practices—and, I argue, to novel expressive registers. Building on the work of sociologist Nikolas Rose (2007), who depicts the contemporary “neuromolecular” style of thought as an extension of the somatization of the individual that began in the late twentieth century, cultural theorist Victoria Pitts-Taylor (2016) points out that while somatization has brought the physical body and health to bear on conceptions of identity, citizenship, and ethics, neurosciences and popular neurodiscourses have opened up the management of the self to new brain- and nervous system–based practices, including practices of care, enhancement, and optimization. In this regard, therapeutic interventions on the nervous system have been presented as mere extensions of an existing “somatic ethic” (what I would call a “somatic virtue
ethics”) that links the body to “the embodied mind—the brain” (Rose and Abi-Rached 2013, 22, 272n3). That said, I advise caution in describing such interventions as second-order attempts to re-channel and recode bodily processes (cf. Kockelman 2013, 181), since such descriptions can reintroduce the idea of an intentional agency subordinating the body under its volitional control, something that holistic mind-body practices would generally prefer to resist or challenge.

My account relies on fieldwork at a Wim Hof Method workshop in Finland, interviews with certified instructors regarding their methods, and participant observation/plunging at various more-or-less ritualized sites, such as public ice holes and swimming halls in Finland. I also make use of media texts such as websites, commercial publications (books, manuals, documentaries), podcasts, and YouTube videos to situate ice swimming and the Wim Hof Method as technologies of the body within contemporary mediatized (Agha 2011) therapeutic cultures. I view these texts and popular publications as representations of ice swimming through which influential rationales, sentiments, and action sequences are entextualized for broader circulation. Underlying my analysis are my own experiences with ice swimming, which I started practicing regularly during the fall of 2019. Such bodily learning has provided me with an embodied feel for ice swimming and its tacit intricacies.

The following discussion is divided into three main sequences. First, I locate ice swimming and its currently most visible international representative technique, the Wim Hof Method as an element of what I call the contemporary Euro-American therapeutic regime, pointing out its connections with other therapeutic and stress discourses. Second, I plunge into the semiotic rationale of what I call therapeutic ice swimming exegesis by looking at how Wim Hof practitioners describe the manner in which this technique “hacks” the autonomic nervous system by alternatively stimulating the sympathetic and the parasympathetic parts of this system. Third, I show how stress and its counterpart, homeostatic balance, are semiotically enregistered into cultural models in public interviews with practitioners.

Ice Swimming and the Therapeutic Regime: The Wim Hof Method
While increasingly incorporated within the global circulation and commodification of therapeutic cultures, ice swimming has long existed as a folk “hydrotherapeutic” practice (Foley 2014) in certain areas. This is the case in Finland, where people have allegedly taken ice plunges since at least the seventeenth century (see Kinnunen 2000), and where the recent development of this practice has been documented through decennially distributed written questionnaires.
by Suomen Latu ry (Finnish Ski Track), an organization promoting outdoors sports in Finland. According to the results of the questionnaire studies administered in 2000, based on the 662 written answers that practitioners of ice swimming provided, typical reasons for taking up the practice are recommendations by friends and relatives, curiosity, and health issues. Eighty percent of ice swimmers reported an increase in their ability to endure the cold. Others reported more specific health-related effects, like strengthened immunity (29.8 percent), alleviation of aches and (joint) pains (23.6 percent), resilience to stress (6.2 percent), or an increase in energy and sleep quality (11 percent). A third of the respondents either noticed no difference in their health or could not specify any particular changes. There were slightly more women than men in every respondent category.

Ice swimming is also being studied in clinical settings. A Finnish authority on the subject, Pirkko Huttunen (2000; see also Huttunen et al. 2004), credits the practice with increasing “brown fat” (brown adipose tissue). It is frequently pointed out that ice swimming should not be practiced by those with cardiovascular symptoms. Ice swimming has also been shown to temporarily boost the production of “stress hormones” (e.g., cortisol and adrenaline) and endorphins (endogenous morphine), which some suggest lies behind the “addiction” that the practice can allegedly induce. Endorphins in particular could be argued to provide ice swimmers with a sense of relief and invigoration by alleviating inflammation and pain. In Finland, ice swimming has been accepted by professionals as a treatment for rheumatism since at least the 1950s. Other more psychologically oriented but equally popular justifications for ice swimming relate to winning, transcending, invigorating, energizing, or “hardening” oneself (to the cold but also things beyond this), as well as therapeutically “grounding” oneself in one’s body and in the present moment.

To speak of ice swimming or the Wim Hof Method as a therapeutic or “happy” (Ahmed 2010) technology is to locate it sociologically in the proximity of a host of “psychological, spiritual and holistic discourses and practices that encourage cultivation, care and transformation of the self” (Salmenniemi et al. 2020, 1). While it arguably converges with some other holistic practices (e.g.,

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5. One could argue that in Finland, ice swimming is currently being reflexively accommodated as part of traditional or national culture (on this general process, see Honko 2013; see also Briggs 2020), for instance through national ice swimming competitions that have over 1,000 competitors annually and explicit presentations of ice swimming as part of Finnish health history. This may be one reason for the occasionally doubtful reception of the Wim Hof Method in Finland, as surmised by the Finnish Wim Hof instructor Hannele Alanko: “After all, our own tradition of ice swimming is so strong that we tend to think that we already know everything about this topic, as if ’No one can teach us how to swim in ice holes’ [laughter]” (interview in possession of author).
mindfulness) on the one hand and perhaps some forms of extreme athletics on the other, the boundaries between different modalities and technologies of the therapeutic regime are not exclusive from the outset. The orienting tropes, metaphors, and logics of these seemingly distinct modalities share common elements. As elements of this discursive formation, ice swimming and the Wim Hof Method are subject to the interventions and critiques launched against the therapeutic regime more generally.

On the one hand, standard critiques of therapeutic self-help (e.g., Rimke 2000; McGee 2012) reframe it as indexing the broader development and global expansion of neoliberal political economies, as an “ongoing redistribution of social risk, entitlement, and responsibility” (Graan 2016). In particular, these accounts have targeted a generalized form of neoliberal agency that essentially requires the subject to treat oneself in entrepreneurial terms as a collection of “assets that must be continually invested in, nurtured, managed, and developed” in order to maximize one’s efficiency in the work force and labor market (Martin 2000, 582; Gershon 2011, 539–43). In the more specific field of public health, this sort of self-responsibilization has been criticized as turning collective health care into forms of self-care (“healthy citizenship”) that is ideally performed by various proactive measures and modes of self-governing (e.g., by subjecting oneself to data tracking; see Gershon 2011, 539; Ruckenstein and Schüll 2017, 263). The neoliberal ideal is described as an infinitely flexible habitus that allows one to engage with risks and make decisions under conditions of increased uncertainty. It is able to adapt to, accommodate, and flourish—in an almost Aristotelian sense of “flourishing” (eudaimonia)—within a minefield of modern stressors and pressures (Wilf 2014, 407; see also Urciuoli 2008).

On the other hand, from an ethnographic perspective that lays relatively more emphasis on individual and collective agency than on discursive power and domination (cf. Kennedy et al. 2015, 6), therapeutic technologies have been framed as forms of everyday resistance, as vernacular ways of dealing with stress and illness. Suitably described as “radical in some ways and reactionary in others” (Swan 2010, 11), such technologies must be seen as tactics of coping with or disengaging from the deleterious effects of the neoliberal work ethic, rather than a means of “strategically” maximizing one’s alignment with it (Illouz 2008; McGee 2012; Salmenniemi et al. 2020). I suggest that the above perspectives need not be seen as opposing or negating each other in the first place (see also Elyachar 2010, 459). Rather, they point in the same direction: contemporary work and everyday lives put a novel array of demands on (certain) people, against which an increasingly broad array of antidotes (or symptoms) have emerged.
The antidote offered by the Wim Hof Method relies on the idea that voluntary short-term stress (also referred to as “hormesis”) contributes positively to the adaptive capacities of the human organism. Journalist and anthropologist Scott Carney (2017), a popular commentator on the Wim Hof Method, describes modern Westerners as weakened in adaptive abilities: “With no challenge to overcome, frontier to press, or threat to flee from, the humans of this millennium are overstuffed, overheated, and understimulated.” The Wim Hof Method appears to appropriate scientific discourses on stress according to which “the secret of health and happiness lie in successful adjustment to the ever-changing conditions on this globe” (Hans Selye, The Stress of Life [New York: Longmans, Green, 1956], quoted in Viner 1999, 400) in order to offer therapeutic remedies for the fact that modern Westerners are “disconnected” from their own bodies and selves (cf. Lemon 2018, 30).

Originally defined by Hans Selye as a set of nonspecific physiological responses to certain types of stimuli (termed a “general adaptation syndrome,” somewhat awkwardly acronymized as GAS), the concept of stress was quickly adopted in a multitude of social and scientific domains beyond experimental biology, including psychosomatic medicine, the military, industry, and popular culture (Viner 1999, 392–94). Several works have detailed the genealogy through which stress has been valorized or rheumatized (Gal and Irvine 2019, 125–26) into a condition of and master metaphor for modern times in general (Jackson 2013; Cooper and Dewe 2004; for critiques, see Doublet 2000; Patmore 2006.) As an encompassing notion with considerable slippage between terms such as “strain,” “pressure,” “anxiety,” and “nervousness”—each of which can be corporeally experienced as an array of indexical qualia such as bodily tension, discomfort, excitement, nervousness, or squeamishness—stress exemplifies the manner in which the (experience of the) body can often function as a deep indexical icon of living in culture and history more broadly (Silverstein 2013, 91–92; Stasch 2014, 637). From a semiotic perspective, the encompassing range of the stress concept is related to the fact that the causal object of stress may be traced to a diverse array of phenomena—whether environmental (e.g., pollution, cold), somatic (e.g., pain), psychological (e.g., depression, anxiety), social (e.g., loneliness), or cultural (e.g., work culture)—that are perceived as inducing stress. Poignantly, Elizabeth Watkins (2014; italics added) observes how stress can mean not only “the physical, emotional, or social challenge faced by an individual,” but also “the body’s response to one or more of these stimuli; or the pathological result itself” (2016; italics added). It may thus appear to function as sign, object, and interpretant, all at once.
From the perspective elaborated in this article, the functions and uptake of such ingredients of stress (“challenge,” “response,” “result”) vary according to the interpretative projects and regimenting frameworks of participants. For instance, the physical, emotional, or social challenge (or stressor) faced by an individual might be construed as a sign, but also as an object that one gets at through other signs, such as one’s bodily responses. Meanwhile, bodily responses are commonly construed as interpretants of other signs (stressors). However, a bodily interpretant, such as a stress response, can draw attention to itself and thus become a sign capable of yielding further (propositional) interpretants, as in the statement “I must be having a stress reaction caused by such-and-such.” In what follows, I argue that therapeutic ice swimming exegesis functions in part by supplying one with a pragmatic framework through which to construe and manipulate such constellations of signs, objects, and interpretants.

While the gender profile of the therapeutic field has long been femininely marked, contemporary therapeutic cultures also betray a masculine (bio)engineering ethos that treats the body in cybernetic terms as a self-regulating system in intimate entanglement with its environment (see Pickering 2010 on the “adaptive and performative ontology” of cybernetics). Such tendencies toward scientific justification of traditional modalities of health (and their cybernetic re-enregisterment) are perhaps most evident in so-called biohacking, which links various (holistic) health practices to cutting-edge technology and reintroduces them under the rubric of evidence-based science. A jargon-laden technoscientific register (Carr 2010) is used, for instance, to reframe ice swimming as “cold thermogenesis” induced through a “hormetic stressor.” The idea of hacking the body, often glossed as a use of the environment to manipulate one’s own (hidden) biology, also aligns with the Wim Hof Method, which promotes ice plunges for their alleged ability to trigger autonomic responses in the body. The notion of hacking also affords access to the semiotic ideology underlying these practices, an issue to which I now turn.

Hacking the Nervous System: Three Interpretants

In this section, I examine the action sequence of ice swimming and its metasemiotic regimentation through descriptive and prescriptive texts, primarily those provided by the Wim Hof Method. I view these pedagogical texts as providing frameworks of selective attention to bodily qualia under the framework of holistic self-awareness (cf. Chumley 2017, S11). In particular, I analyze the semiotic logic through which the Wim Hof Method appropriates ice water as a tool for heightening attentiveness to patterns of bodily response and
prescribes heightened somatic (and focused mental) awareness. All of this is glossed as “contact” with one’s body. The body is formulated as a unique object, a central communicative channel for sociality which mediates how other subjects and objects exist for us. Holistic techniques of the body such as the Wim Hof Method attempt to unravel our received semiotic ideology of an intentional and immaterial self in control of a material body by provoking, manipulating, and granting agency to the body and its parts.

Ice swimming is an action sequence in which one usually goes to the sauna (if available and if preferred in this order), and then, after a warm-up, plunges into water that is as close to zero degrees Celsius as possible, whether in a lake, in the sea, or in one’s own private pool. Technologized versions exist in the form of cold showers and freezers filled with ice cubes (see, e.g., Rantavaara 2020). The ordeal ranges from a few second to a few minutes. Ice swimmers and Wim Hof practitioners testify to heightened mood and somatic awareness through holistic qualia such as a “natural high” or an “adrenaline grin” (Maksimainen 2020). As might be expected, cautionary tales also circulate of swimmers who develop something paramedics refer to as the “afterdrop”: staying in the cold for too long makes one’s core temperature too low. In such cases, the process of vasoconstriction, in which chilled blood circulates from cold extremities to body core, occasionally has fatal consequences (see Carney 2017).

In therapeutic ice swimming exegeses, including those describing the Wim Hof Method, focused attention is given to the somatic sensory encounter with the cold itself. As a multisensory experience that “bundles” (Keane 2003) together various sensuous qualities—from the crisp air in one’s lungs to the biting snow under one’s feet (if practiced in wintertime in natural settings)—ice water itself is characterized predominantly by brute Secondness and affective immediacy, which bypasses higher-order mediation through a directly felt haptic assault on one’s senses (cf. Newell 2018, 4). As Wim Hof instructor Mahdi Hamidi puts it: “When you get there, you simply cannot think about anything else rather than that moment.” Utilizing the cold to bring oneself into the privileged chronotope of the here-and-now of self-presence, the Wim Hof Method aligns itself with other holistic practices that similarly prescribe non-evaluative self-observation as therapeutically efficacious (Kirmayer 2015; Mckay 2019; cf. Nakassis 2018).

6. Classically illustrated by Peirce through the example of an “ear-splitting, soul-bursting locomotive whistle,” Secondness as pure external force and reaction to this force is also described as relating to how “different sense-qualities have different degrees of intensity” (CP 7.496; quoted in Manning 2016). In this regard, the Peircean ontology of Secondness as intensity has been recently designated as corresponding with the domain of affect (see Newell 2018; see also Chumley 2017; Harkness 2020).
The Wim Hof Method complements the basic sequence of therapeutic ice swimming with its own metasemiotic rationalizations by drawing from scientific literature on bodily function, particularly the function of the nervous system. In order to reap the most benefit by staying in the water for a proper period of time—two minutes is sometimes suggested as an ideal—one is supplied with tools for facing the cold and transcending the stress reaction it prompts in the body. These tools can be framed as different types of interpretants by which the cold is received.

As mentioned, upon descending into an ice hole, the ice swimmer is instructed not to attempt to repress bodily reactions. Rather, one is encouraged, first, to adopt a non-reactive observational stance toward one’s “affective interpretants” (i.e., bodily responses and stress reactions), and thus to lengthen the “gap” or delay between stimulus and response. Second, one is taught to counter these largely involuntary reactions by purposefully controlled “energetic interpretants” (i.e., movements and actions), such as deepened and lengthened out-breaths that are explained as activating the parasympathetic nervous system associated with calm. Third, as explicitly described in the third “Pillar” of the Method, “Mindset,” one is encouraged to fix one’s mind on suitable “representational interpretants” (i.e., willful thoughts) that frame the act of ice swimming in explicitly propositional terms. The Wim Hof Method proposes that willful mental intention has causal efficacy over one’s bodily sensations, feelings, and resilience to the cold. Finally, the Wim Hof Method aims at transforming what Peirce might call one’s “ultimate interpretants,” by seeking to change one’s attitude, habit, and disposition towards one’s bodily states (Kockelman 2013, 65, 179).

The modus operandi of the Wim Hof Method thus consists of ramping up a stress response and then intentionally countering this response in order to take control of one’s autonomic nervous system and its fight-or-flight reactions. The rationale for this is typically parsed in explanatory metadiscourses, through talk of three types of (muscle) control and associated parts of the nervous system. First, the somatic nervous system is linked to muscles that we control voluntarily, for example, muscles used in moving our limbs. Second, the autonomic nervous system is linked to muscles over which we have no control, like those that regulate the heart, digestion, or dilation of pupils. In effect, the autonomic nervous system (and the “reptilian brain” associated with it) is construed as a cause-and-effect system that lies under the radar of conscious volitional control (by the “mammalian brain,” associated with the prefrontal cortex). Third, there is a group of muscles located between the somatic and autonomic nervous systems, like those involved in breathing or blinking our eyes, actions which are possible...
to control intentionally, but which are taken over by the autonomic system as soon as our focus lapses.

The third group is the type that is described as affording access to manipulating or “hacking” the second group (the involuntary responses and reactions). Such a performative mind–body holism, which appears to be characteristic of holistic therapeutic technologies, is best called a form of “endogenous phaticity.” Here, this term does not refer to the pragmatics of establishing and maintaining social connections between people, in Jakobson’s (1960) sense. It refers instead to the pragmatics of establishing connections or ties between one’s body and one’s perceiving mind by creating an “intra-active” (Barad 2007) circuit that links aspects of the same organism to each other (cf. the concept of “intro-sensing,” Mol and Law 2004, 47–48).

Likewise, insofar as the autonomic nervous system is conventionally conceptualized as a causally conditioning infrastructure beyond the grasp of our volitional intervention—as “body” in opposition to “mind”—hacking the nervous system prescribed by promoters of the Method might be described semiotically as a partial transformation or upgrade from channel (of the body) into a code (of the mind) (see Kockelman 2010; see also Kockelman 2014, 609; Keane 2018). What are the implications of such a transformation from body (index) to mind (symbol) in terms of embodiment and ethics? Could this point to an expansion, or rather somatization, of ethics? To lay out some further context for discussion of these questions, I will next look at how such transformations are described and semiotically organized in public interviews with practitioners and their associated cultural regimes of differentiation, valuation, and personhood.

**Enregistering Bodily Qualia: Stress and Homeostasis**

This section describes how bodily qualia of stress are linked to affective interpretants that are textually projected onto person-types. The (in)ability to adapt to (environmental or social) stressors becomes a somatic disposition of a person. Ice swimming discourses can be argued to enregister novel typifications of bodily reactions or adaptive skills and to naturalize these through characterological models that have wider implications. It is also worthwhile to consider their implications for the broader framework of an emerging somatic ethics (see Mckay 2019).

Consider the following depiction and evocative reenactment of an ice plunge, provided by a Finnish expert of men’s health, Teemu Syrjälä. As a vocal advocate of the benefits of ice swimming for general well-being, Syrjälä has also adopted the practice as part of his therapeutic “men’s weekends.” The narrative
below is from a public, video-recorded podcast interview in which Syrjälä is discussing cold water as a potentially useful tool through which to heighten contact with one’s body. His narrative covers four aspects of this sequentially:

And how I feel that it has had the most impact is that . . . Like, it’s a very uncomfortable situation, especially the colder the water is. So what does your body do? It tries to close up and it tries to . . . breathing is blocked. [gasp] [2:14:05–2:14:16]

And easily, this is something that happens in our lives more generally. And here I think it would be good to go through a bit of the functions of our basic nervous system. So, when you are, let’s say . . . You’re driving a car and someone cuts in front of you. What do you easily do? [squeezes an imaginary steering wheel and pulls back while straining his body] Sympathetic nervous system . . . stress reaction . . . just like in the ice hole [2:14:16–2:14:35]

And that, I think, has been one of the biggest things in my own being . . . is that I have learned to relax in there. So that when the cold hits you, you just slowly . . . [breathes in and out deeply, while lifting his arms to the rhythm of the breathing] parasympathetic nervous system . . . the out-breath activates just that. And those slow and deep breaths are a huge deal. Then you can be in the ice hole and just like: “This is a stressful thing for my body, but it is a fairly positive stress that one can relax into.” [2:14:35–2:15:08]

And that is a lesson I have tried to bring into the basics . . . basics of everyday life. So that always when I notice—and these days I notice it very clearly—“Oh, my body is having a stress reaction . . . sympathetic nervous system is really active. Let’s try to . . .” [breathes out slowly and deeply] And when the out-breath has come to its end . . . things look a bit different again. [2:15:08–2:15:33]

This account of an encounter with ice water exemplifies the semiotic logic through which therapeutic ice swimming discourses and the Wim Hof Method (with which Syrjälä is undoubtedly familiar) remediate scientific stress discourses by enregistering them into generalized dispositions and models of conduct. Prefiguring his account by first presenting ice swimming as counterintuitive—which arguably renders his account more relatable—Syrjälä zeroes in on somatic self-reflection by evoking a multimodal depiction of a stress reaction in cold

7. “Ihmisiä, siis eläimiä #39” [Humans, therefore animals], an interview podcast with Teemu Syrjälä and Henry Vistbacka, December 18, 2019, https://www.youtube.com/watch?vnpMNn6IHy8c&tp8967s. The segments here are translated by the author.
water. This reaction, soon associated with the sympathetic nervous system, is initially iconized through a host of mutually indexical qualia: rapid breathing, an anguished look on his face, bodily strain and tension, and the general bodily hexis of “closing up” (the channel, one might add) or “holding in.”

Represented as comparable with an array of other events and semiotic encounters “in our lives more generally,” this affective interpretant from the domain of ice swimming is then iconically paralleled to stress responses from the domain of modern life (Rosen 2019, 290). The axis of comparison is formulated by going into explicit detail on the functioning of nervous systems under stress. Posited as the interior causal substance that makes itself perceivable through outward bodily qualia, the autonomic nervous system, formulated as having two main branches, is brought into the discussion by a metonymic illustration of another stress reaction, drawn from a quotidian chronotope of motor traffic, which is similarly refigured through bodily hexis into an indexical icon of a general disposition (Gal and Irvine 2019, 275). The parasympathetic nervous system is in turn rhematized with a complementary bodily hexis of “opening up” (the channel), formulated as an index of homeostasis, connection, and equanimity (cf. Kramer 2011, 161).

Typified as general somatic dispositions, stress and homeostasis are portrayed as sharing the same, mutually iconic relations among their contrastive parts (Gal 2013, 34). To borrow Nikolas Harkness’s (2013) terminology, such iconic relations across a variety of different modalities emerge within a state of metapragmatically regimented “qualic transitivity” that allows for transpositions of qualia from one semiotic order to another. The axis is construed as to talizing in the sense that both stress and homeostasis are experienced across the mutually associated modalities of sensorial and social experience: the relaxed posture, softer demeanor, and sociable mood of homeostatic bodily balance as opposed to the tense mood and uptight somatic posture of stress (cf. Harkness 2013, 26).

When portrayed as a universal tool for stress reduction and heightened somatic awareness, therapeutic discourse on ice swimming as modulation of affect tends to indexically associate physiological relaxation with moral implications, perhaps even conflating the former with moral equanimity. I am here reminded of anthropologist Francis Mckay’s (2019) recent discussion of a historical shift in Western virtue ethics from the virtuous disposition of cultivated character to a largely somatic discourse of physiological calm. As a result of this “somatization of ethics,” the state of equanimity considered an exemplary disposition in earlier ethical discourse has been increasingly reframed and understood
as a somatic state of calm, amenable to manipulation through the autonomic nervous system. Reminiscent of such somatized ethics and a similar semiotic ideology that foregrounds performative mind-body transactions, therapeutic ice swimming exegesis seems to postulate the calm state of equanimity as almost mechanically following from bodily relaxation (see also Hirschkind 2006, 73–74). Although the contextual frameworks—somatic stress reduction, moral equanimity, “well-being”—to which ice swimming is currently linked are diverse, they seem to be situated together at the intersection of an emerging, often scientifically regimented somatic ethics on the one hand, and the much longer (residual) trajectory of Western virtue ethics on the other (Williams 1977; Hirschkind 2006, 82; Shusterman 2008, 2009).

Conclusion
As Annemarie Mol and John Law (2004) point out, we relate to our bodies not only by feeling them from the inside (subjectively, as something we are) or by measuring our bodily responses from the outside (objectively, as something we have), but also by enacting, acting, and intervening on them. Through these processes, we can gain important performative and practical knowledge about our bodies in relation to their environments. In this article, I have described how ice swimmers intervene on their bodies and analyzed how the Wim Hof Method pedagogically appropriates and metasemiotically regiments the practice of plunging into cold water as a means of altering one’s perception of bodily responses to stress in order to achieve homeostatic well-being. To this end, I have introduced an anthropological perspective on therapeutic technologies of the body which shows how these technologies teach one to detect and attend to salient qualia, and thus teach semiotic behavior, in the sense that a simple uptake, whether noticing or even reaction, makes any behavior into a sign in a Peircean sense (Gal 2016, 124; Gal and Irvine 2019, 112–37.) While the question of whether ice swimming (practiced in the Wim Hofian mode or not) indeed affords practitioners with improved somatic capacity is beyond the purview of this article, my analysis can shed light on the semiotic rationale that underlies such claims.

8. Mckay (2019) focuses on how the somatization of ethics has been criticized as eliding moral character education in favor of physiological and scientific understandings of calm relaxation and thus contributing to a broader deterioration of virtue ethics. For instance, modern mindfulness meditation has been frequently blamed for instrumentalizing the practice as a means to reduce stress or gain mental capital rather than pursue the moral goals of the Buddhist ethics underlying the “original” practice (see Harrington and Dunne 2015).
I have focused on how bodily states and responses are caught up in expressive registers that make the bodily qualia of stress and homeostasis consequential to social and communicative practices. They provide (moral) anchors of orientation for the situated enactment of forms of personhood and somatic disposition. Such registers are not (yet) lexicalized in the sense of lexical registers. I argue that bodily registers nonetheless function in social life as recognizable models of action and social interaction to those acquainted with the discursive practices that formulate their significance. Further still, I show how ice swimming exegesis in general and the Wim Hof Method in particular reformulate (neuro)scientific stress discourses into an increasingly influential metapragmatics that frames our ideologies of the body in the language of hormonal functions, autonomic nervous systems, and brain sections. I have highlighted a specific semiotic ideology that reframes and performatively aims to transform parts of the body from channel (as causal index) into code (as symbol) within an emerging framework of somatized (virtue) ethics (Mckay 2019). Insofar as shifting saliencies of sign relation qua ideology often point toward broader sociocultural and political trends, I contend that linguistic and semiotic anthropologists should pay increasing ethnographic attention to transformations of these kinds.

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