# TRADITIONAL HEALING EXPECTATIONS IN LIGHT OF PLACEBO AND PERFORMANCE STUDIES

#### Siria Kohonen

Postdoctoral Researcher University of Helsinki, Finland siria.kohonen@helsinki.fi

**Abstract:** This article examines what expectations lay people (those not considered folk healers themselves) had for pre-industrial Finnish-Karelian healing traditions, how these expectations were represented in archived folklore materials, and how they, in turn, affected the healing traditions. The study represents a cross-disciplinary analysis of the subject, with theoretical perspectives drawn from performance studies, cognitive science memory studies, and placebo studies. Via a two-step analysis, this article examines the different meanings given to traditional healing methods and suggests that these methods increased the placebo effect in several ways, most importantly by fulfilling the general expectations for healing performances. The article also proposes that the placebo effect affected the way that lay people considered efficacious healing performances.

**Keywords:** ethno-medicine, Finnish-Karelian traditions, folklore, performance theory, placebo effect, schema-analysis

#### **INTRODUCTION**

In this article my aim is to study how individuals' expectations of healing rituals affect these rituals. Based on performance theories and placebo studies, I consider that expectations for healing rituals affect the way that people evaluate and experience their efficacy. According to performance studies, people tend to evaluate a performance as successful if it follows their general expectations (e.g., Bauman 2004: 9, 126–127), and according to placebo studies, a patient's expectations of treatments in turn affect the placebo effect, which also increases physical healing rates (e.g., Kirsch 1985; Brody 2010). I suggest that recollections and narratives about ritual traditions mirror these expectations, and that these expectations affect the practical healing performances as well.

https://www.folklore.ee/folklore/vol88/kohonen.pdf

As a case study, I analyse materials about Finnish-Karelian healing traditions in the late nineteenth and early twentieth centuries – more precisely, materials about the traditional healing of skin burns. The materials consist of recollections about healing methods and healing instructions, and they were collected and sent to the Folklore Archive of the Finnish Literature Society between 1880 and 1939 from all over Finland and from several parts of Karelia.<sup>1</sup> My research questions are as follows: What were the general expectations of and understanding about traditional skin burn healing? How are these expectations represented in archived folklore materials? How did they affect healing traditions? I studied these questions via a two-step analysis. First, I conducted a quantitative analysis to determine the healing features that occurred most frequently in the research material. After that, I analysed the different qualitative aspects of these frequently occurring features.

This article functions as a complementary study to previous ones about Finnish-Karelian healing traditions (e.g., Naakka-Korhonen 1997; Piela 2003, 2005, 2006), magic and incantations (e.g., Siikala 2002; Stark 2006; Issakainen 2012; Tarkka 2013; Frog 2017), and the wider academic discussion about the relationship between archived folklore materials and historical folklore performances (e.g., Gunnell 2018; Wolf-Knuts 2020). The approach followed by placebo studies has been adopted to studies on historical healing traditions by, for instance, Olympia Panagiotidou (2016; 2022), and James McClenon (2002) has connected the placebo effect to the evolutionary origin of religions. As far as I am aware, the perspectives of placebo and performance studies have not been combined before.

A pre-industrial, early modern agricultural lifestyle maintained its dominance in many Finnish and Karelian provinces until the early twentieth century, and there were many areas in which people lived far away from hospitals or professional doctors. Thus, traditional healing practices and healers were valued in some regions even up to the 1930s (Stark 2006: 50–53). In most cases, when dealing with minor afflictions, people would use domestic methods of healing: in most households and neighbourhoods at least someone knew some measures, which might include massaging, bathing in the sauna, and using different ointments and herbs (Piela 2006: 291–293).

Verbal incantations and symbolic ritual actions were also important parts of the healing tradition. Lay people might have known a few of these methods, but most incantations and rituals were performed by traditional specialists, the *tietäjä*s (Siikala 2002: 76–79, 85–86; Tarkka 2013: 104–109). A *tietäjä* ("the one who knows" in Finnish and Karelian) was a traditional semi-professional sage or a ritual specialist in pre-industrial Finnish-Karelian cultures. Healing was the most important task of *tietäjä*s and, in addition to incantations, the *tietäjä*s also used many similar healing methods as the lay people, for instance bathing in the sauna or using different ointments (Siikala 2002: 76–84; Piela 2005: 18–21). In this article, the traditional healing knowledge of the *tietäjä*s, and other studies about it, function as the information context for my analysis, but I will primarily concentrate on the knowledge and perspectives of the lay people.

Since my research perspective in this article concentrates on different processes of the human mind, my own analyses and interpretations of the research material are not likely to be similar to those that the informants themselves would have had about the healing traditions. The aim of this study is to complement the academic understanding of vernacular healing systems from an etic (versus emic) point of view.

#### THEORETICAL PERSPECTIVES

#### Ritual, performance, and the schematic expectations of the audience

Rituals have been studied as performances by Stanley J. Tambiah (1985), Ronald L. Grimes (2006, 2014), and many other scholars. Generally, rituals represent a form of conventional behaviour – they are combinations of formal and structural enactments and words that condense cultural values and worldviews (see, e.g., Tambiah 1985). As performances, rituals designate specific roles for their participants, might have an audience, and are expected to achieve certain goals, such as status changes, luck in life, or improved health (Grimes 2006; 2014: 297–302; Schechner 2013 [2002]: 52–88).

Performances – rituals included – are "restored behaviours", that is, behaviours that are familiar, known, and have been witnessed earlier within their social contexts (Schechner 2013 [2002]: 28–30). The performers, the coparticipants, and the audience always recognize performances as such, and they might evaluate how well the performance fits their previous conception of what comprises a (good) performance. Richard Bauman describes these evaluations as being made within the *frames* and *keys of performance*, such as special codes, figurative language, or appeals to tradition (Bauman 1984 [1977]: 7–24). Additionally, John Miles Foley uses the concept of the *performance arena* to describe the social and cultural frameworks associated with experiencing and interpreting a performance, the different semantic meanings ascribed to it, and the different verbal, sensate, and embodied aspects included in it (Foley 1995: 8, 47–49). However, (ritual) performance on the basis of their *expectations* of what comprises a successful performance – their understanding of

the performance arena, and what they consider a successful performance to be (Foley 1995: 49; Bauman 2004: 9, 126–127).

The expectations for these rituals are constructed through the memory processes of individuals. Their previous experiences and learned stories are used to construct *schematic understandings* of how these situations usually ought to go. Mental schemas are, analytically speaking, depositories of thinking and absorbed knowledge: they contain representations of different elements that occur in different events, entities, or environments. When an individual encounters a situation similar to their previous experiences, the relevant elements of that situation are activated in the individual's mind as they construct a schematic understanding involving a kind of "basic grammar rules" for that situation. However, schemas can undergo continuous changes through the effects of new experiences (see, e.g., Eysenck 2015 [2014]: 182–188).

Schematic understandings guide individuals as they interpret and act on different situations (ibid.). Schemas lead people to have previous expectations about what to expect in different situations: when one goes to a doctor, or to a traditional healer, is that person expected to wear a white coat, or not? If the majority of people in a society share a more or less similar schema, it forms a "cultural schema", which will guide socio-cultural expectations and interpretations about what comprises successful performances (Bernard 2011 [1988]: 439–443). Thus, it can be said that (cultural) schematic understandings form the basic rules for evaluating the success of healing rituals as well.

The cultural schemas associated with ritual and/or healing performances also include understandings of relevant traditions. In the cases of vernacular healing rituals, the expectations for performances are constructed within the frames of tradition: people recognize the healing performances generally because of these schemas, and additionally they recognize them as special and meaningful traditions (see, e.g., Bauman 2004: 8–10, 27–28). Performances following the frames of tradition acquire authority, and also activate several cultural-semiotic links: links to tradition might also include, for instance, moral stances or socio-cultural codes (Bauman 2004: 25–28; Koski 2008: 282; Tarkka 2013: 119).

## The placebo effect and the influence of expectancies

Facing and fulfilling the socio-cultural schematic expectations increases the placebo effect in different healing processes, both in traditional and contemporary medicine. The *placebo effect* is a medical and psychobiological phenomenon in which mental stimuli lead to improved neural and physical responses in a patient's condition (Benedetti et al. 2005; Brody 2010). The term *placebo* 

has many pejorative connotations, such as "fake medicine", and the "illusion effect", which have led to views that the placebo effect is something that should be avoided in contemporary medicine. However, modern placebo studies have shown that the placebo effect is an important part of almost all medical encounters (Brody 2010). The placebo effect causes responses in and activation of many of the neural areas that would be activated by the pharmacological treatments that the placebo mimics (Benedetti et al. 2005).

According to the research on placebos, the features that increase the placebo effect in healing include: 1) the fulfilment of the expectations that the patient has about the treatment; 2) positive conditioning; 3) the communication and provision of exact information for the patient about the treatment; and 4) the motivation for healing (Benedetti 2008; Kaptchuk 2011: 1855; Finniss et al. 2010). Howard Brody has also suggested a meaning model for placebo responses. He argues that the placebo effect may also activate when a patient feels that the healer or clinician listens to them, or when the patient receives an explanation for the illness that comports with their worldview, or when the patient feels that they can exert control over the illness (Brody 2010: 160–161). If these positive placebo accelerators are instead manifested in their negative forms – for instance, avoiding communication with the patient or highlighting the negative effects of the treatment – this might even enhance *nocebo*. The nocebo effect lowers the normal healing rate and might even lower the expected efficacy of intense painkillers, such as opioids (Amanzio et al. 2001).

Fulfilling a patient's expectations is the most studied aspect raising the placebo effect, although oftentimes the different types of influence cannot be properly distinguished from each other. Expectancy influences treatment results in ways similar to those that influence the success of performances. Thus, I will introduce more closely the effects of expectancy from the viewpoint of placebo studies.

Many placebo studies have provided evidence for how mental processing can increase the placebo effect. For instance, verbal cues can manipulate the patient's expectancy and mediate the placebo effect (Kirsch 1985; Finniss et al. 2010: 688). There is a clear difference in efficacy based on whether the clinician says the medicine is a sugar pill or a powerful painkiller.

Contextual cues, such as the appearance of the environment and the healer, can also be evaluated via expectations. Patients have a schematic understanding of how a treatment usually happens. In a modern context, a medical treatment usually involves a specific, conventional script and not much improvising: the doctors wear white coats and diagnostic instruments, the treatment room has a certain sterile look, and the interaction between the clinician and the patient involves certain questions and answers, gestures, and possibly methods of touching (Colloca & Miller 2011: 1860). If these expectations are met, it usually increases the placebo effect; however, as noted above, violations might lower it, or might even trigger a nocebo.

A patient's prior experiences of illnesses, pain, or afflictions will affect his or her expectations about future illnesses and treatments (Colloca & Miller 2011). These prior experiences of successful healing situations do not need to be first-hand experiences, as placebo effects also occur in patients who have observed the benefits of the treatment in another person (Colloca & Benedetti 2009). In addition, the clinician-patient relationship also affects the placebo effect and expectations (Kaptchuk et al. 2008).

To conclude, an individual's former experiences, the verbal and contextual cues from the environment, and the framework of tradition all work together to construct mental schemas about afflictions or illnesses and their healing processes, and this schematic knowledge constitutes people's expectations of different healers, curing methods, and their efficacy. Schematic expectations are thus not only socio-cultural evaluation tools for making judgments about the success or failure of a healing performance. They also construct the fundamentals for a patient's mental processing, which in turn activates the placebo effect, and thus might influence the success or failure in dealing with a patient's physical health as well.

Both performance theories and placebo studies highlight the importance of expectancy in the success of healing performances. However, whereas the perspective of performance theories concentrates on interpretations of the success of (healing) performances, the perspective of placebo studies emphasizes the physical outcomes of healing performances – the improved healing rates.

## **RESEARCH MATERIAL**

The research materials for this study were gathered from all over Finland and Karelia between 1880 and 1939, and they were deposited in the folklore archive of the Finnish Literature Society (Suomalaisen Kirjallisuuden Seura, SKS).

Before the 1880s, folklore collectors were mostly academic persons interested in poetic traditions, but during the 1880s lay people also started to collect materials about their own traditions, and these collections included prose narratives and reports on traditional practices as well (Stark 2006: 53). The first larger collections of ethno-medical traditions were also collected during that time. The most extensive collections of ethno-medical traditions gathered before the era of wider industrialization in Finland and Karelia were, however, collected during the 1930s. Between these decades, there were some periods when folklore collecting was less intense, and thus, for instance, the collections from the 1920s are not very extensive compared to earlier or later decades.

The informants of this material were mostly lay people who had a general understanding of the healing tradition but were not specialists in those methods. Thus, the analysis of this article focuses on the perspectives of these lay people and their understandings about their own domestic healing practices as well as the healing performances of the *tietäjäs*. The research material consists of stories about healers and their methods, some personal recollections about illnesses and afflictions, and reports about domestic healing measures used in the past. Much of the material is presented in the form of healing instructions, but primarily they were recorded rather like responses to questions, such as "Do you remember what kind of healing procedures were usually done if someone burned their skin?", so the instructions were often a kind of recollection as well.

Several researchers have discussed in multiple ways how recollections and narratives relate to the events, practices, and performances they reflect (e.g., Tarkka 2013: 76–79; Gunnell 2018; Wolf-Knuts 2020: 116). The archived materials cannot be considered as the "original" folklore that people would perform for and within themselves; rather, the archive materials represent a kind of meta-commentary about folklore and traditional healing (see, e.g., Wolf-Knuts 2020: 116; Kohonen 2022: 31–33).

In cognitive memory studies, scholars have provided evidence that schematic aspects are better remembered than aspects that violate established schemas when people are asked to recall past events or scenarios (e.g., Brewer & Treyens 1981; Lampinen & Copeland & Neuschatz 2001). Based on what we know about schematic knowledge and its influences on memory processes (see previous sections), I believe that archival materials about folklore can be considered a special kind of pathway to understanding the folklore and traditional knowledge that people performed in their everyday lives. I consider that when interviewers asked about folklore and old traditions, the informants provided them with information that was *not exactly* their folklore, but was still something that *bore the same main schematic aspects* that were also present in folklore – with narratives and practical performances both included. Thus, in my analysis, I will concentrate on the general schematic features that are present in this research material.

Since the ethno-medical collections in the SKS archive are huge, and comprise tens of thousands of archive units, I have concentrated on materials concerning skin burn healing. This corpus of material consists of 573 archive units and was collected from approximately 500 informants. I chose skin burns because they represent an affliction that might be anything from harmless to deadly. All in all, the skin burn corpus is surprisingly diverse.

#### **QUANTITATIVE ANALYSIS**

The first part of my analysis is built on a quantitative evaluation of the most frequent features mentioned in the research material. These include suggestions for specific medicines, ointments, ingredients for ointments, and instruments required in skin burn healing; instructions for specific enactments or recited words; mentions of special healers or specific contextual circumstances required in healing; and certain descriptions of the affliction itself. Inspired by H. Russell Bernard's anthropological schema analysis method (Bernard 2011 [1988]: 439–443), I treat the most frequently occurring features as parts of a culturally shared schematic understanding of skin burn healing.

Following this process, I found altogether 235 different features. I considered a feature frequent if it appeared in more than 20% of the entire research material, which resulted in five considerably frequent features. It is of course important to note that since the research material was not originally collected in any single standard way, but rather via different kinds of discussions between the informants and collectors, it is safe to assume that these five features did not come to people's minds in any one special context, but rather on several occasions.

The five most frequent features are as follows:

- 1) The healing requires ointments (61% of the material);
- 2) The healing requires recited words, for example, incantations (43%);
- 3) Similar-affects-similar concept used in healing (26%);
- 4) The affliction is called "the wraths of fire" (*tulen vihat* in Finnish and Karelian) (26%);
- 5) The healing requires symbolic repetitions three or nine times (21%).

Decade	Quantity	1)	2)	3)	4)	5)
1880s	45 units	33 / 73.3%	23  /  51.1%	16 / 35.6%	12 / 26.7%	13 / 28.9%
1890s	73 units	48 / 65.8%	44 / 60.3%	25 / 34.2%	14 / 19.2%	19 / 26.0%
1900s	37 units	23  /  60.5%	32  /  84.2%	8 / 21.1%	8/21.1%	16 / 42.1%
1910s	46 units	33 / 71.7%	21 / 45.7%	7  /  15.2%	17 / 37.0%	9 / 19.6%
1920s	17 units	13  /  76.5%	1/5.9%	3 / 17.6%	1/5.9%	0 / 0%
1930s	355 units	197 / 55.5%	126 / 35.5%	91 / 25.6%	95/26.8%	62 / 17.5%
Alto- gether	573 units	347 / 60.6%	247 / 43.1%	150 / 26.2%	147 / 25.7%	119/20.8%

Table 1. The frequencies of the most common features in the research material, sorted by decade

The first feature – that the healing requires ointments – points to the physical nature of skin burns that require physical treatments. Features 2, 3, and 5, however, suggest a need for more ritualistic and symbolic treatment methods. Feature 4 presents a vernacular understanding about certain skin burns as manifestations of fire's anger.

I have used the same research material and quantitative evaluation as used in this article in a previous study (Kohonen 2020).<sup>2</sup> In that study, I concentrated on analysing feature 4, the "wraths of fire" illness, and how these understandings mirror the human mind's intuitive thinking processes. Therefore, in this article I will concentrate on the other four schematic features.

# QUALITATIVE ANALYSIS: RITUAL EXPECTATIONS IN THE MATERIAL

The second part of my analysis involves a qualitative content analysis of the most frequent healing methods found in the quantitative analysis: the use of ointments or recited words, the similar-affects-similar concept, and the use of symbolic repetitions in skin burn healing. I will focus on each feature separately, and show how they are presented in the research material. By means of this analysis, I attempt to evaluate the idea of approaching the materials as schematic expectations, and to form a deeper view about each frequent feature, their different cultural meanings, possible psychological backgrounds, ways of reception, and possible relations to the placebo effect.

## **Ointments**

Burned skin should be moistened with cow's urine so it won't get blisters.

Burns are also moistened with flax oil, which keeps the bandages from sticking to the wound, because its form is so greasy.

Lamp oil is also used in anointing the burn spot, it does not let the blisters rise. Palanutta ihoa kastellaan lehmän virtsassa niin se ei nouse rakoille. Palohaavaa voitellaan myös liina öljyllä joka pitää sen rasvaisen olonsa vuoksi sellaissa ettei siihen haavaan tartu kääreet.

Lamppuöljyllä myös voijellaan palanutta kohtaa se ei anna nousta rakkoja.

(Example 1. SKS KRA. Pielavesi. Armas Nissinen, 53. 1936.)<sup>3</sup>

As domestic medicines, a burned spot was covered with syrup or cream, or one could also use this so-called salve of lead or calcium liniment from the Pharmacy. Palaneen paikan päälle pantiin joko siirappia eli kermaa kotilääkkeenä, myös käytettiin Apteekista tuotua n.k. lyijysalvaa ja kalkkilinimenttiä.

(Example 2. SKS KRA. Lohja. Maria Österberg 274b. 1920.)

Ointment for burns was made by *Tulenpolttaman voiteeks kiuhautettiin* bringing sheep's dung to a boil in milk. *lampaan lantoo maijossa*. (Example 3. SKS KRA. Sonkajärvi. V. Kaukonen 1192. 1934. Jaakko Huttunen.)

Taking away the pain of burns	Palotuskat pois	
A piece of iron must be heated and	Rauta pitää kuumentoo ja se pistee	
put into milk. Then some charcoals	maitoon. Kuumentoo sittä koivun	
of birch must be heated in the milk.	hiiliä maijossa. Sillä voijella palanut	
The skin burn is anointed with it.	jäläki.	
(Example 4. SKS KRA. Nilsiä. P. Ollikainen. 419. 1894. Pietari Myöhänen.)		

Ointments were used in both domestic healing performances and in the healing performances of the *tietäjä*s but their importance is highlighted in domestic healing – probably because the *tietäjä*s had more special healing methods in addition to ointments (see, e.g., Siikala 2002: 76–84; Piela 2005: 18–21). The four examples presented above illustrate quite usual forms of using ointments in healing. The narrators instruct the listener to make an ointment for skin burns from different ingredients that are quite easily available in rural environments. The ingredients are comprised of common products such as oils, milk or cream, animal excrement, and in some cases ointments from pharmacies. However, it was quite rare that the ointment was comprised only of these products; instead, something was usually mixed into it, or the ointment was manipulated somehow.

In example 3, the narrator states that sheep excrement should be used in the ointment. Using cow, pig, or horse excrement are also quite common options in the research material.<sup>4</sup> Animal excrement was a very common ingredient for practices of magical harm, but sometimes it was used in beneficial magic as well (Issakainen 2012: 131–134). The magical efficacy of excrement has been considered to be based on its strong and repulsive scent (Kuusi 1985: 39) or its essential connection to the animals themselves (Issakainen 2012: 131–134). In addition, animal excrement was generally used as a fertilizer in agriculture, to grow and nurture new life. This nurturing feature of excrement may also have been in peoples' minds when they used it in healing.

The use of excrement in ethno-medical skin burn healing is strikingly common in the research material. In one or two reports the informants themselves display doubt in this method,<sup>5</sup> but dozens of mentions from different areas and decades suggest that this has been a trusted method in traditional healing. In a symbolic sense, people might have thought that the excrement drove away some magical threat from the burn, or that it nurtured new life and health.

In example 2, the narrator states that ointments from a pharmacy – for instance calcium liniment – were also good options for skin burns.<sup>6</sup> In the nineteenth-century Finland and Karelia, medical ingredients from pharmacies were common additions to traditional and domestic medicines. At that time lay people did not have much trust in educated doctors, but their medicines were more popular than their advice (Piela 2003: 315–318). Some people stated that it was easier to get some medicines from pharmacies or doctors than to make them at home, although that was also possible. Some also stated that the pharmacy medicines had magical healing powers (Issakainen 2012: 53–54).

Examples 1–4 present quite plausible options for healing skin burns in traditional ways. The ointments presented there are common in the research material, and probably anointing burns with anything non-harmful would have had some efficacy for the healing rate. Positive experiences with such ointments would have confirmed the schematic understandings that presented ointments as usual and efficacious healing products. Additionally, the symbolic aspects included in the ingredients connected them with the authority of tradition – the idea that the bygone people in the same culture have used these same methods for ages (e.g., Tarkka 2013: 119). The authority of tradition encouraged people to trust the established healing methods, and, hypothetically, this connection might have led to placebo effects as well, although it cannot be properly measured from this research material.

The next example also presents the use of some ointments. However, some details in the example might cause suspicion, at least for a contemporary reader.

For burns, one must anoint them with salt water, for it takes away the pricking. It is good to anoint the burns with oil and heat them near fire, and they will heal well. Honeybee's nectar and fresh cream are good for healing burns. Wood oil must not be used in anointing the face, for it leaves scars on the face. Palaneeseen pitää panna suolavettä se ottaa kirvelyksen pois. Palaneeseen on hyvä voidella öljyllä ja paahtaa tultavasten se paranee siitä hyvin. Palanetta on hyvä parantamaan Mehiläisen mesi ja nuori kerma. Puuöljyllä ei pidä voitella palaneita kasvoja kun se paranee se jättää arvet kasvoihin.

(Example 5. SKS KRA. Tuusula. Andersson, A. G. 354. 1901.)

It is most likely that, like the contemporary audience, people at that time also would have had some experiences with salt actually increasing the pain of wounds, and that more heat hurts a skin burn even more. However, salt was in fact a rather common ingredient in traditional healing ointments. In this research material, salt is mentioned as an ingredient for ointments in approximately 11% of the material considering ointments, and in approximately 7% of the whole material corpus. Salt was a valuable product, and it was something that came from outside the rural communities – it was something important in everyday life (for instance, in preserving food), but also something that was possibly hard to acquire. Thus, salt had symbolic meanings in addition to its price, and as a product of the "outside" world it was also considered to be a powerful and efficacious, even magical, product. Indeed, salt has been considered a magical ingredient in several traditions, all over the world (Vuorela 2019 [1960]: 54–55).

Heating a skin burn again is also something that would actually increase the pain of the burn. However, this method is rather common as well. I will concentrate on this more in the following section, "Similar affects similar". Nevertheless, in example 5, salt water and heating the burn are suggested side-by-side with using oils and cream, which represent the common ointment ingredients in the healing schema, as we saw in examples 1–4. Thus, although a contemporary reader might find these methods suspicious, most likely they would not have been considered as such in their own historical and cultural context. Without editorializing whether these methods would have been efficacious or not, I would rather observe that these methods fit in this healing schema – they represent the tradition that bore significant authority, and they included the general ideas about what had been used in healing and what might have been used again. Provided with the status of tradition, even somewhat peculiar healing methods might have increased the placebo effect, although this cannot actually be verified from this research material.

# Incantations

The second most frequent healing feature in the research material is the use of recited words in healing. In this material corpus, this mostly means using Finnish-Karelian incantations that were presented in a poetic form and followed the Finnic tetrametre. Incantations were considered to be ritual tools – especially for *tietäjäs* – that could affect both this world and the transcendent otherworld (Siikala 2002: 71–79). Alongside the *tietäjäs*, many lay people also knew and used incantations in their everyday life, but these incantations were somewhat different. The efficacy of the lay people's incantations was thought to be based on magical connections between words and their objects (Siikala 2002: 71–76; Tarkka 2013: 109–110), but the efficacy of *tietäjä*'s incantations was considered to be based on communication with the otherworld (Siikala 2002: 84–92; Tarkka 2013: 110–111). Certainly, some lay people had heard fragments of the *tietäjä*'s incantations, and they might have reported them to the folklore collectors.<sup>7</sup> However, what was their understanding of the incantations' efficacy, or more generally, what did they think was going on during an incantation ritual?

The incantations mentioned in this research material mostly represent instructions for incantations used by the lay people.<sup>8</sup> The following examples (examples 6 and 7) present two of them.<sup>9</sup>

Medicine for skin burns

One should put cold water in a cup, bring their mouth very close to the cup, and blow into the water and recite the following incantation as close to the water cup as possible, so the water will hear them.

Iron the eldest brother,

water the second.

Wipe away your hallow wrath,

into your golden cup,

into your tiny goblet.

This should be recited three times, and a little of the water is given to the patient to drink, and the rest of the water should be used for anointing the sore.

#### Lääke palohaavoihin

Tulee ottaa kylmää vettä kuppiin ja puhallella aivan lähellä suuta siihen veteen kupissa ja lukea seuraava loitsu niin lähellä sitä vesikuppia kun suinkin, että vesi kuulee.

Rauta on vanhin veljeksistä, vesi toinen. Pyyhi pois pyhät vihasi, kultaiseen kuppiisi pikkuiseen pikariisi. Tämä luetaan kolme kertaa ja annetaan juoda sairaalle ja lopulla vedellä valellaan kipeä paikka.

 $(Example 6.\,SKS\,KRA.$ Pudasjärvi, Sotkajärvi. Lukkari, Olavi. KT213: 177. 1936.)^{10}

The wraths of fire	Tulen vihat
Ugh, what am I seeing far away?	Hyi, mikä kaukana näkyy?
A cloud over there etc.	Pilvi kaukana jne.
(This is recited 9 times to the spirit	(Luetaan 9 kert. viinaan tai veteen,
or water that is used to anoint the	jolla voidellaan tulen polttamaa
burned spot.)	paikkaa).
Stirred with a knife.	Weits. sekoitetaan.
(Example 7. SKS KRA. Lammi. Alho,	K. E. VK3:7. 1903.)

In example 6, the incantation consists of two parts. The first part considers the origin of iron and water ("Iron the eldest brother, water the second"). Similar verses sometimes also state that fire is the youngest or the middle brother.<sup>11</sup> Possibly, these words were presented to tame the healing water, for the words are explicitly recited to the water. On the other hand, some people might have believed that the water worked as a mediator between the incantation and the burn. Different beliefs might have been in parallel, or even contradictory. The second part of the incantation presents a command to heal ("Wipe away your hallow wrath, into your golden cup, into your tiny goblet").

The incantation in example 7 is a fragment of a longer one. Reporting only a part of an incantation to a folklore collector was rather common and, at the least, many *tietäjäs* were reluctant to reveal complete incantations to folklore collectors, as they usually thought that the incantation would lose its efficacy if revealed carelessly (Tarkka 2013: 109). The same way of thinking might also have been related to a reluctance to reveal lay incantations to folklore collectors, as they were usually people from an outside culture.

The incantation fragments presented here might also be parts of *tietäjä*'s incantations. However, in these two cases, the short form of the incantation (example 6) and the instructions for the performance point to magical efficacy rather than communication. In both examples, the narrators stress that the incantation must be recited three or nine times. This points to the idea that the efficacy of the incantation was somehow tied to the magical repetition of exact words, although the idea that the water could listen and act accordingly was also present, at least in example 6 ("the water will hear them"). I will consider the meaning of magical repetitions in more detail later in this article. In any case, the requirement of repetition points to the idea that the efficacy of the incantation lies in the magical mechanisms of repetitions and in the mystic power of spoken words. In cases of magically affective spoken words, a communicational and dialogical connection to the otherworld was not necessarily needed or sought (see, e.g., Tarkka 2013: 110).

However, some ideas related to the presence of the otherworld were also linked to the lay incantations. They too were *addressed* to the otherworld, though the connection was far more distant than in the communicational incantations of the *tietäjäs*. Furthermore, the cultural conception of serious skin burns pointed to the idea that fire was both intentional and personal, which connected fire and skin burns to the mystic otherworld and mythic thinking (see, e.g., Kohonen 2020). In fact, folklorist Frog proposes that lay people did believe that some kind of connection to the otherworld was made during an incantation ritual (at least when the lay people acted as an audience), although they might not have formed such a connection themselves in their own incantations (Frog 2017: 601). All in all, it is most likely that people's interpretations of the efficacy of incantations and the presence of the otherworld have varied. Different interpretations have probably appeared contemporaneously, overlapping and even contradicting each other.

Thirty-four material units of the total 248 units mentioning incantations (14%) represent recollections of past healing events.<sup>12</sup> In most of these cases, the narrator does not remember the incantation words very well, but only fragments of them, if at all. The following two examples (examples 8 and 9) represent these kinds of material units.

## Skin burn

When the narrator was a child and had burned her skin, they usually went to "the smith of Kärpänen for he could incantate the ointment for burns". The smith took some cream and "recited the incantation for the wraths of fire to it". When the skin burn was anointed with the cream, the spot was healed.

#### Palohaava

Kun kertoja oli lapsena saanut palohaavan, mentiin tavallisesti "Kärpäse sepäll tulevvoijetta luettammaa." Seppä laittoi kermaa ja "luk tulevvihat sen kerma pääll". Kun sitten palanutta voideltiin kermalla, parani se kohta.

(Example 8. SKS KRA. Vuoksenranta. Aino Arponen E 114, s. 10-11. 1934.)

How Kust Ihalainen made an ointment for skin burns for one girl The farmer Jussi Ihalainen said that once when he lived in Siikaniemi. his younger sister, who was a child, burned her arm on a hot pot of milk. They left to get some ointments for burns from Litmaniemi's Harju, where Kust Ihalainen was a tenant. Kust poured milk into a bowl and brought it to the pot, then stirred it with his knife and incantated, Jussi recalled. A verse that Kust repeated many times stayed in Jussi's mind. It was: "Wrap the pains in your mittens, all the pangs in your gloves." It was a long incantation.

# Miten Kust Ihalainen laittoi palaman voidetta eräälle tytölle

Maanvilj. Jussi Ihalainen kertoi että ennen Siikaniemellä asuttaessa poltti hänen nuorempi keskenkasvuinen sisarensa kätensä kuumassa maitopadassa. Hänlähti Litmaniemen Harjulle, jossa oli lampuotina Kust Ihalainen, saamaan palaman voiteita. Kust toi maitoa vadissa pataan liuksella, hämmenteli sitä veitsellään ja loihti, muisteli Jussi. Erään paikan, jota Kust usein toisti, sanoi Jussi jääneen mieleensä. Se kuului: "Kiäri kivut kintaihis, kaikki vaivat vanttuihis." Se oli pitkä loitsu.

(Example 9. SKS KRA. Vehmersalmi. Räsänen, Otto. KRK118:224. 1935.)

In these examples, the narrators stress that the incantations were crucial parts of healing, but the words themselves do not play much of a role in these recollections. In example 8 the narrator does not mention the words at all, and in example 9 the narrator remembers only two lines of a long incantation. Some narrators also report that they could not hear the words of the incantations at all, because the healer recited them so quietly or unclearly. As so many other material units follow this same pattern,<sup>13</sup> it is likely that the patients and the lay people in general did not have much insight into what kind of incantations the *tietäjäs* presented, so they could not evaluate the actual words of the incantations, but rather concentrated on the healing performance in a more general sense.

Presenting an incantation in a healing situation also enhances the placebo effect. Reciting an incantation when applying an ointment seems to be a more efficacious healing method than using the ointment alone, as the patient feels that something more is done. In placebo studies, researchers have found evidence that elaborate procedures increase the placebo effect more than the use of placebo pills alone (e.g., De Craen et al. 2000; Kaptchuk 2002). This is likely similar to why performing an incantation while applying an ointment is probably more effective treatment. Additionally, the semantic content of the incantations activates extensive frames of cultural and traditional knowledge and meanings that charge the substances and actions of the ritual with performative and affective power. The healing attempts and the healer take on specific cultural meanings that function as explanations for the patient, and thus instil confidence in the healing situation.<sup>14</sup> Giving a meaning to a situation and experiencing control over it increase the results of placebo effects (Brody 1980; 2010: 160–162).

The essential level of understanding of healing incantations, and their efficacy, was probably similar between the *tietäjäs* and the lay people, although there were also differences. The knowledge of *tietäjäs* was much more detailed and deeper, and it is possible that the lay people may not have even considered how detailed and deep it was. Thus, I suggest that the understanding of the lay people was not only less detailed, but that they considered *tietäjäs*' incantations to be quite similar to their own incantations, which did not aim at establishing any communication and dialogue with the otherworld, but formed their link to the otherworld via magically affective words. The lay people understood that the *tietäjäs*' incantations, but as they did not have much knowledge about the content of the *tietäjäs*' incantations, they might have guessed about them based on their own incantations.

The material units that mentioned incantations stress strongly that incantations were an important part of the healing schema and the authorized tradition. The patients expected an incantation performance, and living up to these expectations probably increased the placebo effect. However, the research material does not emphasize that certain kinds of incantations were more expected than others, either in lay or in the *tietäjäs*' incantations.

#### Similar affects similar

The idea of efficacy via similarity is well known all around the world. The Victorian era anthropologists, for instance James Frazer (1911 [1890]), introduced the concept of magical thinking, and they considered it to be a typical form of thinking for "primitive" people. The idea of magical effects via similarity has been linked to, for instance, the use of dolls and images, which represent living people, and different rituals in which people imitate their desired outcomes, as well as to Finnish-Karelian traditional healing methods. A common principle in this healing tradition is the idea of healing the patient with the same substance that hurt them.

However, modern cognitive psychology has found evidence that this kind of magical thinking is not limited only to people living in non-industrialized environments; rather, "magical" thinking is natural and common for all humans, regardless of culture or time. Magical thinking has been linked to heuristic and intuitive thinking, which are basic forms of thought for humans (e.g., Rozin & Nemeroff 1990; 2002). In the human mind, intuitive thinking presents fast, reaction-based, and automatic interpretations of newly encountered situations and phenomena, and after a little delay, the more conscious form of thinking - reflective thinking - either confirms, contradicts, or corrects the interpretations of the intuition (Kahneman & Frederick 2005; Evans & Frankish 2009).<sup>16</sup> Intuitive thinking often follows certain cognitive structures, with heuristics being one example. Heuristics provide rules-of-thumb and quick, generalized answers that explain many situations well enough – although in fact not very accurately (Tversky & Kahneman 1974; Gilovich & Griffin & Kahneman 2002). Thereby, the idea of magical effects via similarity represents a so-called *similar*ity heuristic, which is a form of other, better known representativeness heuristic (Rozin & Nemeroff 2002).<sup>17</sup>

As a form of intuitive thinking, it is safe to assume that people considered healing methods following the similarity heuristic as familiar practices that came to their mind naturally and easily (Kohonen 2021). The following two examples represent the way the similarity heuristic appears in the research material.<sup>18</sup>

The wraths of fire will heal if one takes that white fuzz on top of the coals of an ember and puts that onto the wraths. Tulen vihat paranoo kun otta hiiluksesta hiilijen piältä valkeeta nukko ja panno sitä vihohin.

(Example 10. SKS KRA. Juva. T. Pasanen 615. 1899. Akatta Takkinen.)

Erasing the wraths of fire If a spot of someone's skin has burned, the wraths of fire will be erased by heating the burned spot three times, as close to the fire as one can bear. Valkian-vihat pois

Valkian vihat saadaan pois jos joku paikka ihmisestä on palanut siten että palanutta kohtaa kuumennetaan tulen likellä kolme kertaa niin kuumaksi kun suinkin kärsii.

(Example 11. SKS KRA. Lehtimäki. Aaro Vallinmäki 493. 1912.)

These examples represent the idea of curing an injury with the element that caused the injury: healing skin burns with something that has burnt as well (example 10, the fuzz on top of coals), or healing by repeating the process of hurting (example 11, heating the burnt spot again). These can be considered primarily as representations of similarity heuristic and expressions of intuitive thinking. However, people might have had analytical reasons for these healing methods as well, and they might have had practical experience that these methods have clearly worked. For instance, if a skin burn occurred some time ago, and then became inflamed, heating it again (example 11) could work as a disinfecting act, which might reduce the inflammation (see, e.g., Hugo 1995: 200).

In example 10, the narrator instructs one to use the white fuzz on top of coals for healing skin burns. In this example, in which the fuzz is not mixed with anything else, the essential idea resembles that of similarity heuristic, but there may have been analytical reasons behind it as well. Ashes can be used to make lye and soap, which have cleaning and disinfecting effects (see, e.g., Naakka-Korhonen 1997: 216; Piela 2003: 315). The following example (example 12) presents a recollection in which a smith makes a kind of soap for healing.

Teacher K has said:

A smith took just ordinary pieces of sheep's poop and roasted them in a pot in the glow of forge. Then he ground them by the anvil and mixed them with sparks of a coal and cream. - He cooked this and incantated. -

#### Opett. K on kertonut:

Seppä otti tavallisia lampaan "papuja" ja paahtoi niitä padankappaleella ahjon hehkussa. Sitten hän jauhoi ne alasimella hienoksi ja sekoitti joukkoon hiilen kyventä ja kermaa. – Tätä hän keitti ja samalla loitsi. – This turned into a yellowish salve, which was a cure for all burns. (The teacher had seen this when he was a boy, and nobody had seemed to care about the presence of the boy. The teacher's sister had had hot water poured on her chest, and the smith Pöykänen from Vesanta had made the medicine mentioned above.) Tästä tuli kellertävää salvaa, joka oli parannusaineena kaikkiin palamiin. (Opett. oli nähnyt tämän poikasena ollessaan, pojan läsnäolosta ei nähtävästi välitetty. Opett:n sisaren rinnalle oli mennyt kuumaa vettä ja seppä Pöykänen Vesannalta oli tehnyt yllä m. lääkkeen.)

(Example 12. SKS KRA. Konnevesi. Kyllikki Sutinen 144. 1936.)

Ashes have also had symbolic meanings. Toivo Vuorela points out that ashes were used in preventing and curing the effects of the 'evil eye', as ashes were the product of all-purifying fire, and were thus purifying products themselves (Vuorela 2019 [1960]: 51–53). Therefore, ashes probably not only represented a similarity heuristic for these people, but also purification in a wider sense.

However, using heat or ashes is not the only way that similarity heuristic appears in the research material. The following examples (examples 13 and 14) show how the concept of similarity magic has been used in other ways as well.

The origin of burns The origin of fire is familiar, Merciless is the beloved of iron, But I know the charm of fire etc. If a human or animal burns themselves with water, soup, or the stove; one must take the same substance from the same place where the burning happened; and the same substance from two other similar places, and stir them into salt water or spirits, and sing the above origin words three times while stirring; and anoint the burned spot three times with this ointment. Palon synty

Tuttava on tulen synty,

Armottomat rauan armat.

Vaan tunnen minä tulen lumoa jne. Jos vedessä, keitossa tai tulisijassa joku ihminen tai eläin polttaa itsensä; niin otetaan samaa ainetta ja samasta paikasta jossa ja jolla palo tapahtui; sekä kahdesta muustakin saman laisesta aineesta ja paikasta ja sekoitetaan suolaveteen tai viinaan ja sekoittaessa lauletaan edellä olevaa syntyä kolme kertaa; sekä voidellaan sillä kolme kertaa palanutta kohtaa.

(Example 13. SKS KRA. Suomussalmi. L. Niiranen. 20. 1891.)

Healing of burns from sauna steam. If sauna steam has burned a spot, it will heal when one takes dirt from the chinks of the sauna benches and presses the burn with it. Löylyn polttama paranee.

Jos löyly on polttanut jonkun paikan, niin paranee se, kun saunanlauteitten raoista ottaa likaa ja sillä painelee.

(Example 14. SKS KRA. Nurmes. M. Nurmio 2110. 1891.)

The similarity heuristic is present in these examples, although the healing products are not directly associated with fire. In example 13, the narrator states explicitly that the same substance that has caused the burn must be used in the healing, even if the cause of the burn might have been, for instance, hot water. Additionally, example 14 proposes that if a patient has been burned by sauna steam, the cure comes from sauna as well.

Tenka Issakainen has discussed the similarity heuristic – or similarity magic – in Finnish context. She notes that the concept of similarity magic is inherent in many magical practices, but this does not absolutely determine how these charms should be interpreted, as different variations must be considered as well (Issakainen 2012: 91, 128–130). I argue that in this research material the similarity heuristic could be seen the same way as Issakainen suggests: as something that defines different healing methods, although they are not solely just manifestations of this heuristic. People might have reasoned that using ashes in healing simultaneously represented physical and symbolic purifying, and additionally this might have been felt to be a good method because of the intuitive tendency of similarity heuristic. These two aspects do not exclude each other.

I have proposed that healing methods following the conception of similarity magic have had both intuitive and analytical meanings. Some people might have reasoned that these healing methods had both intuitive and analytical explanations, and others might have emphasized some reasons over others. All in all, it seems like the concept of similar-affecting-similar was a familiar part of the healing tradition. It occurred in many different ways, but nonetheless in ways that people recognized as a part of their general, schematic understanding of the healing tradition.

## Symbolic repetitions

Symbolic repetitions were present in many of the previous examples in this article (examples 6, 7, 11, 13). It is often stated that many practical methods must be repeated three times, or that an incantation must be recited thrice (see

examples 15 and 16). Additionally, in some instructions or recollections the ingredients for an ointment are gathered from three different places (example 16).

The wraths of fire	Valkian vihat
whence the flame flares	mistä tuli loimoa
from the sky the flame flares	taivahasta tuli loimuaa
where the flame flares	mihinkä tuli loimuaa
to the sea it flares.	merehen se loimuaa.
- These words had to be recited	– Nämä sanat piti lausua
without breathing three times. One	hengähtämättä kolme kertaa.
had to have flax oil into which to	Liinaöljyä piti olla, johon hän
recite these words; in cases of such	ylläolevat sanat lausui kun tuli
afflictions people came to our place,	sellaisia vahinkoja tultihin meille
for that Mariuska could heal them;	jotta Mariuska parantaa niin
that is how she was usually called.	tavallisesti häntä sanottiin.
(Example 15. SKS KRA. Kauhajoki. E	Cllen Leppimaa. KRK 182.39. 1935.)

A burn will heal when one takes	Palanut paranee, kun kolmesta			
dust from three fireplaces and mixes	tulisijasta otetaan poroja ja pannaan			
them with cream. Then one must	poroihin kermaa. Sitten puhalletaan			
blow on it 3 times and spit.	3 kertaa ja syleksitään.			
(Example 16. SKS KRA. Maaninka. Pertti Korhonen 481. 1939.)				

In this research material concerning skin burns, the ingredients collected from different places are in most cases connected to the similarity heuristic: ashes or coals from three different places (e.g., example 16), ashes of three or nine different kinds of woods, or similar substance that has burned from three different locations (e.g., example 13).<sup>19</sup> Tenka Issakainen argues that in many charms, repetitions three or nine times represent the variety of different substances as well as – or even more than – the power of the magical number three (Issakainen 2012: 151–153). Additionally, in many cases in which repetitions of three or nine are mentioned in this research material, the repetition concerns the performance. The incantation must be repeated three or nine times (e.g., examples 6, 7, and 15), or some enactment – for instance blowing, spitting, heating, or anointing – must be performed three or nine times (e.g., examples 11 and 16). In these cases, the repetition seems to emphasize the enactment and its value to the performance. One must pay attention to the repetitions because they are considered to transmit the efficacy of the healing ritual.

The value of symbolic repetitions in rituals has been noted in many studies, and their importance seems to be cross-cultural (see, e.g., Lease 1919; Dundes

1980 [1968]). Additionally, in recent ritual studies, scholars have found evidence that people in different cultures believe that repetitions of procedures increase or mediate the efficacy of a ritual (Legare & Souza 2012). Furthermore, repetitions of specific enactments have been considered as one of the aspects that are linked to the relieving effects of rituals: when people perform rituals in stressful situations, their concentration turns away from the stressful event and towards the correct performance of the ritual, especially so if the performance requires detailed enactments (Boyer & Liénard 2006).

Repetitions have been connected to the placebo effect as well. Healing rates are higher if a patient receives placebo treatment four times a day rather than twice a day (De Craen et al. 1999). This refers to a different kind of repetition – repetitions that are not conducted right away after the previous procedure, but after a little delay. However, in both kinds of repetitions, the repeating is connected to learning and absorbing ideas. People trust repeated information more than new information (e.g., Corneille & Mierop & Unkelbach 2020).

With these arguments in mind, I propose that symbolic repetitions were rather common in traditional Finnish-Karelian skin burn healing because of their psychological properties. Repeating an incantation or an enactment a certain number of times reinforced the belief that the incantation would work, and this had relieving effects. As was the case with the similarity heuristic, the psychological easiness of these ideas probably affected their popularity, but this is not the sole reason why these ideas increase the placebo effect and later evaluations of a performance's success. Their involvement in healing rituals is considered necessary because people have become used to their presence in rituals. I suggest that they were incorporated into these rituals in the first place because of their psychological easiness, but that they later acquired their importance and authority in rituals and traditions through their continued renewal. Thus, people began to consider them to be crucial parts of rituals – as expected parts of the healing ritual schema and tradition, and something that had been performed for generations in their culture.

# CONCLUSIONS

In this study, I have attempted to illustrate the general understanding of skin burn healing in pre-industrial Finland and Karelia. What were the most common features of the healing schemas of that time, and why were they significant? Why were they mentioned in healing instructions and recollections? How were they connected to the placebo effect?

The four most frequent healing features in the research material can be convincingly argued to form the general skin burn healing schema, and represent the general expectations for skin burn healing in this socio-cultural context. Building on several previous studies on Finnish-Karelian incantations, charms, and worldview, I found different ways to contextualize these healing features within their social, cultural, and environmental contexts and general worldview. It seems clear that people were familiar with these healing features, and that they had certain expectations of their roles in healing performances. People considered these healing features to be traditional, and thus they trusted their authority and significance (see, e.g., Bauman 2004: 27–28; Tarkka 2013: 119). Their status as tradition enhanced their continuity in Finnish and Karelian healing contexts; however, the placebo effect might have consolidated their status and traditionalization processes as well. The research materials of this study do not state objectively whether the placebo effect occurred or not while using these healing methods. Nevertheless, my analysis proposes a hypothesis that the placebo effect occurred at some level because the analysed healing features are connected to several aspects that are known to increase the placebo effect, most importantly schematic expectations (see, e.g., Kirsch 1985; Brody 2010; Finniss et al. 2010).

Two of the features – the similar-affects-similar concept and symbolic repetitions – could be seen as psychologically easy ideas that arise from the intuitive thinking systems characteristic of human cognition. They come to people's minds very easily, and are tempting trains of thought. As a result, they have spread widely and have been manifested in different ways suitable to this socio-cultural context. When established as crucial or typical parts in a ritual healing schema, they also become important identifiers of traditional and ritual authority and the efficacy of ritual performances. These examples represent the ways that the tendencies of the human mind might have strengthened the traditionalization processes of certain customs.

I have also identified factors other than expectancy, which have possibly strengthened the placebo effect in Finnish-Karelian skin burn healing. Ritualistic and elaborate procedures increase the placebo effect as well (e.g., De Craen et al. 1999, 2000; Kaptchuk 2002), and at least incantations and symbolic repetitions also fall into this category. Additionally, performing incantations might have served as a placebo stimulus in itself because incantations provide a culturally coherent explanation for an illness or injury and its treatment (see, e.g., Brody 1980; 2010: 161). Perhaps these features have gained their wide distribution in the healing tradition partly because they enhance the placebo effect, although this suggestion is difficult to verify. Howard Brody concluded that a patient must be provided with an explanation for an illness and treatment that fits their general worldview (Brody 2010: 161). In the case of Finnish-Karelian healing incantations, it seems that the patients (and the lay people generally) also somehow modified the explanations provided by the healers. The *tietäjä*'s incantations usually included some kind of dialogue with the otherworld, and the efficacy of the incantation was considered to rely on these relations – at least for the *tietäjä*s themselves (Siikala 2002: 73–92). However, in my analysis, it seems that the lay people might have understood the efficacy of the *tietäjä*'s incantations a little differently, in a way that was more reliant on the magical efficacy of the words themselves – just as the shorter "lay incantations" were. It seems that there were (at least) two cultural schemas associated with the efficacy of healing incantations: that of the *tietäjä*s, and that of the lay people. However, they were not extremely different from each other.

What cannot be determined from this research material is how well the patients felt listened to, or taken care of. Most likely, the relationship between a healer and a patient in a healing performance was still much closer than it usually is in contemporary hospitals, where a doctor might order some pills for a patient, but nurses administer the medicine, and clinicians do not have much time to discuss matters with patients (see, e.g., Piela 2005). Interpersonal relations also affect the placebo effect (e.g., Kaptchuk et al. 2008; Miller & Colloca & Kaptchuk 2009), and most likely they have had beneficial effects on traditional healing performances.

Furthermore, in this article I have analysed the different symbolic and cultural meanings that defined certain special healing ingredients and procedures – most importantly the symbolic meanings given to animal excrement, salt, ash, and repetitions of procedures or ingredients in medicines. In the cases of ash and repetitions, the symbolic meanings are intertwined with mental processes that emphasize their value. In the cases of animal excrement and salt, however, their different symbolic meanings seem to have had such a traditional value that they were integrated into the cultural healing schema due to that position.

Oftentimes in folklore studies, scholars argue that archived folklore materials somehow mirror the performances, events, traditions, and cultures they reflect – not necessarily in an exact way, but nevertheless in some way, and thus they can be used as research materials when investigating past traditions (e.g., Dundes 2007 [1969]; Gunnell 2018: 109). However, I do not think that archived materials *only* mirror the past traditions. When considering schematic aspects contained in archived folklore materials, such as in this research material, these schematic aspects might also have been *mirrored* in the past traditions; that is, schematic knowledge involved in, for instance, healing traditions might have affected the actual healing performances.

The schematic knowledge about healers and healing rituals affected the audience's understanding of this tradition. The lay people had certain expectations when they encountered traditional healing – expectations influenced by their own previous experiences as well as stories they had heard from others. Consequently, if the healers were aware of these expectations and the healing schemas of the lay people, and if they performed their practices accordingly, this most probably increased the placebo effect, which usually leads to better results in healing processes. This – perhaps unconscious – notion might have given some extra encouragement for the healers to perform according to these expectations, in addition to the encouragement provided by the authority of tradition.

Thus, the influential relationship between the healing performances and the stories about them had effects in both directions: the schematic knowledge about healers and healing mirrored the actual events, but it affected the enactments of the healers as well. They were in an ongoing interaction with each other.

The aim of this article was to study the schematic expectations associated with the pre-industrial Finnish-Karelian healing tradition, how these expectations were represented in archived folklore materials, and how they affected the healing tradition. I conducted the analysis within the frameworks of performance theories, placebo studies, and cognitive science theories about memory schemas. The analysis suggested that schematic features related to skin burn healing had several ways to enhance the placebo effect – and being a part of the traditional customs, general healing schema, and expectations were perhaps the most influential aspects in this sense. This study acts as an example of a multi-disciplinary analysis that could benefit the field of folklore studies and archival studies in further research projects as well. Studying the mental processes of the human mind helps us in our studies of historical as well as contemporary people, in exploring their mental worlds and the representations of those worlds in folklore.

# ACKNOWLEDGEMENTS

My work during this study was funded by the Finnish Cultural Foundation (2019), the Emil Aaltonen Foundation (2020–2021), the Alfred Kordelin Foundation (2021), and the research project "Materiality, Verbal Art, Mythic Knowledge and the Lived Environment" funded by Kone Foundation (2022). I would like to give my sincere thanks for my dissertation supervisors Professor Lotte Tarkka, Docent Kaarina Koski and Docent Risto Uro for their support and comments. I would also like to thank Professor Terry Gunnell and Senior Lecturer Neill Martin for their comments on the manuscript during Folklore Fellows Summer School 2021. I am also grateful to the anonymous reviewers. Finally, this study would not have been conducted without the inspiring conversations with my colleagues in the Network Meeting of the NNCSR in Stockholm in 2019, and in the Folklore Studies Research Seminar at the University of Helsinki.

# NOTES

- <sup>1</sup> The Finnish and Karelian cultures are neighbouring cultures that have been in close relation with each other, and thus many features in their vernacular healing traditions were shared. Most of my research material (435 archive units out of 573) was collected from different parts of Finland, where Finnish was the main language and Lutheran Christianity was the official religion. Finland proclaimed its independence in 1917, but the eastern border moved a couple of times before the 1940s. Karelia is an area that is situated partly in Eastern Finland and partly outside Finland's borders. The research material for this article that was collected from Karelian provinces comprises altogether 139 archival units. The languages that were spoken in Karelia were Karelian, Finnish, and Russian, depending on the area, and the official religions were Orthodox and Lutheran Christianity.
- <sup>2</sup> In the previous study, also some materials from Finnmark and the Swedish side of Länsipohja were included in the material corpus. I have not included them in this article, because these materials might have been associated more with Sámi and Scandinavian cultures than with Finnish cultures, although the materials were written and archived in Finnish. The excluded materials totalled altogether 22 archival units, and thus the statistics were a bit different in the previous article, although not by much. The most frequent features remain the same in both sets of statistics.
- <sup>3</sup> The codes after each example provide information of how to detect them in the Folklore Archive of the Finnish Literature Society. The order of the codes is the following: 1. Shortened name of the archive (in Finnish); 2. Municipality where the note was written down; 3. Name of the collector; 4. Number of the note in this collector's collections. Sometimes there is a code with letters and numbers, and this means that this note is a part of a larger collection (for instance KRK-collection is a Kalevala Jubilee Year's Collection (Kalevalan Riemuvuoden Keräys). 5. Archiving year; 6. Name of the informant. This is not given in many notes.
- <sup>4</sup> Approximately 10% of the whole material mentions that animal excrement could be used in skin burn healing, and these suggestions come from all around the studied area and throughout the whole collection period. For other examples, see, for instance, SKS KRA. Perniö. Hjorth, G. E. 122. 1887; SKS KRA. Laihia. Brandt, Herman 833. 1891; SKS KRA. Kangasniemi. Oskari Kuitunen 996. 1927.
- <sup>5</sup> Especially SKS KRA. Perho. Samuli Paulaharju 21443. 1933. The informant ends his report with the words: "Those curing methods were nothing to fuss about" (In Finnish: "Ei ne niin kakkosia ole ne parannukset").
- <sup>6</sup> For other similar examples, see, for instance, SKS KRA. Ruovesi. Vilho Saariluoma 3651b. 1919; SKS KRA. Nousiainen. Leivo, Frans 2615. 1937.

- <sup>7</sup> For instance, SKS KRA. Juva, Purhola. Kärkkäinen, V. J. 3. 1899; SKS KRA. Uhtua, Ievala Iivari 0202. 1930; SKS KRA. Koivisto. Ulla Mannonen 4901. 1937.
- <sup>8</sup> 207 material units out of 248 units mentioning incantations (83%) are presented as instructions. 6 units of these 207 resemble longer and more communicative incantations.
- <sup>9</sup> For similar examples see SKS KRA. Joroinen. Aleks Rytkönen 98. 1888; SKS KRA. Sahalahti. Äijälä, Emilia. VK115:90. 1896; SKS KRA. Kurikka. Samuli Paulaharju 2631. 1907; SKS KRA. Somerniemi. E. Vihervaara 631. 1910; SKS KRA. Nurmes. Lasanen Pekka KRK163:981. 1935; SKS KRA. Taivalkoski. Matti Tienari 942. 1939.
- <sup>10</sup> I have separated the lines of the incantation from each other, but they are not separated in the original archive text. I have made similar separations of the lines in some of the other examples as well (examples 9 and 15).
- <sup>11</sup> For instance, SKVR I4 137; SKVR I4 333; SKVR VI1 3195; SKVR VI1 3228; SKVR VII3 loitsut 619; SKVR VII3 loitsut 679; SKVR IX2 442; SKVR XII1 3556; SKVR XIII3 8717. These words are also parts of the aphoristic tradition (Tarkka 2013: 229).
- <sup>12</sup> 3% of the material units mentioning incantations are not explicitly instructions or recollections, but their form is more unclear.
- <sup>13</sup> For instance, SKS KRA. Tervola. Väinö Salminen 298. 1904; SKS KRA. Hyrynsalmi. Samuli Paulaharju 20012. 1932; SKS KRA. Kittilä. Samuli Paulaharju 20027. 1932; SKS KRA. Perho. Samuli Paulaharju 21462. 1933; SKS KRA. Konnevesi. Kyllikki Sutinen 144. 1936; SKS KRA. Tampere, Halttunen, Iida KT16:152. 1936.
- <sup>14</sup> Tarkka (2013: 172–179) has also concluded that other poetic representations of healers, such as epic stories about mythic healing events, establish a healer's authority and trust in their traditional practices.
- <sup>15</sup> *Tietäjä*s were thought to have a strong *luonto*, a special character that brought them power (Stark 2006: 262–266).
- <sup>16</sup> For more on the *dual-process theory* see, e.g., Tversky and Kahneman 1974; Kahneman and Frederick 2005; Evans and Frankish 2009).
- <sup>17</sup> According to representativeness heuristic, phenomena that appear close to each other or have significant categorical similarities would affect each other (see, e.g., Kahneman & Frederick 2002).
- <sup>18</sup> For similar examples see, for instance, SKS KRA. Ii. Samuli Paulaharju 6613. 1917; SKS KRA. Pöytyä. Eemil Vihervaara 5043h. 1919; SKS KRA. Vuolijoki. Samuli Paulaharju 20015. 1932; SKS KRA. Nilsiä. Kaukonen, Väinö 500. 1933.
- <sup>19</sup> The three exceptions in the research material are 1) three different kinds of rust from brass objects (SKS KRA. Rautavaara. Ollikainen, P. 306. 1894), 2) nine different ingredients from a graveyard (SKS KRA. Rautavaara. Lyyli Karhu 619. 1936), and 3) three ears of rye (SKS KRA. Koivisto. Ulla Mannonen 4910. 1937).

# **ARCHIVAL SOURCES**

- SKS KRA Folklore Archive of the Finnish Literature Society (Suomalaisen Kirjallisuuden Seuran arkisto, perinteen ja nykykulttuurin kokoelma), Ethno-Medicine Catalogue (Kansanlääkintäkortisto).
- SKVR: The Ancient Poems of Finnic People (Suomen Kansan Vanhat Runot), available at https://skvr.fi/.

# REFERENCES

- Amanzio, Martina & Pollo, Antonella & Maggi, Giuliano & Benedetti, Fabrizio 2001. Response Variability to Analgesics: A Role for Non-Specific Activation of Endogenous Opioids. *Pain*, Vol. 90, No. 3, pp. 205–215. http://dx.doi.org/10.1016/ S0304-3959(00)00486-3.
- Bauman, Richard 1984 [1977]. Verbal Art as Performance. With supplementary essays by Barbara A. Babcock [and others]. Prospect Heights, Ill.: Waveland Press.
- Bauman, Richard 2004. A World of Others' Words. Cross-Cultural Perspectives on Intertextuality. Oxford: Blackwell Publishing.
- Benedetti, Fabrizio 2008. Placebo Effects: Understanding the Mechanisms in Health and Disease. New York, NY: Oxford University Press.
- Benedetti, Fabrizio & Mayberg, Helen S. & Wager, Tor D. & Stohler, Christian S. & Zubieta, Jon-Kar 2005. Neurobiological Mechanisms of the Placebo Effect. Journal of Neuroscience, Vol. 25, No. 45, pp. 10390–10402. http://dx.doi.org/10.1523/ JNEUROSCI.3458-05.2005.
- Bernard, H. Russell 2011 [1988]. Research Methods in Anthropology: Qualitative and Quantitative Approaches. 5th ed. Lanham: AltaMira.
- Boyer, Pascal & Liénard, Pierre 2006. Why Ritualized Behavior? Precaution Systems and Action Parsing in Developmental, Pathological and Cultural Rituals. *Behavioral* and Brain Sciences, Vol. 29, No. 6, pp. 595–613. http://dx.doi.org/10.1017/ S0140525X06009332.
- Brewer, William F. & Treyens, James C. 1981. Role of Schemata in Memory for Places. *Cognitive Psychology*, Vol. 13, No. 2, pp. 207–230. http://dx.doi.org/10.1016/0010-0285(81)90008-6.
- Brody, Howard 1980. Placebos and the Philosophy of Medicine: Clinical, Conceptual, and Ethical Issues. Chicago: University of Chicago Press.
- Brody, Howard 2010. Ritual, Medicine, and the Placebo Response. In: William S. Sax & Johannes Quack & Jan Weinhold (eds.) *The Problem of Ritual Efficacy*. Oxford: Oxford University Press, pp. 151–167.
- Colloca, Luana & Benedetti, Fabrizio 2009. Placebo Analgesia Induced by Social Observational Learning. *Pain*, Vol. 144, No. 1, pp. 28–34. http://dx.doi.org/10.1016/j. pain.2009.01.033.
- Colloca, Luana & Miller, Franklin G. 2011. How Placebo Responses Are Formed: A Learning Perspective. *Philosophical Transactions of the Royal Society B: Biological Sciences*, Vol. 366, No. 1572, pp. 1859–1869. http://dx.doi.org/10.1098/ rstb.2010.0398.
- Corneille, Olivier & Mierop, Adrien & Unkelbach, Christian 2020. Repetition Increases Both Perceived Truth and Fakeness of Information: An Ecological Account. *Cognition*, Vol. 205, article 104470. http://dx.doi.org/10.1016/j.cognition.2020.104470.
- De Craen, Anton J. M. & Moerman, Daniel E. & Heisterkamp, Simon H. & Tytgat, Guido N. J. & Tijssen, Jan G. P. & Kleijnen, Jos 1999. Placebo Effect in the Treatment of Duodenal Ulcer. *British Journal of Clinical Pharmacology*, Vol. 48, No. 6, pp. 853–860. http://dx.doi.org/10.1046/j.1365-2125.1999.00094.x.

- De Craen, Anton J. M. & Tijssen, Jan G. P. & de Gans, Jan & Kleijnen, Jos 2000. Placebo Effect in the Acute Treatment of Migraine: Subcutaneous Placebos Are Better than Oral Placebos. *Journal of Neurology*, Vol. 247, pp. 183–188. http://dx.doi. org/10.1007/s004150050560.
- Dundes, Alan 1980 [1968]. The Number Three in American Culture. In: Alan Dundes. Interpreting Folklore. Bloomington: Indiana University Press, pp. 134–159. Available at https://archive.org/details/interpretingfolk0000dund, last accessed on 7 February 2023.
- Dundes, Alan 2007 [1969]. Folklore as a Mirror of Culture. In: Alan Dundes. The Meaning of Folklore: The Analytical Essays of Alan Dundes. Edited and Introduced by Simon J. Bronner. Logan, Utah: Utah State University Press, pp. 53–66. https:// doi.org/10.2307/j.ctt4cgrzn.6.
- Evans, Jonathan St. B. T. & Frankish, Keith (eds.) 2009. In Two Minds: Dual Process and Beyond. Oxford: Oxford University Press.
- Eysenck, Michael W. 2015 [2014]. Semantic Memory and Stored Knowledge. In: Alan Baddley & Michael W. Eysenck & Michael C. Anderson (eds.) *Memory*. 2nd edition. New York: Psychology Press, pp. 165–193.
- Finniss, Damien G. & Kaptchuk, Ted J. & Miller, Franklin & Benedetti, Fabrizio 2010. Biological, Clinical, and Ethical Advances of Placebo Effects. *Lancet*, Vol. 375, No. 9715, pp. 686–695. http://dx.doi.org/10.1016/S0140-6736(09)61706-2.
- Foley, John Miles 1995. *The Singer of Tales in Performance*. Bloomington & Indianapolis: Indiana University Press.
- Frazer, James George 1911 [1890]. The Golden Bough: A Study in Magic and Religion. Part 1: The Magic Art and the Evolution of Kings. Vol. 1. 3rd edition. London: MacMillan and Co., Limited.
- Frog 2017. Multimedial Parallelism in Ritual Performance (Parallelism Dynamics II). Oral Tradition, Vol. 31, No. 2, pp. 583–620. http://dx.doi.org/10.1353/ort.2017.0022.
- Gilovich, Thomas & Griffin, Dale & Kahneman, Daniel (eds.) 2002. *Heuristics and Biases: The Psychology of Intuitive Judgement*. Cambridge: Cambridge University Press.
- Grimes, Ronald L. 2006. Performance. In: Jens Kreinath & Jan Snoek & Michael Stausberg (eds.) Theorizing Ritual. Vol. 1. Issues, Topics, Approaches, Concepts. Leiden: Brill, pp. 379–394.
- Grimes, Ronald L. 2014. The Craft of Ritual Studies. Oxford: Oxford University Press.
- Gunnell, Terry 2018. Performance Studies. In: Jürg Glauser & Pernille Hermann & Stephen A. Mitchell (eds.) Handbook of Pre-Modern Nordic Memory Studies. Berlin & Boston: De Gruyter, pp. 107–119.
- Hugo, W. B. 1995. A Brief History of Heat, Chemical and Radiation Preservation and Disinfection. International Biodeterioration & Biodegradation, Vol. 36, No. 3/4, pp. 197–217. http://dx.doi.org/10.1016/0964-8305(95)00055-0.
- Issakainen, Tenka 2012. Tavallista taikuutta: Tulkinta suomalaisten taikojen merkityksistä Mikko Koljosen osaamisen valossa. [Ordinary Magic: An Interpretation of the Meanings of Finnish Magical Measures in the Light of the Expertise of Mikko Koljonen.] Diss. (PhD Thesis). University of Turku. Available at https://www.utupub.fi/handle/10024/84792, last accessed on 8 February 2023.

- Kahneman, Daniel & Frederick, Shane 2002. Representativeness Revisited: Attribute Substitution in Intuitive Judgement. In: Thomas Gilovich & Dale Griffin & Daniel Kahneman (eds.) *Heuristics and Biases: The Psychology of Intuitive Judgement*. Cambridge: Cambridge University Press, pp. 49–81.
- Kahneman, Daniel & Frederick, Shane 2005. A Model of Heuristic Judgment. In: Keith J. Holyoak & Robert G. Morrison (eds.) The Cambridge Handbook of Thinking and Reasoning. Cambridge: Cambridge University Press, pp. 267–294.
- Kaptchuk, Ted J. 2002. The Placebo Effect in Alternative Medicine: Can the Performance of a Healing Ritual Have Clinical Significance? *Annals of Internal Medicine*, Vol. 136, No. 11, pp. 817–825. http://dx.doi.org/10.7326/0003-4819-136-11-200206040-00011.
- Kaptchuk, Ted J. 2011. Placebo Studies and Ritual Theory: A Comparative Analysis of Navajo, Acupuncture and Biomedical Healing. *Philosophical Transactions of the Royal Society B: Biological Sciences*, Vol. 366, No. 1572, pp. 1849–1858. http:// dx.doi.org/10.1098/rstb.2010.0385.
- Kaptchuk, Ted J. & Kelley, John M. & Conboy, Lisa A. & Davis, Roger B. & Kerr, Catherine E. & Jacobson, Eric E. & Kirsch, Irving & Schyner, Rosa N. & Nam, Bong Hyun & Nguyen, Long T. & Park, Min & Rivers, Andrea L. & McManus, Claire & Kokkotou, Efi & Drossman, Douglas A. & Goldman, Peter & Lembo, Anthony J. 2008. Components of Placebo Effect: Randomised Controlled Trial in Patients with Irritable Bowel Syndrome. *BMJ*, Vol. 336, pp. 999–1003. http:// dx.doi.org/10.1136/bmj.39524.439618.25.
- Kirsch, Irving 1985. Response Expectancy as a Determinant of Experience and Behavior. American Psychologist, Vol. 40, No. 11, pp. 1189–1202. http://dx.doi. org/10.1037/0003-066X.40.11.1189.
- Kohonen, Siria 2020. The Wraths of Fire: Contagion Heuristic and Intuitive Personification Processes in Early Modern Finnish-Karelian Conceptions of Illness. *Journal* for the Cognitive Science of Religion, Vol. 5, No. 2, pp. 166–186. http://dx.doi. org/10.1558/jcsr.41026.
- Kohonen, Siria 2021. Ihmismieli kulttuurin takana: kognitiivisen kulttuurintutkimuksen tiedonintressi ja potentiaali arkistoaineiston tutkimuksessa. [The Human Mind Behind Culture: The Research Interest and Potential of Cognitive Cultural Studies in Analysing Archive Materials.] In: Niina Hämäläinen & Petja Kauppi (eds.) Paradigma. Näkökulmia tieteen periaatteisiin ja käsityksiin. Kalevalaseuran vuosikirja 100. Helsinki: SKS, pp. 183–201. Available at https://library.oapen.org/bitstream/handle/20.500.12657/51434/1/9789518583946.pdf, last accessed on 8 February 2023.
- Kohonen, Siria 2022. Healing, Magic, and Mind The Early Modern Finnish-Karelian Healing Tradition in Light of the Cognitive Science of Religion and Ritual Studies. Diss. (PhD Thesis). University of Helsinki. Available at https://helda.helsinki.fi/ handle/10138/346865, last accessed on 9 March 2023.
- Koski, Kaarina 2008. Uskomustarinoiden estetiikkaa. [Aesthetics of Belief Narratives.] In: Seppo Knuuttila & Ulla Piela (eds.) *Kansanestetiikkaa*. Kalevalaseuran vuosikirja 87. Helsinki: SKS, pp. 271–288.
- Kuusi, Matti 1985. *Perisuomalaista ja kansainvälistä*. [Thoroughly Finnish and International.] Tietolipas 99. Helsinki: SKS.

- Lampinen, James M. & Copeland, Susann M. & Neuschatz, Jeffrey S. 2001. Recollections of Things Schematic: Room Schemas Revisited. Journal of Experimental Psychology: Learning, Memory & Cognition, Vol. 27, No. 5, pp. 1211–1222. http:// dx.doi.org/10.1037/0278-7393.27.5.1211.
- Lease, Emory B. 1919. The Number Three, Mysterious, Mystic, Magic. Classical Philology, Vol. 14, No. 1, pp. 56–73. http://dx.doi.org/10.1086/360206.
- Legare, Cristine H. & Souza, André L. 2012. Evaluating Ritual Efficacy: Evidence from the Supernatural. *Cognition*, Vol. 124, No. 1, pp. 1–15. http://dx.doi.org/10.1016/j. cognition.2012.03.004.
- McClenon, James 2002. Wondrous Healing. Shamanism, Human Evolution, and the Origin of Religion. DeKalb, Ill.: Northern Illinois University Press.
- Miller, Franklin G. & Colloca, Luana & Kaptchuk, Ted J. 2009. The Placebo Effect: Illness and Interpersonal Healing. *Perspectives in Biology and Medicine*, Vol. 52, No. 4, pp. 518–539. http://dx.doi.org/10.1353/pbm.0.0115.
- Naakka-Korhonen, Mervi 1997. Vaivasta taudiksi: Lapamatoon liittyvä kansanparannus erityisesti pohjoiskarjalaisen aineiston valossa. [From an Ailment to an Illness: Ethno-Medicine Associated with Tapeworms in the Light of North Karelian Materials.] Helsinki: SKS.
- Panagiotidou, Olympia 2016. Religious Healing and the Asclepius Cult: A Case of Placebo Effects. Open Theology, Vol. 2, pp. 79–91. http://dx.doi.org/10.1515/opth-2016-0006.
- Panagiotidou, Olympia 2022. Healing, Disease and Placebo in Graeco-Roman Asclepius Temples: A Neurocognitive Approach. Sheffield: Equinox Publishing Ltd.
- Piela, Ulla 2003. Kansanomaiset terveyskäsitykset ja yhteisöllisyys. [Communality and Vernacular Conceptions about Health.] In: Pekka Laaksonen & Seppo Knuuttila & Ulla Piela (eds.) *Tutkijat kentällä*. Kalevalaseuran vuosikirja 82. Helsinki: SKS, pp. 304–327.
- Piela, Ulla 2005. Parantajan rituaalinen kosketus. [The Ritualistic Touch of a Healer.] In: Sirpa Huttunen & Pirkko Nuolijärvi (eds.) Tahdon sanoa: Kirjoituksia kielen ja perinteen voimasta. Helsinki: SKS, pp. 11–31.
- Piela, Ulla 2006. Luonto ja muuttuvat maailmat kansanlääkinnässä. [Nature and Changing Worlds in Ethno-Medicine.] In: Hilkka Helsti & Laura Stark & Saara Tuomaala (eds.) Modernisaatio ja kansan kokemus Suomessa 1860–1960. Helsinki: SKS, pp. 277–331.
- Rozin, Paul & Nemeroff, Carol 1990. The Laws of Sympathetic Magic: A Psychological Analysis of Similarity and Contagion. In: James W. Stigler & Richard A. Shweder
  & Gilbert Herdt (eds.) Cultural Psychology: Essays on Comparative Human Development. Cambridge: Cambridge University Press, pp. 205–232.
- Rozin, Paul & Nemeroff, Carol 2002. Sympathetic Magical Thinking: The Contagion and Similarity 'Heuristics'. In: Thomas Gilovich & Dale Griffin & Daniel Kahneman (eds.) *Heuristics and Biases: The Psychology of Intuitive Judgement*. Cambridge: Cambridge University Press, pp. 201–216.
- Schechner, Richard 2013 [2002]. *Performance Studies: An Introduction*. Third Edition. London & New York: Routledge.
- Siikala, Anna-Leena 2002. *Mythic Images and Shamanism*. FF Communications 280. Helsinki: Academia Scientiarum Fennica.

- Stark, Laura 2006. The Magical Self: Body, Self and Society in Early Modern Rural Finland. FF Communications 290. Helsinki: Academia Scientiarum Fennica.
- Tambiah, Stanley J. 1985. A Performative Approach to Ritual. In: Stanley J. Tambiah. Culture, Thought, and Social Action: An Anthropological Perspective. Cambridge: Harvard University Press, pp. 123–166.
- Tarkka, Lotte 2013. Songs of the Border People. FF Communications 305. Helsinki: Academia Scientiarum Fennica.
- Tversky, Amos & Kahneman, Daniel 1974. Judgement Under Uncertainty: Heuristics and Biases. Science, Vol. 185, No. 4157, pp. 1124–1131. https://doi.org/10.1126/ science.185.4157.1124.
- Vuorela, Toivo 2019 [1960]. *Paha silmä suomalaisen perinteen valossa*. [The Evil Eye in the Light of Finnish Tradition.] Helsinki: SKS.
- Wolf-Knuts, Ulrika 2020. What Can We Do Today with Old Records of Folk Belief? On the Example of Devil Lore. *Folklore*, Vol. 131, No. 2, pp. 115–134. http://dx.doi. org/10.1080/0015587X.2020.1733313.

**Siria Kohonen** is a postdoctoral researcher at the Department of Cultures, University of Helsinki, Finland. She finalized her doctoral dissertation, *Healing, Magic, and Mind: Early Modern Finnish-Karelian Healing Tradition in Light of the Cognitive Science of Religion and Ritual Studies*, in 2022. Her main research fields are folkloristics, the cognitive science of religion and ritual studies.

siria.kohonen@helsinki.fi