

This is a self-archived version of an original article. This version may differ from the original in pagination and typographic details.

Author(s): Lehti, Lotta; Luodonpää-Manni, Milla; Jantunen, Jarmo Harri; Kyröläinen, Aki-Juhani; Vesanto, Aleks; Lappala, Veronika

Title: Commenting on poverty online : A corpus-assisted discourse study of the Suomi24 forum

Year: 2020

Version: Published version

Copyright: © Suomen kielitieteellinen yhdistys, 2020

Rights: In Copyright

Rights url: <http://rightsstatements.org/page/InC/1.0/?language=en>

Please cite the original version:

Lehti, L., Luodonpää-Manni, M., Jantunen, J. H., Kyröläinen, A.-J., Vesanto, A., & Lappala, V. (2020). Commenting on poverty online : A corpus-assisted discourse study of the Suomi24 forum. *SKY Journal of Linguistics*, 37, 7-47.

http://www.linguistics.fi/julkaisut/SKY2020/SKYJoL33_Lehti_Luodonp%C3%A4%C3%A4-Manni%20et%20al_.pdf

Commenting on poverty online: A corpus-assisted discourse study of the Suomi24 forum

Lotta Lehti¹

University of Helsinki

Milla Luodonpää-Manni

University of Helsinki

Jarmo Harri Jantunen

University of Jyväskylä

Aki-Juhani Kyröläinen

McMaster University and Brock University

Aleksi Vesanto

University of Turku

Veronika Laippala

University of Turku

Abstract

This paper brings new insight to poverty and social exclusion through an analysis of how poverty-related issues are commented on in the largest online discussion forum in Finland: Suomi24 ('Finland24'). For data, we use 32,407 posts published in the forum in 2014 that contain the word *köyhä* ('poor') or a predefined semantically similar word. We apply the Corpus-Assisted Discourse Studies (CADS) method, which combines quantitative methods and qualitative discourse analysis. This methodological solution allows us to analyse both large-scale tendencies and detailed expressions and nuances on how poverty is discussed. The quantitative analysis is conducted with topic modelling, an unsupervised machine learning method used to examine large volumes of unlabelled text. Our results show that discussions concerning poverty are multifaceted and can be broken down into several categories, including politics; money, income and spending; and unequal access to goods. This

¹ Lehti is the corresponding author. Lehti and Luodonpää-Manni are first authors with equal contribution.

suggests that poverty affects the lives of people with low income in a comprehensive way. Furthermore, it is shown that the posts include self-expression that displays both the juxtaposition of social groups, e.g., between the rich and the poor, and between politicians and citizens, as well as peer support and giving advice.

Keywords: Discussion forum, discourse analysis, poverty, topic modelling, self-expression

1 Introduction

In 2018, the number of people with a low income in Finland was 640,000, i.e., 11.8% of the population had limited income and potentially suffered from poverty (Statistics Finland 2020).² Statistics show that poverty leads to varied social problems related to, e.g., health and housing, and poor people are, consequently, often excluded from society in many ways (Kuivalainen 2013; Aaltonen et al. 2020). Research also indicates that social disadvantages are transmitted from one generation to the next within Finnish families (e.g., Kallio et al. 2016; Vauhkonen et al. 2017). In addition, there is currently a sense of growing polarisation between different social groups in Finland, especially between the wealthy and non-wealthy. Indeed, Riihelä & Tuomala (2020) indicate that the income and property chasm between the richest and the poorest has grown in Finland over the past couple of decades. Furthermore, in their book, social scientists Anu Kantola & Hanna Kuusela (2019) shed light on perceptions that the wealthiest per mille of the Finnish population have of different social groups and wealth distribution. The publication of the book in autumn 2019 caused a public uproar because of the harsh, unempathetic and even unrealistic views expressed by the wealthiest Finns interviewed for the book.

Research on attitudes towards poverty, as well as on experiences with poverty, mostly utilises statistics, questionnaires, interviews and other kinds of material specifically produced for research purposes (e.g., Van Oorschot & Halman 2000; Kallio & Niemelä 2014; Hakovirta & Kallio 2016; Mattila 2020). Therefore, we know very little about how poverty is discussed when the subjects are not restricted to specific social groups, and when poverty

² The at-risk-of-poverty threshold as defined by the European Commission is 60 per cent of the national median income. In 2017, the median income for a one-person household in Finland was 24,580 euros meaning that persons with an income less than 14,750 euros are classified as being at risk of poverty (Statistics Finland 2020).

is discussed freely, without the artificial framework of questionnaires or interviews imposed by researchers (see, e.g., Lehti & Kallio 2017; Salonen et al. 2018). Therefore, this article investigates voluntary self-expressions concerning poverty in naturally occurring data, namely the most visited discussion forum in Finland: Suomi24 ('Finland24').

In addition to examining naturally occurring data, our methods are data-driven, i.e., we analyse discussion forum posts without theoretically predetermined classification criteria. Our research relies on the Corpus-Assisted Discourse Studies (CADS) method, which combines quantitative corpus methods with qualitative discourse analysis. CADS aims to uncover "non-obvious meanings" from large data and is not bound to any specific branch of discourse analysis (Partington et al. 2013: 10–11). Thus, our study takes an exploratory approach using data to examine how poverty is discussed in a data-driven manner. We use topic modelling for the quantitative method – an unsupervised machine learning method that can be used to examine large volumes of unlabelled text (e.g., Rehurek & Sojka 2010; Roberts et al. 2016a). This approach enables the identification of possible social media uses beyond the scope of what researchers anticipate finding.

The present study's main objective is to analyse how poverty and poverty-related issues are discussed in naturally occurring data. Even if the participants of the Suomi24 discussion forum represent only a few demographic groups in the Finnish population, we aim to bring new insight into social exclusion and how poverty is discussed among the general public. The discussion forum posts in our data appear to come from both the poor themselves and others who make evaluative claims about the poor and poverty-related topics overall. Through our analysis of the Suomi24 data, we expect to spotlight aspects of poverty that do not often gain visibility in established and edited public discussions or in research. Our research questions are the following: Which areas of life are brought up in an online discussion forum in relation to poverty? What are the self-expressions related to poverty like?

The article is organised as follows. After this introduction, we present previous research on the Suomi24 discussion forum as a space in which Internet users can publish their opinions, while also examining the notion of self-expression. In the third section, we present our data and methods. The fourth section focuses on the study's results, presenting both the overall results from topic modelling and more specific results from the close reading of a selected sample of the data. Finally, we conclude the study by summing up the results and comparing them with some previous research.

2 The Suomi24 discussion forum as a space for public self-expression

Discussion fora – such as Suomi24, which this study examines – are most often spaces of self-expression. By self-expression, we are referring to the volitional “evaluative and hence subjective comments that individuals aim at sharing with those with whom they communicate” (Pfister 2014: 85–87; Eronen 2015: 1). Using language to express one’s views is an age-old characteristic of humankind, but since the advent of social media, ordinary Internet users have had the opportunity to publish their self-expressions. Chouliaraki (2012) views the situation as an “unprecedented explosion of self-expression”, which leads to a change in the ways in which we communicate solidarity. The popularity of the rhetoric of self-expression stems not only from technology, but also from a variety of factors, such as the increase in the public disclosure of people’s private lives (cf. the demotic turn; Turner 2004; 2010) and the persuasive force of personal experience often being stronger than that of organisational rhetoric and expert knowledge (Vasquéz 2014; Ismagilova et al. 2017).

Public self-expressions on different social media platforms are used for a variety of purposes. People choose to publish content on social media e.g. to persuade others on a given perspective and to create a favourable image of themselves. Self-expressions also function as appeals to communicate, to be with others, to engage in discussions and to be heard. However, it is important to bear in mind that self-expressions in digital spaces are not free from any constraints. According to the theory of deindividuation, in anonymous digital spaces, social regulation is strong, i.e., participants act according to implicit interaction norms more carefully than in face-to-face settings (Moor et al. 2010: 1537; Spears & Postmes 2015). Furthermore, the platform’s technological affordances regulate participants’ self-expression in terms of, for example, layout and visibility.

In Finland, one of the most prominent digital spaces for public self-expression is the discussion forum Suomi24, which we examine in this study. The forum, which is openly accessible to anyone, was the most visited Finnish discussion forum in 2019, with more than 2.1 million users monthly. It is also the seventh-most-visited Finnish website overall (Finnish Internet Audience Measurement n.d.). Harju’s (2018) study indicates that the majority of them are middle-aged men who live with a partner. Harju (2018: 53–55) conceptualises the Suomi24 discussion forum as a contact zone, a term

borrowed from Mary Louise Pratt, who studies colonialism in travel literature (e.g., Pratt 1991). *Contact zone* refers to “social spaces where cultures meet, clash and grapple with each other, often in contexts of highly asymmetrical relations of power, such as colonialism, slavery or their aftermaths as they lived out in many parts of the world today” (Pratt 1991: 34). Unlike on Twitter, Facebook or other social networking sites, many discussion fora are sites in which participants do not reveal their names, faces or identities. Many use a pseudonym, nickname or no name at all. Considering that participants do not choose their interlocutors, e.g., by “accepting” friends (Facebook), “following” (Twitter and Instagram) or “connecting” (LinkedIn), discussion fora such as Suomi24 can function as contact zones in which different social groups can interact.

Harju’s (2018) analysis of Suomi24 users’ responses to a questionnaire depicts a certain kind of contact zone taking place in the Suomi24 forum. Most of the responses pertain to encounters with socially and ideologically different people, and some of these encounters represent a sense of community and even friendship. Conversely, many responses describe trolling, negative affective reactions and a lack of respect towards social groups other than one’s own. At a more abstract level, these communication strategies can be viewed as signs of power asymmetry, inequality and othering, as discussed in Pratt’s (1991) theory. As Harju (2018) states, interaction in Suomi24 is versatile and fruitful, but often encumbered by disrespectful participants and trolls whose actions are possible because of insufficient moderation.

In this Suomi24 contact zone, an extremely wide variety of themes is discussed. We concentrate on poverty, which is an issue at the intersection of public and private spheres. Political decisions, societal structures and the financial sector are linked closely to the poverty that people experience in their private daily lives. Consequently, we consider that our study on self-expressions concerning poverty in the Suomi24 discussion forum can provide policymakers and researchers of, e.g., social policy and media studies, with new knowledge from the perspective of the poor and of others making claims about the poor and poverty in general.

3 Data and methods

The Suomi24 corpus is a multi-billion-word corpus comprising posts on the Suomi24 discussion forum between 2001 and 2017; however, the present

study examines posts only from 2014. According to Statistics Finland (2020), in 2014, the number of people at risk of poverty in Finland was reported to be 674,000 (around 12% of the population), and the number has remained high ever since. Furthermore, poverty was one of the frequently discussed topics in (social) media during that time. The corpus is available in the Language Bank of Finland (Meta-Share 2017), and it is updated twice a year (The Suomi 24 Corpus; Aller Media 2014).

The analysis is conducted following Corpus-Assisted Discourse Studies (CADS, see e.g., Partington et al. 2013: 10–14). In corpus linguistics, large amounts of language data are interrogated using large-scale computational and statistical techniques, with which e.g. frequencies, collocations, clusters and keywords can be retrieved from the data. In the present study, this quantitative information, typically comprising keywords that reflect the data, is taken as a starting point, and the data are studied further in more depth using approaches typical of discourse analysis, i.e., the detailed qualitative examination and close reading of the texts.

In the present study, the quantitative analysis is realised with topic modelling, a method that aims to examine text topics occurring in large volumes of unlabelled documents (e.g., Blei et al. 2003; Rehurek & Sojka 2010). Topic modelling is applied widely in many fields utilising large language resources, such as digital discourse analysis, social and political sciences, and media studies. For instance, topic modelling has been shown to be helpful in identifying important news items (Krestel & Mehta 2010) and in examining the development of news article topics over time (Jacobi et al. 2013).

The basic idea behind topic modelling is that recurring topics in a dataset can be analysed in a data-driven manner by quantitatively modelling words that co-occur in the texts. Topics are viewed as latent, i.e., they cannot be found directly in the data, but can be interpreted by analysing co-occurring word patterns. These can be analysed as reflecting the topics. Formally, a topic is specified as a mixture of words in which each word in the data has a probability of belonging to a latent, underlying topic. For instance, for one topic, the words *hunger*, *thin* and *calorie* could have very high probabilities, while the probabilities for *orange* and *yellow* could be low. Based on these probabilities, we could interpret the topic as representing the theme of diet. Thus, a document is a mixture over topics. In other words, a single document can feature several topics, and the sum of the topic proportions across all topics for one document is one.

As a result of the fitting process, topic modelling provides the number of topics that best fits the data. The topics are described and can be analysed by their keywords, i. e., the words that have the highest probabilities of belonging to these topics. The probabilities are also a result of the fitting process, as a topic is a mixture of words with a probability of belonging to the topic (Roberts et al. 2013; 2016a). Furthermore, the fitting process provides information about the topics that are the most prevalent in a given document. This information is the basis for the qualitative analysis in our study.

In our study, to set up the data, the first step was to lemmatise the raw data. This was done with the Finnish Dependency Parser (Luotolahti et al. 2015). The second step was to extract relevant posts. Our objective was to collect a comprehensive set of posts that discuss poverty. Using the word *köyhä* ('poor') as a starting point, we applied Word2Vec to identify a set of words occurring in similar contexts with the word *köyhä* ('poor'). Word2Vec is a machine learning method that models semantic similarity among words based on their shared contexts in the training data (Mikolov et al. 2013). The underlying assumption is that semantically similar words share similar meanings (Firth 1957), and with very large datasets, this similarity can be computed.

At this point in the analysis, we focused on high recall, i. e., on extracting as many relevant posts as possible; therefore, the 12 most similar words retrieved by Word2Vec were included in the search.³ The Word2Vec model that we used⁴ is trained on the same Suomi24 corpus that we are using in this study; i. e., these words are used in similar contexts in our dataset. However, the list of 12 most similar words is not to be viewed as a list of near-synonyms. Although some of the words might be described as near-synonyms (e.g., *köyhä* 'poor', *vähävarainen* 'poor'), some of them are quite different from *köyhä* ('poor') (e.g., *sosiaalipummi* 'social bum', *eläkeläinen* 'pensioner'). However, in general discussions and in our data, they are often associated with low income and lack of money.

Naturally, it is clear that this extraction method is less focused on precision and also retrieves less-relevant posts. For instance, the word *köyhä* ('poor') can refer to poorness, a quality associated with a product, and a post

³ The words were *köyhä* ('poor'), *rahaton* ('without money'), *persaukinen* ('broke'), *vähävarainen* ('poor'), *rutiköyhä* ('extremely poor'), *tyhjätasku* ('broke'), *varaton* ('indigent'), *pienituloinen* ('with a low income'), *pienipalkkainen* ('with a low salary'), *sossupummi* ('social bum'), *sosiaalipummi* ('social bum'), and *eläkeläinen* ('pensioner').

⁴ Available at http://bionlp-www.utu.fi/wv_demo/ (accessed 2021-01-15).

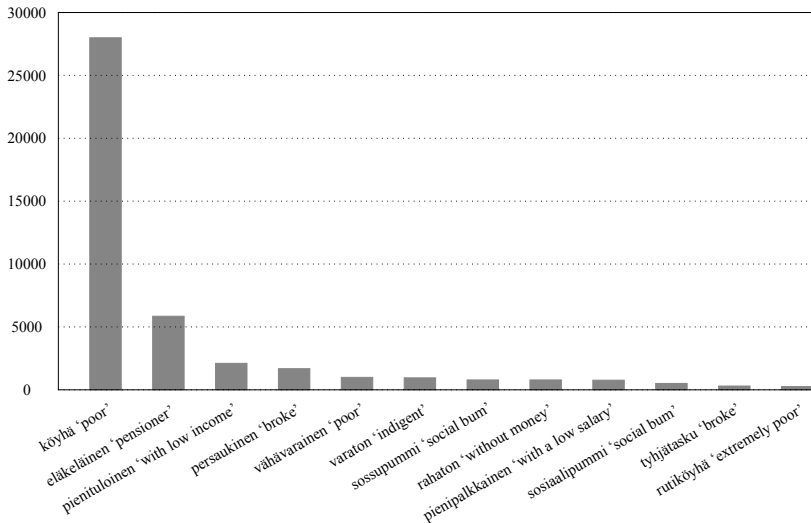


Figure 1. Absolute frequencies of the search words in the final dataset

including this meaning would still be retrieved. However, it is not possible to differentiate these meanings in a computational manner in this study's context. Thus, excluding them would have required a different research setting. By focusing on high recall, our approach is to first extract as many posts as possible, then focus on the relevant ones during the analysis.

Based on the set of search words, we retrieved 32,407 posts from the corpus altogether. These went through a relatively heavy preprocessing to clean the data from duplicates and linguistically uninteresting material such as punctuation, pronouns and other function words.⁵ The frequencies of the search words in these data are described in Figure 1, and these reflect the importance of the search words in the final dataset. As can be seen, *köyhä* ('poor') is by far the most frequent, followed by *eläkeläinen* ('pensioner') and *pienituloinen* ('with a low income').

To form the topic models, we used structural topic modelling (STM), implemented in R (package *stm*, version 1.3.0). To estimate the number of

⁵ This cleaned version of the data is available at <https://github.com/TurkuNLP/Corpus-linguistics/> for the sake of reproducibility. (Accessed 2021-01-15).

topics, we used a spectral initialisation method which has been shown to offer good performance on large datasets (see Roberts et al. 2013; 2016a; 2016b). A solution with 46 topics was estimated to have the best fit to the data. To describe the topics, we extracted for each topic the 25 best keywords with the label topics function. Specifically, we focused on keywords estimated with the highest probability. These are the words within each topic with the highest probability (inferred directly from topic-word distribution parameter β ; see R Package Documentation 2021). The 25 keywords with the highest probabilities are not necessarily the most frequent ones in the data. Instead, they can be described as the most popular and probable ones in each of the 46 topics. These 25 keywords extracted with this method were then used as a basis for the subsequent qualitative analysis.

During the qualitative analysis, we first analysed the keywords for each topic to identify the central themes discussed in the posts belonging to each topic. Finding the central themes over automatically estimated keywords was not self-evident. To increase our results' reliability, this analysis was first done independently by four authors (Lotta Lehti, Milla Luodonpää-Manni, Jarmo Harri Jantunen and Veronika Laippala) of this article, who are all experienced researchers. As a second step, the independent analyses were then compared and discussed to reach a joint conclusion. In most cases, the independent analyses were quite unanimous about a topic's central theme. Where the analyses were more spread out, packages of 30 posts with the highest probabilities of being associated with each of the 46 topics were consulted to find the central themes. The central themes identified for each topic are presented in Table 1 (see § 4.1).

Considering that in many cases, the keywords for different topics were related semantically, and that performing a closer analysis of all 46 topics would be very difficult in one article, all the topics with similar central themes were grouped to form larger topic groupings (e. g., politics; Table 1). The three largest groups (i. e., politics; money, income and spending; and unequal access to goods) were then chosen for a more detailed qualitative analysis based on a close reading of the 46 post packages described above, comprising 30 posts with the highest probabilities of being associated with each of the topics (a total of 1,380 posts).

To sum up, our methodological framework combines a data-driven, large-scale exploration of all the poverty-related topics emerging from the data using the topic modelling technique, as well as a detailed manual analysis of selected topics and discourses that they reflect. The different steps taken in

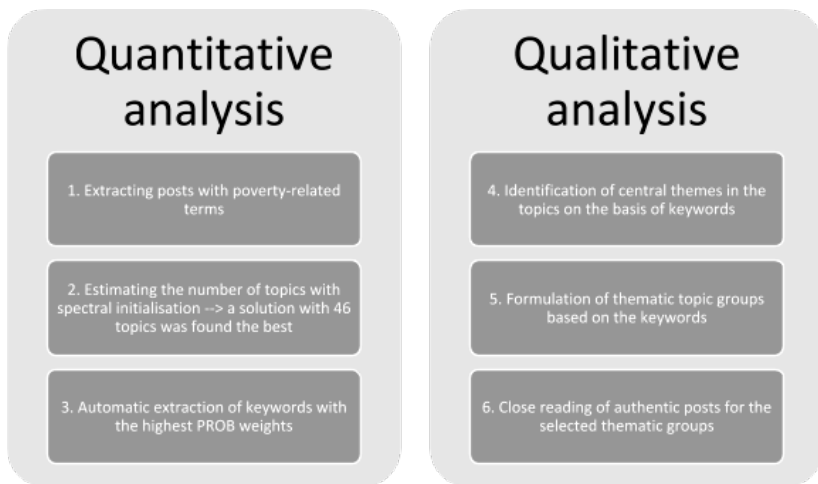


Figure 2. Steps taken in the analysis

the analysis are depicted in Figure 2. This approach has many advantages, as well as some limitations. Topic modelling allows us to analyse a large amount of data without predetermined classification criteria, which would not be possible without relying on computational methods. Examining a large number of discussion forum posts based on the topics and extending the analysis using discourse analysis provides a good overall picture of how poverty-related topics are discussed online beyond the scope of what we, as researchers, would have anticipated to find. However, relying on computational methods meant that we needed to operationalise the discourses on poverty in a measurable form. The decision to concentrate on the lemma *köyhä* ('poor') and our list of 11 words occurring in similar contexts meant that a large number of posts that discuss poverty, but do not use the chosen lemmata, was potentially lost. However, it was estimated that the quantity of data obtained using the lemma *köyhä* ('poor') and a list of similar words (32,407 posts) was large enough to provide sufficient material with which to examine the poverty discourses in the Suomi24 discussion forum.

4 Results

4.1 Large-scale tendencies on how poverty is discussed

As described above, a solution of 46 topics was defined as the best fit for our data using the spectral initialisation method. The next step in the analysis comprised analysing 25 keywords estimated for each of the 46 topics. This initial examination gave us a global perspective on how poverty and social exclusion are discussed in the discussion forum. The topics are grouped and presented thematically in Table 1, which also provides a small set of keywords for each of the topics. These keywords were selected manually from the set of 25 highest-ranking keywords that we extracted for each topic (see § 3 for details). For each topic, we provide five sample keywords that best describe the topic qualitatively. The ranking of the keywords among the 25 highest-ranking keywords is indicated in the parentheses.

Table 1. Thematic groupings of 46 topics and examples of the highest-ranking keywords estimated using PROB (ranking of the keywords indicated within parentheses)

Topic	Examples of keywords	Theme	Topic group
Topic 1	<i>lääkäri</i> ‘doctor’ (2), <i>opiskella</i> ‘to study’ (3), <i>sairaus</i> ‘illness’ (5), <i>lääke</i> ‘medicine’ (6), <i>koulutus</i> ‘education’ (7)	Health care and education	Social services
Topic 2	<i>pankki</i> ‘bank’ (1), <i>laina</i> ‘loan’ (2), <i>vaate</i> ‘clothing’ (3), <i>tavara</i> ‘goods’ (5), <i>käteinen</i> ‘cash’ (9)	Banks, money and spending	Money, income and spending
Topic 3	<i>puoliso</i> ‘spouse’ (1), <i>perintö</i> ‘legacy’ (3), <i>leski</i> ‘widow’ (5), <i>eurovaalivideo</i> ‘Euro-election video’ (7), <i>leffa</i> ‘movie’ (13)	Partnerships, inheriting, EU	Memes and repetition
Topic 4	<i>eläke</i> ‘pension’ (1), <i>vanhus</i> ‘elderly person’ (2), <i>ikäluokka</i> ‘age group’ (8), <i>sukupolvi</i> ‘generation’ (11), <i>työura</i> ‘career’ (14)	Old age and retirement	Social services
Topic 5	<i>lehti</i> ‘magazine’ (1), <i>mummo</i> ‘grandmother, old lady’ (4), <i>tyytyväinen</i> ‘satisfied’ (5), <i>enää</i> ‘no more’ (8), <i>auki</i> ‘open’ (13)		Unmeaningful

Table 1 continued

Topic	Examples of keywords	Theme	Topic group
Topic 6	<i>ihme</i> ‘odd’ (4), <i>viina</i> ‘booze’ (7), <i>juoppo</i> ‘drunk’ (10), <i>ryypätä</i> ‘to drink’ (18), <i>kyykittää</i> ‘to humiliate’ (20)	Alcohol, humiliation	Poor/rich dichotomy
Topic 7	<i>hallitus</i> ‘government’ (1), <i>leikata</i> ‘to cut’ (2), <i>Soini</i> (3), <i>lapsilisä</i> ‘child allowance’ (7), <i>Katainen</i> (13)	Financial and social policy, politicians	Politics
Topic 8	<i>Jeesus</i> ‘Jesus’ (1), <i>luterilainen</i> ‘Lutheran’ (2), <i>enkeli</i> ‘angel’ (7), <i>paavi</i> ‘pope’ (8), <i>ortodoksi</i> ‘Orthodox’ (10)	Religion and confessions	Religion
Topic 9	<i>tulo</i> ‘income’ (1), <i>vero</i> ‘tax’ (2), <i>tuloero</i> ‘income difference’ (10), <i>ostovoima</i> ‘purchasing power’ (12), <i>suurituloinen</i> ‘high income’ (15)	Income, capital and taxation	Money, income and spending
Topic 10	<i>yhteiskunta</i> ‘society’ (1), <i>valta</i> ‘power’ (2), <i>kapitalismi</i> ‘capitalism’ (5), <i>kommunismi</i> ‘communism’ (7), <i>pääoma</i> ‘capital’ (21)	Ideologies	Politics
Topic 11	<i>joulu</i> ‘Christmas’ (1), <i>lahja</i> ‘present’ (3), <i>varaa</i> ‘afford’ (6), <i>ruoka</i> ‘food’ (17), <i>juhla</i> ‘party’ (24)	Christmas and holidays	Unequal access to goods
Topic 12	<i>keskustelu</i> ‘discussion’ (3), <i>ruma</i> ‘ugly’ (4), <i>mielipide</i> ‘opinion’ (7), <i>kommentti</i> ‘comment’ (10), <i>ulkonäkö</i> ‘appearance’ (19)	Online discussion, dating and appearance	Dating and relationships
Topic 13	<i>kunta</i> ‘municipality’ (2), <i>palvelu</i> ‘service’ (4), <i>Helsinki</i> (9), <i>veronmaksaja</i> ‘taxpayer’ (12), <i>Turku</i> (15)	Municipal services	Politics
Topic 14	<i>poika</i> ‘boy’ (1), <i>luku</i> ‘number’ (3), <i>vapaa</i> ‘free’ (11), <i>pää</i> ‘head’ (18), <i>rikas</i> ‘rich’ (19)		Unmeaningful
Topic 15	<i>mahdollisuus</i> ‘possibility’ (2), <i>koulu</i> ‘school’ (3), <i>taloudellinen</i> ‘economical’ (6), <i>opettaja</i> ‘teacher’ (16), <i>koulutus</i> ‘education’ (17)	Education opportunities	Social services
Topic 16	<i>puolue</i> ‘party’ (1), <i>eduskunta</i> ‘parliament’ (2), <i>edustaja</i> ‘representative’ (4), <i>ehdokas</i> ‘candidate’ (5), <i>vaali</i> ‘election’ (6)	Party politics, elections	Politics

Table 1 continued			
Topic	Examples of keywords	Theme	Topic group
Topic 17	<i>rikas</i> 'rich' (1), <i>köyhyyys</i> 'poverty' (2), <i>omaisuus</i> 'property' (3), <i>varallisuus</i> 'wealth' (5), <i>elintaso</i> 'standard of living' (12)	Wealth and poverty	Money, income and spending
Topic 18	<i>huono</i> 'bad' (1), <i>heikko</i> 'weak' (3), <i>fiksu</i> 'clever' (7), <i>typerä</i> 'stupid' (8), <i>laiska</i> 'lazy' (14)	Intelligence	Negative evaluations of the poor
Topic 19	<i>pakko</i> 'certainty' (1), <i>tietenkin</i> 'of course' (2), <i>kuolema</i> 'death' (4), <i>häätä</i> 'emergency' (7), <i>hauta</i> 'grave' (11)	Certainty, inevitable, death, ending	Finality and certainty
Topic 20	<i>matka</i> 'trip' (4), <i>kesä</i> 'summer' (7), <i>loma</i> 'holiday' (17), <i>hotelli</i> 'hotel' (18), <i>Thaimaa</i> 'Thailand' (19)	Traveling and vacation	Unequal access to goods
Topic 21	<i>Venäjä</i> 'Russia' (1), <i>USA</i> (5), <i>sota</i> 'war' (7), <i>armeija</i> 'army' (11), <i>Eurooppa</i> 'Europe' (16)	Nations and war	Rich and poor nations, immigration
Topic 22	<i>arvo</i> 'value' (1), <i>Halonen</i> (6), <i>Esko</i> (10), <i>saastuttaa</i> 'to pollute' (19), <i>maanviljelijä</i> 'farmer' (21)	Values, class society, politicians	Politics
Topic 23	<i>kokoomuslainen</i> 'member of the National Coalition Party' (1), <i>kansanedustaja</i> 'member of parliament' (2), <i>vasemmistolainen</i> 'leftist' (10), <i>ministeri</i> 'minister' (12), <i>Hakkainen</i> (17)	Politicians	Politics
Topic 24	<i>EU</i> (2), <i>kieli</i> 'language' (7), <i>maahanmuuttaja</i> 'immigrant' (11), <i>kehitysapu</i> 'development aid' (18), <i>itsenäinen</i> 'independent' (23)	Poor and rich countries, international politics	Politics
Topic 25	<i>homo</i> 'gay' (2), <i>tyttö</i> 'girl' (4), <i>avioliitto</i> 'marriage' (6), <i>parisuhde</i> 'relationship' (9), <i>sukupuoli</i> 'gender' (17)	Relationships and sex	Dating and relationships
Topic 26	<i>leipä</i> 'bread' (3), <i>peruna</i> 'potato' (9), <i>terveellinen</i> 'healthy' (12), <i>marja</i> 'berry' (16), <i>ravinto</i> 'nutriment' (25)	Food and nutrition	Unequal access to goods
Topic 27	<i>valtakunta</i> 'kingdom' (3), <i>sielu</i> 'soul' (6), <i>Paavali</i> 'Paul' (7), <i>Tuonela</i> 'Hades' (15), <i>opetuslapsi</i> 'disciple' (19)	Christian places and characters	Religion

Table 1 continued			
Topic	Examples of keywords	Theme	Topic group
Topic 28	<i>paska</i> ‘shit’ (1), <i>luuseri</i> ‘loser’ (2), <i>perse</i> ‘ass’ (4), <i>hullu</i> ‘crazy’ (5), <i>jauhaa</i> ‘to bullshit’ (11)	Vulgar and hate speech	Poor/rich dichotomy
Topic 29	<i>perhe</i> ‘family’ (1), <i>turha</i> ‘meaningless’ (3), <i>hoito</i> ‘treatment’ (5), <i>kysymys</i> ‘question’ (9), <i>etukätein</i> ‘beforehand’ (13)		Unmeaningful
Topic 30	<i>kateellinen</i> ‘jealous’ (1), <i>järke</i> ‘sense’ (3), <i>huudella</i> ‘to shout’ (6), <i>sääliittävä</i> ‘pathetic’ (8), <i>pummi</i> ‘bummer’ (11)	Vulgar and hate speech	Negative evaluations of the poor
Topic 31	<i>kotimaa</i> ‘homeland’ (2), <i>kerjätä</i> ‘to beg’ (3), <i>maahanmuutto</i> ‘immigration’ (5), <i>uutiset</i> ‘news’ (8), <i>perussuomalainen</i> ‘member of the Finns Party’ (18)	Immigration and media	Rich and poor nations, immigration
Topic 32	<i>puhelin</i> ‘phone’ (5), <i>tietokone</i> ‘computer’ (6), <i>mersu</i> ‘Mercedes’ (10), <i>audi</i> ‘Audi’ (13), <i>huolto</i> ‘service’ (17)	Cars and electronics	Unequal access to goods
Topic 33	<i>yhteiskunta</i> ‘society’ (2), <i>toimeentulotuki</i> ‘income support’ (4), <i>Kela</i> ‘Social Insurance Institution’ (5), <i>asiakas</i> ‘client’ (6), <i>päätös</i> ‘decision’ (10)	Social security, benefits	Social services
Topic 34	<i>poliisi</i> ‘police’ (1), <i>kadota</i> ‘disappear’ (8), <i>pelko</i> ‘fear’ (10), <i>jengi</i> ‘gang’ (19), <i>huijaus</i> ‘cheat’ (20)	Police and crime prevention	Crime, illegal activities and the police
Topic 35	<i>valtio</i> ‘state’ (1), <i>yritys</i> ‘enterprise’ (2), <i>tukea</i> ‘to support’ (7), <i>yksityinen</i> (sektori) ‘private (sector)’ (9), <i>palvelu</i> ‘service’ (12)	State, economy, entrepreneurship	Money, income and spending
Topic 36	<i>asunto</i> ‘apartment’ (2), <i>vuokra</i> ‘rent’ (3), <i>asumistuki</i> ‘housing benefit’ (10), <i>kerrostalo</i> ‘block of flats’ (17), <i>sähkö</i> ‘electricity’ (18)	Housing and housing costs	Unequal access to goods
Topic 37	<i>rikollinen</i> ‘criminal’ (1), <i>rikos</i> ‘crime’ (2), <i>tuomita</i> ‘to judge’ (4), <i>uhri</i> ‘victim’ (6), <i>väkivalta</i> ‘violence’ (7)	Crimes and judgement	Crime, illegal activities and the police

Table 1 continued

Topic	Examples of keywords	Theme	Topic group
Topic 38	<i>kannatus</i> ‘popularity’ (10), <i>persut</i> ‘members of the Finns party’ (13), <i>äänestäjä</i> ‘voter’ (16), <i>kansalainen</i> ‘citizen’ (20), <i>Sipilä</i> (24)	Party politics, elections	Politics
Topic 39	<i>hammas</i> ‘tooth’ (1), <i>hymyillä</i> ‘to smile’ (11), <i>hammaslääkäri</i> ‘dentist’ (12), <i>suu</i> ‘mouth’ (13), <i>korva</i> ‘ear’ (15)	Health and dental health care	Social services
Topic 40	<i>velka</i> ‘debt’ (1), <i>lasku</i> ‘bill’ (2), <i>maksu</i> ‘payment’ (5), <i>ulosotto</i> ‘debt recovery procedure’ (6), <i>summa</i> ‘sum’ (15)	Debt and payments	Money, income and spending
Topic 41	<i>kallis</i> ‘expensive’ (1), <i>halpa</i> ‘cheap’ (2), <i>ilmainen</i> ‘free’ (4), <i>edullinen</i> ‘inexpensive’ (11), <i>tarjous</i> ‘offer’ (24)	Cheap vs. expensive goods	Unequal access to goods
Topic 42	<i>uskonto</i> ‘religion’ (1), <i>luonto</i> ‘nature’ (2), <i>maapallo</i> ‘earth’ (3), <i>evoluutio</i> ‘evolution’ (12), <i>kristinusko</i> ‘Christianity’ (14)	Religion and evolution	Religion
Topic 43	<i>työtön</i> ‘unemployed’ (1), <i>palkka</i> ‘salary’ (2), <i>työpaikka</i> ‘workplace’ (3), <i>tienata</i> ‘to earn’ (5), <i>työnantaja</i> ‘employer’ (11)	Working life and earning	Money, income and spending
Topic 44	<i>henki</i> ‘spirit’ (2), <i>Kristus</i> ‘Christ’ (3), <i>armo</i> ‘mercy’ (6), <i>rakkaus</i> ‘love’ (9), <i>julistaa</i> ‘to propagate’ (16)	Religion and grace	Religion
Topic 45	<i>lahjoittaa</i> ‘to donate’ (4), <i>kerätä</i> ‘to collect’ (6), <i>hyväntekeväisyys</i> ‘charity’ (13), <i>lahjoitus</i> ‘donation’ (14), <i>avustus</i> ‘contribution’ (18)	Religion and fundraising	Religion
Topic 46	<i>tuollainen</i> ‘that kind of’ (1), <i>nykyään</i> ‘nowadays’ (2), <i>joukko</i> ‘group’ (5), <i>tekeminen</i> ‘doing’ (8), <i>enempi</i> ‘more’ (13)		Unmeaningful

Table 1 sketches the topics’ content. The topics listed in one topic group discuss similar themes, albeit from a slightly different perspective. The document topic loadings, i.e., the importance of topics in the data, are described in the Appendix. Most of the topics display very similar topic loadings although some variation in the importance of the topics can be

detected with topics 3, 8, 14, 22, 27, 29, 31, 34 and 45 being of minor importance only.

The most prominent topic groups, in the sense that they pertain to a large number of topics, are politics; money, income and spending; and unequal access to goods. Many of the topics in these topic groups also feature important document topic loadings. Furthermore, other topic groups include social services (such as healthcare), dating and relationships, poor/rich dichotomy, and crime, illegal activities and the police. The topics also featured religion, immigration and repetitive forum posts, such as memes; however, these topics were not closely related to poverty. Four topics (5, 14, 29 and 46) were left out of the analysis because they grouped posts that lacked meaning in this analysis, and some represented topics with low importance in the data (see Appendix). The rows presenting these topics are in grey.

The three most prominent topic groups – i.e., politics; money, income and spending; and unequal access to goods – were selected for a more detailed qualitative analysis. These three topic groups are discussed in separate sections. A close reading of packages comprising 30 authentic posts with the highest probabilities of being associated with each selected topic reveals several discourses related to poverty in the Suomi24 forum.

4.2 Politics

As mentioned above, based on the keywords for each topic, one of the most prominent topic groups that emerged in the data is politics. This topic group includes topics 7, 10, 13, 16, 22, 23, 24 and 38 (see Table 1). Overall, the ones manifesting the topic group of politics do not necessarily deal with poverty in a straightforward manner. Instead, poverty is present in these posts in an indirect way; e.g., many participants express their distrust and dislike towards rich elites or discuss the poverty and wealth of different countries or municipalities. Also, juxtaposition between those in power and poor people is strongly present in the posts.

The themes of the topics in this topic group are partly parallel. For instance, topics 7, 16, 22, 23 and 38 all are related to national party politics and politicians. Furthermore, topics 10 and 22 pertain to ideologies, values and social classes. Third, the main theme of topic 13 is municipal politics. Finally, topic 24 displays an international perspective in which posts pertain to different countries' wealth.

The party-politics topics include keywords referring to specific politicians (proper names), political positions and institutions, and political parties, their members and supporters. The posts in which the keywords occur reflect a distrust towards those in power in Finnish society. Notably, most of the posts in our data were published in 2014, and the political power relations during that period are clearly visible in the data. Example (1) illustrates the distrust that participants expressed towards political actors. Note that the keywords are highlighted in bold and the search word in italics.⁶

(1) Topic 7

Soini oli ja on rehellinen, ei hän aikonutkaan mennä suomalaisia *köyhiä* sortavaan euron pönkkäys**hallitukseen**, eivät aikoneet mennä myöskään vasurit eikä demarit mutta takki kääntyi ja menivät. **Soinia** on syytetty vastuuttomuudesta kun ei mennyt **hallitukseen**, Arhinmäki on ehtinyt tulla jo poisikin sieltä eurovaalitaktikoinnin vuoksi, **Jutta** lähtee pian kun ei tullut enää valituksi pj.

‘**Soini** was and is honest, he was not even going to join a **government** which represses Finnish *poor* people, neither the Left Alliance nor the Social Democrats were going to join, but they backtracked and joined. **Soini** has also been accused of irresponsibility because he did not join the **government**, Arhinmäki has already joined and left because of EU election manoeuvring, **Jutta** will leave soon because she was no longer elected the head.’

In (1), three politicians are mentioned by name: *Soini*, *Arhinmäki* and *Jutta*. *Arhinmäki* is not among the listed keywords for this topic, but this name refers to Paavo Arhinmäki, the then-leader of the Left Alliance and the minister of science and culture in the coalition government of the period. Arhinmäki resigned, and his party left the government in April 2014 as an objection to the government’s decisions to cut financial aid from students, pensioners, the unemployed and families with children. *Jutta* refers to Jutta Urpilainen, who was the head of the Social Democrats and the minister of finance until June 2014, when she lost her position in an internal party election. *Soini* refers to Timo Soini, who was, at the time, head of the populist Finns Party, which

⁶ The original examples in Finnish are presented as they are on the discussion forum, i.e., the text has not been modified in terms of spelling, syntax or word choice, for instance. The English translations are our own. Please note that some non-normative spelling of the original post, as well as some creative choices or non-normative syntax, is most often not visible in the English translations. Further, all examples are extracts of posts because presenting the posts in their entirety would take too much space in this article.

succeeded in the 2011 parliamentary elections, finishing in third place, but they ended up in opposition.

In (1), Paavo Arhinmäki and Jutta Urpilainen are depicted as traitors because contrary to their previous declarations, they joined a government whose politics are influenced largely by the conservative ideology of the prime minister's party; thus, they were viewed as working against Finnish poor people's needs. In addition, two political parties (the Left Alliance and Social Democrats) are viewed as untrustworthy. Also, the Finnish government and the EU elections are both represented in a pejorative manner: The Finnish government is deemed unfair, and the EU election is viewed as a manoeuvring affair. EU financial support for Greece, which was going through a financial crisis at the time, is also criticised in many posts, as in (2):

(2) Topic 7

Haista vittu! **Soini** ei venkoile, hän on rehellinen, vaalilupauksensa pitävä, Suomen**köyhistä** kurjista huoltalantava ja tukee pienyrittäjyyttä ja on isänmaallinen sekä YLE: n vihaama suurimman oppositi**puolueen** johtaja. Kokoomus taas on suuren pääoman **puolue**, ei yrittäjien ja **köyhät** eivät ole heidän silmissään ihmisiä. Ihan kaikki nykyiset **hallituspuolueet** ja eurovaalitaktikoinnin vuoksi **hallituksesta** eronnut **vasemistoliitto** ovat kokoomuksen pyllynnuolijoina ja kutennmyös **keskusta** haluavat jatkaa tukipakettien jakelua **Kreikkaan** josta koskaan ei saada mitään takaisin

'Fuck you! **Soini** doesn't make up excuses, he is honest, he keeps his campaign promises, he takes care of the *poor* in Finland, he supports small entrepreneurs and he is a true patriot and he is the leader of the opposition **party** that the national broadcasting company hates. By contrast, the National Coalition Party is a **party** of big money, not of entrepreneurs, and the *poor* are not humans in their eyes. Each and every one of the current **parties** in the **government**, as well as the **Left Alliance**, which left the **government** because of EU election strategies, are adulators of the National Coalition Party, and in the same way as the **Centre Party of Finland**, they want to continue financial aid to **Greece** from where we'll never get anything back.'

A noteworthy feature in (1) and (2) is the praise given to Timo Soini. This praise recurs frequently in the posts in our data: Soini is perceived as the only honest politician – a master and a saviour – which is hardly surprising because at the time, Soini's populist rhetoric included sarcasm and criticism, especially towards the establishment and other parties (Niemi 2012: 15; see also Mickelsson 2011: 165, 167).

Furthermore, as mentioned above, topics 10 and 22 contain posts concerning ideologies, values and social classes, as in (3) and (4):

(3) Topic 10

Tuotannon keskittyminen tapahtuu myös maailmanlaajuisesti. Rahalaitokset, kauppapääoma ja tuotantopääoma punoutuvat yhteen ja syntyy finanssipääoma. Kansallisesti ja maailmanlaajuisesti se merkitsee myös omaisuuksien ja pääomien keskittymistä yhä harvempien käsiin. 100 rikkainta omistaa jo nyt enemmän kuin 3.5 mrd maailman köyhintä.

‘The concentration of production is happening also globally. Banking institutions, trade **capital** and production **capital** are intertwined, and financial **capital** is born. Nationally and globally, it also means the concentration of properties and **capital** into the hands of fewer and fewer people. The 100 richest people already now possess more than the 3.5 billion *poorest* people.’

(4) Topic 22

Mielenkiintoinen tarina, joka kyllä kuvastaa entisaikain **arvoja** ja ajattelutapaa. Tuon äärellä herää tietty paljon kysymyksiä itse **kertomuksen** asetelman taustoista. Tuossahan hurskastellaan *köyhien* ja huono-osaisten moraalittomuudella ja syntisyydellä ja käytetään heitä opetusmateriaalina opiksi ja varoitukseksi muille. **Kertomuksessa** tosin käytetään samasta ihmisestä sanaa talon **isäntä** ja **torppari**, mitkä on vähän eri asioita.

‘An interesting story, which does reflect the **values** and thinking of the past. Considering this, a lot of questions, of course, emerge about the background setting of the **narrative**. You have there some hypocrisy about the bad morals and sinfulness of the *poor* and the unprivileged are presented as teaching material to warn others. In the **narrative**, however, the same person is referred to with the words **landlord** and **crofter**, which are slightly different things.’

Posts that deal with topics linked to the division of wealth in the world and different political ideologies often comprise lengthy deliberation on the issue. The discourse includes a juxtaposition between the rich and the poor. In (3), the deliberation pertains to the macro-financial questions about capital and the unfair distribution of wealth in the world. Example (4) is a reaction to a previous post containing a narrative on past events. The author of (4) analyses the narrative in terms of the ways in which the poor are characterised: as immoral and sinful. In the post, these attitudes are part of the past. Indeed,

research also shows that attitudes towards the poor are changing in Finland: In the middle of the 1990s, 60% of the Finnish population viewed recipients of social allowance as lazy, while in 2018, the percentage was only 13% (Kallio et al. 2020: 255).

The third theme to be investigated is municipal politics. In the posts manifesting this theme, poverty is not necessarily discussed in terms of people directly, but rather in terms of a municipality's financial situation, as in (5):

(5) Topic 13

Olen asunut **kaupungin keskustassa** kohta 70 vuotta ja tiedän mistä puhun. **Paikkakunta** on *köyhä* ja surkea ja siihen ovat olleet ja ovat edelleenkin syynä yksinomaan **kaupungin päättäjät**, jotka ovat karkoittaneet **kaupungista** yrittäjät ja tilanneet tilalle työtävieroksuvat työperäiset loiseläjät.

'I have lived in the **town centre** for almost 70 years, and I know what I'm talking about. The **town** is *poor* and miserable, and the ones to accuse of the situation are the **municipal decision makers** who have driven away from the **town** all the entrepreneurs and taken in lazy and feckless foreigners instead.'

These posts mostly deal with municipal political decisions, different towns' financial and social policy and critiques of municipal decision makers. In this discourse, financial problems are perceived as a consequence of leaders' incompetence. Criticising municipal politics is hardly surprising because many political decisions that directly affect people's lives are made at the municipal level. If one is suffering from poverty personally or knows people who are, local leaders are a plausible target for blame.

The juxtaposition between the "ordinary people" and the "rich elite" is clearly visible in the data overall. Other juxtapositions include the one between ordinary Finns and immigrants, as in (5). The decision makers are viewed as supporting immigrants and against ordinary Finns. Furthermore, those in power are most often perceived as dishonest and selfish (see also 1 and 2 above). This juxtaposition portrays the Suomi24 discussion forum as a contact zone (see § 2) where opponents of the establishment can meet. However, as our data comprise individual posts pertaining to poverty, not comment threads, possible conflicts between participants themselves are not necessarily visible.

Finally, the posts in topic 24 contain discussions about cross-national wealth. These posts manifest both positive and negative attitudes towards

Finland in relation to other countries. In some posts, Finland is not mentioned, but the participants discuss other countries' financial and political situation. However, Finland's status in a cross-national comparison is a recurrent theme in posts from topic 24, as manifested in (6) and (7):

(6) Topic 24

Ruotsi on Ruotsi. Se ei ole **Suomi**. **Ruotsissa** on aina osattu toimia paremmin kuin loisvirkamiespopulaatiopesäkefinlandiassa. Johan se on nähty jo satoja vuosia. **Ruotsi** on aina satakertaisesti Finlandiaa edessä tasa-arvossa ja kaikessa muussakin . **Suomen köyhät** olisivat vielä *köyhempiä* jos emme olisi **eu:ssa** ja eurossa . **NÄIN SE ON POIJJAAT** .
 ‘**Sweden is Sweden.** It is not **Finland**. In **Sweden**, they have always known how to act better than in crappy bureaucratic **Finland**. We’ve seen this for hundreds of years already. **Sweden** will always be a hundred times ahead of **Finland** in equality and in everything else, too. The *poor* in **Finland** would be even *poorer* if we were not in the **EU** and euro. **THIS IS HOW IT GOES.**’

(7) Topic 24

Suomi on maa joka elättää **viiron** - Täällä on työssä (palkkoja polkemassa) ainakin satatuhatta **virolaista** joista aivan jokainen ei maksa veroja minnekään. Suomalaisia turisteja käy **virossa** paljon ja nämä kaksi asiaa - Turismi ja **virolaisten suomessa** työssä käynti onkin ne asiat joilla **suomi** elättää **viiron**. Ilman **suomen** avoimia rajoja ei **viro** tulisi toimeen lainkaan vaan olisi *köyhäkin köyhempi* kehitysmää. **Suomi** itse ei hyödy mitään tästä tilanteesta - päin vastoin.
 ‘**Finland** is a country that fosters **Estonia** – there are at least 100,000 **Estonians** working here (dumping wages), and they don’t pay taxes anywhere. Finnish tourists go to **Estonia** a lot, and these two things – tourism and **Estonians** working in **Finland** – are the things by which **Finland** fosters **Estonia**. Without the open borders of **Finland**, **Estonia** could not manage at all, but it would be a desperately *poor* developing country. **Finland** gains nothing from this situation – nothing at all.’

This cross-national discourse on wealth also manifests another juxtaposition: Finland vs. other countries. Overall, this juxtaposition characterises all the topics pertaining to policies. Another common feature in these topics is that the self-expression rarely contains disclosures about the author's personal life (see, however, 5 above). Instead, the posts analyse questions related to poverty and wealth from a political perspective without personal

narratives. The self-expression remains subjective, some even strongly, mostly comprising opinions instead of facts, and the vocabulary used is often rather colourful.

4.3 Money, income and spending

The next topic group, constructed through keywords, comprises topics that denote money, income and spending (see Table 1). This topic group covers six themes: 1) banks, money and spending (topic 2), 2) income, capital and taxation (topic 9), 3) wealth and poverty (topic 17), 4) state, economy and entrepreneurship (topic 35), 5) debts and payments (topic 40), and 6) working life and earning (topic 43).

The ability to use money, make purchases and get loans from a bank relates to poverty (or wealth), and this subject is discussed widely in Suomi24 and in the topic group of money, income and spending. This group manifests itself as keywords such as *bank*, *debt*, *to loan*, *back account*, *cash* and *credit card*. Example (8) concerns banks not treating customers equally and some poor clients feeling humiliated by some banking institutions. This treatment is likely to violate the dignity of poor people, who struggle with their standard of living daily.

(8) Topic 2

Osuspankin kanssa pärjää aina. Asiakkaan kokoinen **pankki**, toisin kuin muutamat muut, joissa *köyhää* kyykytetään.

‘With OP **Bank**, you always get along. A customer-size **bank**, unlike a few others, where the *poor* are being humiliated.’

Example (9) comes from topic 40, and the post is an account of the author’s debt problems: Procuring an instant cash loan has led to a situation in which expenses are deducted regularly from the author’s account. Such a debt recovery process can be very distressing, as the expenses from debt-collection companies can be very high and exacerbate the plight caused by pre-existing poverty.

(9) Topic 40

Itselläni kanssa nuo **maksut** edelleenkin otetaan kuukausittaisesta summasta, vaikka olen ollut yli 24kk **ulosoton** asiakkaana. Että ei se näköjään riitä että pikavippikeisarit kusettavat liian suurilla kuluilla, eikä sekään että **perintätoimistot** hyväksikäyttävät surutta *köyhien* ahdinkoa

hyväkseen, mutta että **ulosotto** vielä tämän jälkeen kusettaa on kyllä käsittämätöntä.

‘In my case, those **payments** will still be taken out of the monthly amount, even though I’ve been over 24 months as a **buyout customer**. It seems not to be enough that instant loan company owners cheat us with too high expenses and the **collection agencies** carelessly exploit the plight of the *poor*, as, after all this, even the **bailiff** cheats us. It is unbelievable.’

Topics 9 and 17 reveal how capital, investments and taxation relate to poverty in digital discussions. Income and money, or the lack thereof, are viewed as characteristics and fundamental features of class and socioeconomic status. This discussion corresponds with the general definition of *socioeconomic status*, which groups people most commonly into three classes – namely high, middle and lower classes – and in which one of the bases for grouping is the income of people and households (see, e.g., Block 2014). The discourse on classes is manifested in (10), in which the author of the post states that in Finland, poor people know their place and that the class society is getting more permanent in Finland. There are concerns that Finns cannot climb the socioeconomic ladder.

(10) Topic 9

Huomisen Suomessa *köyhä* tietää paikkansa. Suomesta on tulossa jälleen maa, jossa ihmiset pysyvät siinä tuloluokassa, mihin ovat syntyneet. Syy löytyy **kasvaneista tuloeroista**. Kun **rikkaat** pysyvät **rikkaina** ja *köyhät köyhinä*, Suomi on asiantuntijoiden mukaan pian luokkayhteiskunta. Tulevaisuudenkuva ei ole ruusuinen.

‘In tomorrow’s Finland, the *poor* will know their place. Finland is becoming again a country where people stay in the income bracket they are born into. The reason can be found in the **increased income disparities**. As the **rich** remain **rich**, and the *poor* remain *poor*, Finland will soon be a class society, according to experts. The picture of the future is not rosy.’

Taxation is repeatedly discussed in the contexts of both wealth or high income and poverty (see 11). In this discourse, a very common view is that high-income people have money to pay more taxes and that their taxation needs to be increased to address the state’s debt crisis. Money from the poor, on the other hand, is spent on many other expenses, but they do not have as much income and wealth on which taxation can be increased.

(11) Topic 9

Suurituloisten veroa on kiristettävä niin että velkaantumisen kääntyy laskuun, *köyhillä* ei ole enää otettavaa.

‘The **taxation of high-income people** must be tightened so that indebtedness starts to decrease; *poor people* have no more to take.’

However, according to our data, it is not self-evident that poverty is always viewed as a sign of an unwelcome situation or distress (see 12). On the contrary, poor people can be perceived as happy, or even happier than rich people, based on evidence from other cultures – in this case, Spain.

(12) Topic 17

Köyhydessä ei ole mitään vikaa, *köyhät* ovat usein onnellisempia kuin **rikkaat** Espanjalaiset ovat *köyhiä*, mutta yhtä onnellisia kuin **rikkaat** pohjoismaalaiset.

‘There’s nothing wrong with **poverty**; the *poor* are often happier than the **rich**. The Spanish are *poor*, but as happy as **rich** Nordic people.’

Topic 35 describes a debate in which, once again, the rich – but also their businesses – are positioned as being opposed to the poor. As seen in (13), personal and state poverty can be blamed on the rich and their craving for money. Simultaneously, companies are depicted as greedy, taking advantage of society’s allowances and, thus, taking money from the poor. In this discourse, rich people also are viewed as lazy, receiving benefits without doing anything.

(13) Topic 35

Ihmettelen miksi IPU haluaa tuhota etunenässä *pienituloisten talouden* joka perustuu lähinnä säästämiseen? Nyt Suomessa rikkaat ja niiden **yritykset** voivat hyvin kun **yrityksiä** tuetaan valtavin summin tavallisten ihmisten rahoilla. Ne rahat käännetään pörssin kautta rikkaille. Näin koko työätekevä Suomi tukee rikkaita laiskureita ja köyhtyy saman verran itse.

‘I wonder why the IPU [Independence Party] wants to destroy the **economy** of *low-income people* based mostly on saving money. Now in Finland, the rich and their **companies** are doing well when the **companies** are supported by the money of ordinary people. That money is returned through the stock markets for the rich. This is how the whole working population in Finland supports rich, lazy people and gets poorer by the same amount itself.’

Finally, example (14) again emphasises the contrast between rich and poor, namely the juxtaposition between employers and employees. The example comes from topic 43, in which poverty and working life are discussed. A common belief is that bosses and employers earn too much compared with ordinary employees and that employees are treated badly, almost as slaves. This post's author contends that even the prime minister should be replaced by a low-income or no-income worker because a poor person would make decisions that benefit society more effectively.

(14) Topic 43

Pomojen palkkiot on rajoitettava sanotaan viisinkertaiseksi alimpaan **työntekijän palkkaan** verrattuna. On tehtävä laittomaksi potkia pois **työntekijöitä** ja heidän tuomisensa takaisin **työttöminä** orjatyöläisinä, ilman **palkkaa**. Pääministerin toki voisi korvata ilmaistyöntekijällä, niin saataisiin yhteiskuntaa paremmin hyödyttäviä päätöksiä lopultakin, kun *köyhä* ihminen olisi päättämässä.

‘Bosses’ salaries must be limited, say, to five times as big as the lowest **worker’s salary**. It must be made illegal to kick out **workers** and bring them back as **unemployed** slave labourers without **pay**. Sure, the prime minister could be replaced by a free worker, so we would at last get decisions that better benefit the society as a *poor* person would be there to decide.’

In the topic group of money, income and spending, the contrast between the rich and the poor, high-income and low-income people, and employers and employees is clear and evident. The poor feel that their status is unfair, that they are degraded because of their poverty, and it is perceived as very difficult to achieve a better social status. In these discourses, the rich are viewed as responsible for the state of affairs and should bear the responsibility for social inequalities and poverty.

4.4 Unequal access to goods

Unequal access to goods is one of the most prominent topic groups when talking about poverty in the Suomi24 discussion forum. This topic group includes topics 11, 20, 26, 32, 36 and 41 (see Table 1), which deal with the challenges that the poor face while trying to cope with everyday life, pertaining to the following themes: Christmas, holidays and travelling; food and nutrition; cars and electronics; housing and housing costs, and cheap vs. expensive goods. On these topics, participants discuss situations in which

poverty means being deprived of equal opportunities to various resources and possibilities that are more readily accessible to wealthier people.

First, we will focus on the discourse of diet, as displayed in topic 26, and to some extent, in topic 41. The keywords for topic 26 (food and nutrition) include different kinds of ingredients available or unavailable to the poor (e.g., *marja* ‘berry’, *leipä* ‘bread’, *kala* ‘fish’) and healthy diet (e.g., *alkoholi* ‘alcohol’, *terveellinen* ‘healthy’, *ravinto* ‘nutriment’). A closer reading of the original posts reveals that most of the posts published in the Suomi24 discussion forum concerning an affordable diet seem genuine and helpful. The participants share their experiences on low budget cooking and address the question of affordable and unaffordable ingredients. Potato dishes, porridge and bread are among the most popular recommendations for affordable cooking (see 16). However, cheese, milk, meat and butter are viewed as too expensive for a low budget diet (see 15 and 16). This advice potentially is of real value because of high food costs in Finland. According to an international price comparison made in 2018 (Eurostat 2019), the price level index for food and non-alcoholic beverages in Finland was 20% above the EU average. Thus, Finnish households need to spend a relatively bigger proportion of their purchasing power on food compared with other Europeans.

(15) Topic 26

Itsekin olen noteerannut, että **juustot** ja **maito** jä *köyhältä* ensimmäisenä pois - *köyhä* Suomessa kertakaikkiaan ei voi ostaa juustoa, eikä juoda maitoa, paitsi jos säästää jostakin muusta.

‘I have noticed too that **cheese** and **milk** are first left out by the *poor* – the *poor* in Finland simply cannot buy cheese or drink milk unless they save from something else.’

(16) Topic 26

Köyhällä on varaa **puuroon** ja **leipään**, rikkaalla lihaan ja voihin.

‘A *poor person* can afford **porridge** and **bread**, a rich person, meat and butter.’

In addition to affordable ingredients, participants also discuss access to affordable food. They seek and give advice on easy, low-budget cooking, or share their best tips on saving money. Example (17) concerns the exploitation of the public right to access natural resources. In Finland, collecting berries and mushrooms is a public right protected by law. In many posts in our data, it is noted that the poor should not forget their right to collect berries and mushrooms, and to enrich their diet with these natural resources.

(17) Topic 26

Näitä kirjoittaessa tulee pakostakin mieleen se, kuinka hieno asia **itse poimitut marjat** ovat. Niistä saa merkittävän lisän **ruokavaliioon**, ja nepä jos mitkä ovatkin **terveellisiä ja eettisesti tuotettuja**. Toivottavasti tämän oudon talven jälkeen tulee edes kohtalainen **marjakesä**, ja toivottavasti *vähävaraisetkin* muistavat hyödyntää sen.

‘Writing this, I realise what a wonderful resource **self-picked berries** are. They provide a significant addition to your **diet**; they are **healthy and ethically produced**. Hopefully, this strange winter is followed by at least a reasonable **berry summer**, and hopefully, *the people with low income* remember to utilise it.’

Finding ways to ensure a balanced diet despite restricted financial means is another issue addressed in several posts. It is acknowledged that tight budgets lead to people buying cheaper white bread and greasy fast food, while avoiding more costly fruits and vegetables. In addition to picking berries, the participants suggested favouring whole grain products and seasonal vegetables (see 18). Alcohol and tobacco are not recommended at all.

(18) Topic 26

Kasviksista ja hdelmistä ei tarvitse täysin luopua, mutta jos ruokabudjetti on ovin tiukka, ei kannata ostaa muuta kuin kauden **sesonkivihanneksia ja hedelmiä**. **Porkkanat ja kaalit** esimerkiksi ovat melko halpoja, ja niistä saa hyviä raasteita, joista tulee **vitamiineja**. [...] ideana on ruoan hyvä maustaminen, suuren määrän kasviksia käyttäminen ja vain minimissään lihaa, kalaa tai kanaa, mihin *köyhillä* ei suurina määrinä olekaan yleensä varaa.

‘You do not have to give up **vegetables** and **fruit** entirely, but if your food budget is very tight, you should not buy anything else than the **season’s vegetables** and **fruit**. **Carrots** and **cabbage**, for instance, are quite cheap, and they taste good grated, and they give you **vitamins**. [...] The idea is to add spices to flavour your food, to use large quantities of vegetables and only a minimal amount of meat, fish or chicken, which the *poor* generally cannot afford in large quantities anyway.’

In addition to the posts concerning food and nutrition, the posts related to free time (topics 11, 20 and 41) are representative of the unequal access to goods among people with higher and lower incomes. The keywords related to free time typically concern either travel and holidays or other festivities. Compared with the discourse on diet, this discourse is less constructive

and more negative in nature. The posts concern, e.g., writers' individual poor living conditions, while displaying anxiety and despair (see 19 and 20). Example (19) illustrates some of the difficulties that low-income people experience when trying to make holiday plans: An interlocutor received a cruise voucher to Stockholm, including a cabin for two people. Considering that the interlocutor has not been on a holiday for many years, he/she is delighted and invites his/her cousin to travel as company. However, after careful calculation, it is determined that neither of them can afford the cruise after all despite the free cabin. The use of first-person forms suggests that the interlocutor is speaking about his/her own experience. Of course, it must be noted that in anonymous digital contexts, we can only examine the representations provided in the discourse, as we do not have access to details about the interlocutor's real-life circumstances.

(19) Topic 20

Pelkästään ruokaan menee paljon rahaa, ei kahdella *köyhällä* näin ex tempore ole varaa laittaa lähes 100 € parin päivän takia . [...] Olisi kiva päästä vihdoinkin **lomalle**, ylipäänsä edes muutamaksi päiväksi pois arkiritiineista. Olen ollut viimeksi **lomalla** vuonna 1998.

‘Merely the food costs a lot of money; two *poor* people cannot afford to spend almost 100€ just for two days. [...] It would be nice to go on a **holiday** finally, at least to get out of the daily routine for a couple of days. I haven't been on **holiday** since 1998.’

Certain periods of the year are described in the posts as particularly challenging for those less fortunate. Summertime and Christmas, characterised by people going out more and eating well, may accentuate feelings of inequality. Many participants are concerned with how poverty affects children who are deprived of equal opportunities for various experiences compared with their more fortunate peers.

(20) Topic 20

En voi sanoin kuvailla sitä tuskaa mitä koen tänä(kin) kesänä *köyhänä* kun istun vuokrayksiössäni ilman parveketta ja ilman ilmastointia. [...] Kesällä rahattomuus korostuu moninkertaisesti kun tosiasiat kolahtaa helpommin [...]; sitä tuntee itsensä **kesällä** 100% luuseriksi aivan kirjaimellisesti.

‘I don't have words to describe how I'm feeling this summer (once again), sitting *poor* in my rented one-room flat without a balcony or air conditioning. [...] **In summertime**, the pennilessness is emphasised,

and you realise more easily that you are broke; you literally feel like a complete loser.’

(21) Topic 11

Tarttis viettää *köyhän miehen joulua* juuri ennen uutta vuotta :) silloin saa kinkutkin puoleen hintaan.

‘One should celebrate a *poor man’s Christmas* just before the new year :) then you will find ham at half price.’⁷

(22) Topic 11

Niin ja varakkaiden vanhempien lapsi(t) ovat aina kiltteja kun saavat runsaasti **lahjoja** verrattuna siihen mitä *pienituloiset* tai työttömät vanhemmat voivat antaa.

‘And the children of wealthier parents are always nicer since they get a lot of **presents** compared to what parents *with low income* or unemployed parents can give.’

Example (22) illustrates how the juxtaposition between the rich and the poor is constructed discursively in the posts. The same juxtaposition can be seen in discourses concerning unequal access to cars and electronics (topic 32), and housing (topic 36). Certain more affordable makes of cars are stigmatised as being driven only by poor people (example 23). Example (24) displays a paradox related to housing that people with low income face: Although buying their own apartment would save them in rent, they would need to set mortgage payments so low that the amount of interest paid to the bank would be higher than for their wealthier peers.

(23) Topic 32

Fiat ja **renlu** on niin rumia ja täysiä heikkolaatuisia pascoja että niillä ajaa vaan tyhmit ja todella *köyhät* ihmiset.

‘**Fiat** and **Renault** are so ugly and low-quality shit that only stupid or truly *poor* people drive them.’

(24) Topic 36

Omistusasuminen kannattaa sikäli, että **lyhennykset** voi sopia **nykyvuokria** pienemmiksi ja se omistus jonka olet lyhennyksinä asuntoa kartuttanut, jää sinulle ja on sinun, ei vuokranantajalle. *Pienituloisen* ei kannata missään tapauksessa hankkia omistusasuntoa.

⁷ Ham is an integral part of a traditional Christmas table in Finland.

Mitä pienemmäksi lyhennykset sopii, sitä enemmän maksaa korkoja pankille.

‘Buying **your own apartment** is profitable since the **mortgage** may be settled lower than the **current rent**, and the money spent on mortgage does not go to the landlord. *A person with low income* should never buy their own apartment. The lower the mortgage is settled, the more you pay interest to the bank.’

We have seen that the posts on most topics under the topic groups of politics; money, income and spending; and unequal access to goods are characterised by juxtaposition between the rich and the poor. However, the discussions on diet (especially topic 26) are characterised more by genuine and constructive advice than by the juxtaposition between the rich and the poor. The connection between a balanced diet and health is acknowledged, and the posts on healthy diet generally are well-informed, discussing nutritional information in detail. Therefore, the discussions on diet may actually contribute to participants’ well-being.

5 Discussion

The analysis that we have presented above demonstrates that the areas of life brought up in the Suomi24 discussion forum in relation to poverty are extremely versatile. As such, this result corresponds with previous sociological research on poverty that found poverty significantly affecting low-income populations’ everyday lives (Mattila 2020). Our analysis also shows that the most discussed areas of life in relation to poverty are, first, politics, then money, income and spending, and finally unequal access to goods. The close reading of the self-expressions in these areas provides results that both converge with and diverge from previous sociological research on poverty. For example, the juxtaposition visible in the posts on the topic groups of politics and of money, income and spending can be viewed as a manifestation of a lack of empathy, which is reciprocal between the rich and the poor (e.g., Kantola & Kuusela 2019; Keto 2020). Furthermore, the strong support shown for the right-wing populist Finns Party and its then-leader Timo Soini corresponds with poverty or at least with decreasing wealth, based on voter demographics (e.g., Wass & Kauppinen 2020: 179).

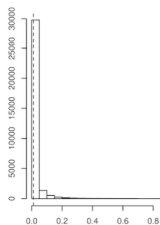
Divergence from previous sociological research can be found especially in the emphasis given to different areas of life, particularly health, education

and childhood – areas of life that are very often linked to questions about poverty in sociological research (e.g., Mattila 2020). These areas of life are certainly present in our data, but they are less prominent. Keywords related to health appear in topics 1 and 39 and those related to education in topics 1 and 15 (see Table 1). Keywords related to childhood are rare and scattered. This is certainly related more to the communication environment studied – the Suomi24 discussion forum – than to participants' life conditions. In other words, Suomi24, as a contact zone, does not seem to be a space that attracts self-expression in these areas of life. If social sciences indicate that intergenerational transmission is an important macro-level factor of poverty in Finland (e.g., Vauhkonen et al. 2017), then the posts in our data, in contrast, often refer to party politics and greedy politicians as the main reason behind poverty.

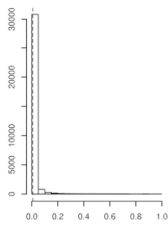
The close reading of the three most prominent topic groups revealed that the self-expression related to poverty is versatile and reflects different communication cultures. For instance, the topic group of unequal access to goods (§ 4.4) contains encouraging and empathetic comments, such as sharing advice on affordable and healthy cooking. This kind of peer support is potentially very helpful for participants. In contrast, the topic group of politics (§ 4.2) is characterised by juxtaposition – between people, social groups and countries – and harsh language. This also is often the case in discourse on the topic group of money, income and spending (§ 4.3), in which opposition between, e.g., employers and employees is noted. These juxtapositions are hardly surprising because, e.g., Määttä et al. (2020) show that in immigration-related discussions on the Suomi24 forum, the creation of in-groups and out-groups prevails, and the two groups are juxtaposed strongly. Finally, the variety of opinions presented on poverty-related questions in the posts analysed confirms Harju's (2018) claim that the Suomi24 forum is a contact zone for different cultures – in our case, different social groups in terms of wealth. All in all, the peer support and harsh juxtapositions, as well as the variety of attitudes towards poverty expressed by online commentators, may open future avenues for research concerning poverty and social exclusion overall.

Appendix: Distribution of MAP estimates of document-topic proportion

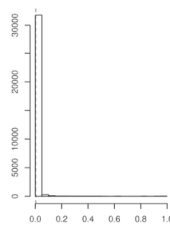
Histograms present loadings of the topics in the data. The loadings are on the x-axis and the number of documents, that is, the proportion of the data, on the y-axis.



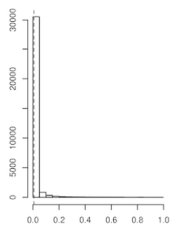
Topic 1: *sairas* 'ill', *lääkäri* 'doctor', *opiskella* 'to study'



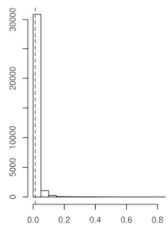
Topic 2: *pankki* 'bank', *laina* 'loan', *vaate* 'clothing'



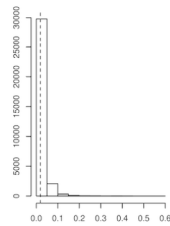
Topic 3: *puoliso* 'spouse', *numero* 'number', *perintö* 'legacy'



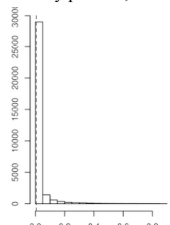
Topic 4: *eläke* 'pension', *vanhus* 'elderly person', *vuotias* 'of age'



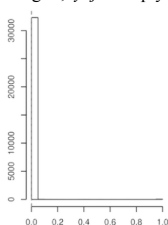
Topic 5: *lehti* 'magazine', *kohde* 'target', *tyhjä* 'empty'



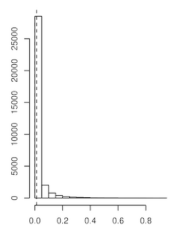
Topic 6: *kova* 'hard', *pää* 'head', *kaveri* 'mate'



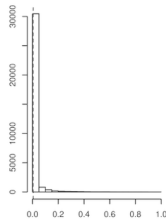
Topic 7: *hallitus* 'government', *leikata* 'to cut', *Soini*



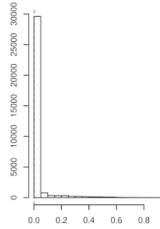
Topic 8: *Jeesus* 'Jesus', *luterilainen* 'Lutheran', *vapaamuurari* 'freemason'



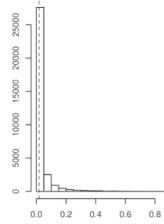
Topic 9: *tulo* 'income', *vero* 'tax', *kasvaa* 'to grow'



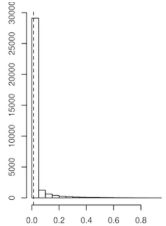
Topic 10: *yhteiskunta* 'society',
valta 'power', *kansa* 'people'



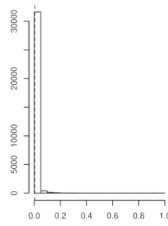
Topic 11: *joulu* 'Christmas', *saa*
'get', *lahja* 'present'



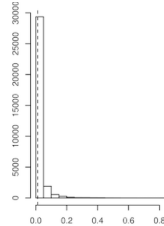
Topic 12: *palsta* 'forum',
haukkua 'to diss', *keskustelu*
'discussion'



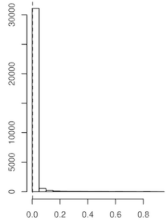
Topic 13: *kaupunki* 'city', *kunta*
'municipality', *rakentaa* 'to
build'



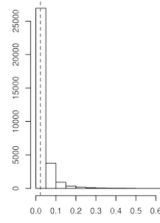
Topic 14: *poika* 'boy', *merkki*
'sign', *luku* 'number'



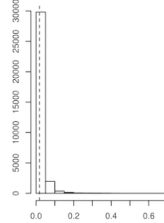
Topic 15: *mahdollinen*
'possible', *mahdollisuus*
'possibility', *koulu* 'school'



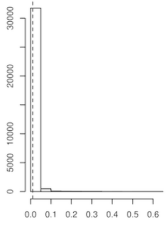
Topic 16: *puolue* 'party',
eduskunta 'parliament', *jäsen*
'member'



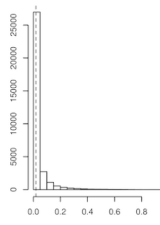
Topic 17: *rikas* 'rich', *köyhyys*
'poverty', *omaisuus* 'property'



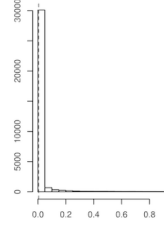
Topic 18: *huono* 'bad', *pelkkä*
'only', *heikko* 'weak'



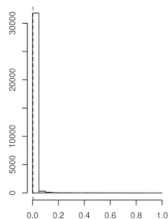
Topic 19: *pakko* 'certainty',
tietenkin 'of course', *varma*
'certain'



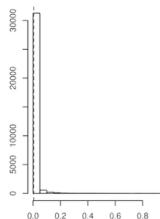
Topic 20: *mukava* 'nice', *kiva*
'nice', *naapuri* 'neighbour'



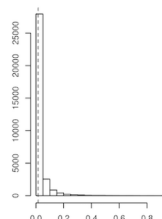
Topic 21: *Venäjä* 'Russia', *Putin*,
venäläinen 'Russian'



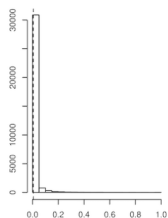
Topic 22: *arvo* 'value', *arvokas* 'valuable', *presidentti* 'president'



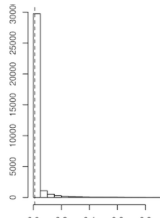
Topic 23: *kokoomuslainen* 'member of the National Coalition Party', *kansanedustaja* 'member of parliament', *politiikko* 'politician'



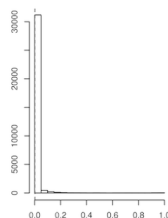
Topic 24: *Suomi* 'Finland', *EU*, *Ruotsi* 'Sweden'



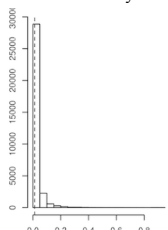
Topic 25: *harrastaa* 'to be interested in', *homo* 'gay', *harrastus* 'hobby'



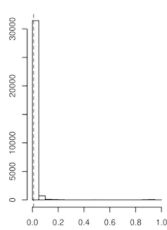
Topic 26: *ruoka* 'food', *nälkä* 'hunger', *leipä* 'bread'



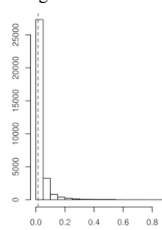
Topic 27: *Jeesus* 'Jesus', *gt* [unmeaningful], *valtakunta* 'kingdom'



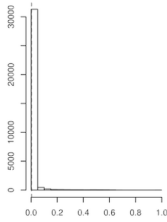
Topic 28: *paska* 'shit', *luuseri* 'loser', *sentään* 'at least'



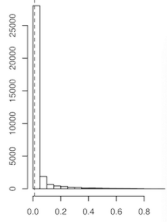
Topic 29: *perhe* 'family', *nuori* 'young', *turha* 'meaningless'



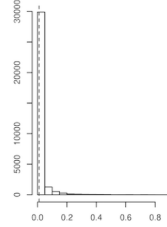
Topic 30: *kateellinen* 'jealous', *kateus* 'jealousy', *järke* 'sense'



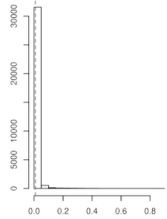
Topic 31: *http*, *kotimaa* 'homeland', *kerjätä* 'to beg'



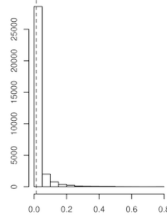
Topic 32: *kone* 'machine', *ajella* 'to drive', *malli* 'model'



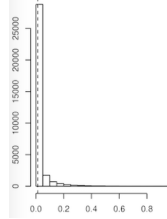
Topic 33: *tuki* 'support', *yhteiskunta* 'society', *sosssi* 'social security office'



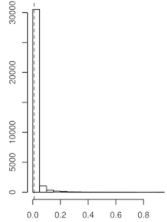
Topic 34: *poliisi* 'police', *pelkästään* 'only', *pyöriä* 'to hang around'



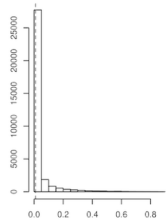
Topic 35: *valtio* 'state', *yritys* 'enterprise', *talous* 'economy'



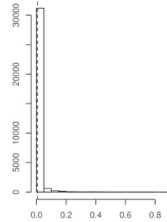
Topic 36: *euro*, *asunto* 'apartment', *vuokra* 'rent'



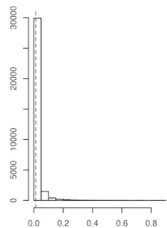
Topic 37: *rikollinen* 'criminal', *rikos* 'crime', *teko* 'action'



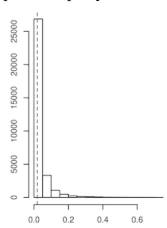
Topic 38: *kokoomus* 'National Coalition Party', *kansa* 'people', *puolue* 'party'



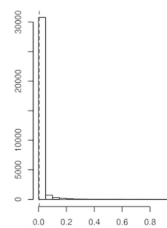
Topic 39: *hammas* 'tooth', *leikkiä* 'to play', *musta* 'black'



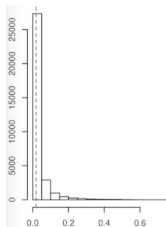
Topic 40: *velka* 'debt', *lasku* 'bill', *ero* 'divorce'



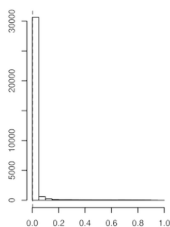
Topic 41: *kallis* 'expensive', *halpa* 'cheap', *kauppa* 'shop'



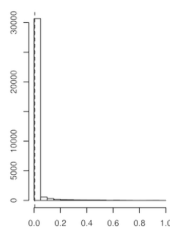
Topic 42: *uskonto* 'religion', *luonto* 'nature', *maapallo* 'earth'



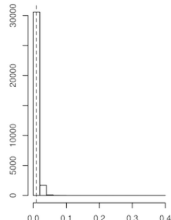
Topic 43: *työtön* ‘unemployed’, *palkka* ‘salary’, *työpaikka* ‘workplace’



Topic 44: *Jeesus* ‘Jesus’, *henki* ‘spirit’, *Kristus* ‘Christ’



Topic 45: *kirkko* ‘church’, *seurakunta* ‘congregation’, *rakkaut* ‘love’



Topic 46: *tuollainen* ‘that kind of’, *tyylikäs* ‘stylish’, *ns* ‘so called’

References

- Aaltonen, Katri & Kotimäki, Sanni & Salonen, Laura & Tenhunen, Essi. 2020. Terveyserot [Health inequalities]. In Mattila, Maija (ed.), *Eriarvoisuuden tila Suomessa 2020* [The shape of inequality in Finland in 2020], 65–92. Helsinki: Kalevi Sorsa -säätiö.
- Aller Media. 2014. *The Suomi 24 Corpus (2015H1)*. Kielipankki. (<http://urn.fi/urn:nbn:fi:lb-201412171>). (Accessed 2019-11-19).
- Blei, David M. & Ng, Andrew Y. & Jordan, Michael I. 2003. Latent Dirichlet allocation. *Journal of Machine Learning Research* 3. 993–1022.
- Block, David. 2014. *Social class in applied linguistics*. London: Routledge.
- Chouliarakis, Lilie. 2012. *The ironic spectator: Solidarity in the age of post-humanitarianism*. Cambridge: Polity Press.
- Eronen, Maria. 2015. *Rhetoric of self-expressions in online celebrity gossip*. Vaasa: University of Vaasa. (Doctoral dissertation).
- Eurostat. 2019. *Comparative price levels for food, beverages and tobacco*. (https://ec.europa.eu/eurostat/statistics-explained/index.php/Comparative_price_levels_for_food_beverages_and_tobacco#Price_levels_for_bread_and_cereals_2C_meat_2C_fish_and_dairy_products). (Accessed 2019-11-19).

- Finnish Internet Audience Measurement. n.d. *Tulokset* [Results]. (<http://fiam.fi/tulokset/>). (Accessed 2019-11-19).
- Firth, John Rupert. 1957. *Papers in linguistics 1934–1951*. London: Oxford University Press.
- Hakoviirta, Mia & Kallio, Johanna. 2016. Children's perceptions of poverty. *Child Indicators Research* 9(2). 317–334.
- Harju, Auli. 2018. Suomi24-keskustelut kohtaamisten ja törmäysten tilana [Suomi24 discussions as a space for encounters and clashes]. *Media & Viestintä* 41(1). 51–74.
- Ismagilova, Elvira & Dwivedi, Yogesh K. & Slade, Emma & Williams, Michael D. 2017. *Electronic word of mouth (eWOM) in the marketing context*. Cham: Springer.
- Jacobi, Carina & Van Atteveldt, Wouter & Welbers, Kasper. 2013. Quantitative analysis of large amounts of journalistic texts using topic modelling. *Digital Journalism* 4(1). 1–18.
- Kallio, Johanna & Kauppinen, Timo M. & Erola, Jani. 2016. Cumulative socio-economic disadvantage and secondary education in Finland. *European Sociological Review* 32(5). 649–661.
- Kallio, Johanna & Lintunen, Lotta & Niemelä, Mikko & Blomberg, Helena & Kroll, Christian. 2020. Lurjuksista kunnan kansalaisia? Kansalaisten asennoituminen toimeentulotuen saajiin 2012–2018 [Public perceptions of the deservingness of social assistance recipients in 2012–2018]. *Yhteiskuntapolitiikka* 85(3). 247–258.
- Kallio, Johanna & Niemelä, Mikko. 2014. Who blames the poor? A multilevel evidence of the support and determinants of the individualistic explanation of poverty in Europe. *European Societies* 16(1). 112–135.
- Kantola, Anu & Kuusela, Hanna. 2019. *Huipputuloiset: Suomen rikkain promille* [The top income earners: The richest per mille in Finland]. Tampere: Vastapaino.
- Keto, Sami. 2020. Eriarvoisuus rapauttaa empatiaa: Pitäisikö köyhyyden lisäksi rajoittaa rikkautta? [Inequality erodes empathy: Should we limit richness in addition to poverty?] *Politiikasta* 2 June, 2020. (<https://politiikasta.fi/eriarvoisuus-rapauttaa-empatiaa-pitaisiko-koyhyden-vahentamisen-lisaksi-rajoittaa-rikkautta/>). (Accessed 2020-08-29).
- Krestel, Ralf & Mehta, Bhaskar. 2010. Learning the importance of latent topics to discover highly influential news items. In Dillmann, Rüdiger & Beyerer, Jürgen & Hanebeck, Uwe D. & Schultz, Tanja (eds.), *KI 2010: Advances in artificial intelligence*, 211–218. Berlin: Springer.
- Kuivalainen, Susan (ed.). 2013. *Toimeentulotuki 2010-luvulla: Tutkimus toimeentulotuen asiakkuudesta ja myöntämiskäytännöistä* [Social assistance in the 2010s: A study on social assistance clients and granting practices]. Helsinki: THL.
- Lehti, Lotta & Kallio, Johanna. 2017. Participation in an online social policy discussion: Arguments in focus. *Discourse, Context & Media* 19. 58–65.

- Luotolahti, Juhani & Kanerva, Jenna & Laippala, Veronika & Pyysalo, Sampo & Ginter, Filip. 2015. Towards universal web parsebanks. In Nivre, Joakim & Hajičová, Eva (eds.), *Proceedings of the Third International Conference on Dependency Linguistics (Depling 2015)*, 211–220.
- Määttä, Simo & Suomalainen, Karita & Tuomarla, Ulla. 2020. Maahanmuuttovastaisen ideologian ja ryhmäidentiteetin rakentuminen Suomi24-keskustelussa [The construction of an anti-immigration ideology and group identity in a Suomi24 forum discussion]. *Virtittäjä* 124(2). 190–216.
- Mattila, Maija (ed.). 2020. *Eriarvoisuuden tila Suomessa 2020* [The shape of inequality in Finland in 2020]. Helsinki: Kalevi Sorsa -säätio.
- Meta-Share. 2017. *The Suomi24 Corpus*. (<http://urn.fi/urn:nbn:fi:lb-2019021101>). (Accessed 2019-11-19).
- Mickelsson, Rauli. 2011. Suomalaisten nationalistipopulistien ideologiat [The ideologies of Finnish national populists]. In Wiberg, Matti (ed.), *Populismi: Kriittinen arvio* [Populism: A critical review], 147–173. Helsinki: Edita.
- Mikolov, Tomas & Chen, Kai & Corrado, Greg & Dean, Jeffrey. 2013. Efficient estimation of word representations in vector space. In *Proceedings of workshop at ICLR*. (<https://arxiv.org/abs/1301.3781v1>). (Accessed 2019-11-19).
- Moor, Peter J. & Heuvelman, Ard & Verleur, Ria. 2010. Flaming on YouTube. *Computers in Human Behavior* 26. 1536–1546.
- Niemi, Mari K. 2012. Messenger and defender: Timo Soini's populist leadership and media strategies in winning the elections of 2011. *Research on Finnish Society* 5. 7–17.
- Partington, Alan & Duguid, Alison & Taylor, Charlotte. 2013. *Patterns and meanings in discourse: Theory and practice in corpus-assisted discourse studies (CADS)*. Amsterdam: John Benjamins.
- Pfister, Damien Smith. 2014. *Networked media, networked rhetorics: Attention and deliberation in the early blogosphere*. University Park: The Pennsylvania State University Press.
- Pratt, Marie-Louise. 1991. Arts of the contact zone. *Profession* (1991). 33–40.
- R Package Documentation. 2021. *Estimation of the Structural Topic Model*. (<https://rdrr.io/cran/stm/man/labelTopics.html>). (Accessed 2021-01-15).
- Rehurek, Radim & Sojka, Petr. 2010. Software framework for topic modelling with large corpora. In *Proceedings of LREC 2010 workshop: New challenges for NLP frameworks*, 46–50.
- Riihelä, Marja & Tuomala, Matti. 2020. Tulo- ja varallisuuserot [Differences in income and property]. In Mattila, Maija (ed.), *Eriarvoisuuden tila Suomessa 2020* [The shape of inequality in Finland in 2020], 29–62. Helsinki: Kalevi Sorsa -säätio.

- Roberts, Margaret E. & Stewart, Brandon M. & Airoidi, Edoardo M. 2016a. A model of text for experimentation in social sciences. *Journal of the American Statistical Association* 515. 988–1003.
- Roberts, Margaret E. & Stewart, Brandon M. & Tingley, Dustin. 2016b. Navigating the local modes of big data: The case of topic models. In Alvarez, R. Michael (ed.), *Computational social science: Discovery and prediction*, 51–97. New York: Cambridge University Press.
- Roberts, Margaret E. & Stewart, Brandon M. & Tingley, Dustin & Airoidi, Edoardo M. 2013. The Structural Topic Model and applied social science. (Paper presented at the Advances in Neural Information Processing Systems Workshop on Topic Models: Computation, Application, and Evaluation, Cambridge, MA, 24 December 2013).
- Salonen, Anna Sofia & Ohisalo, Maria & Laihiala, Tuomo. 2018. Undeserving, disadvantaged, disregarded: Three viewpoints of charity food aid recipients in Finland. *International Journal of Environmental Research and Public Health* 15(12).
- Spears, Russell & Postmes, Tom. 2015. Group identity, social influence, and collective action online: Extensions and applications of the SIDE model. In Sundar, S. Shyam (ed.), *The handbook of the psychology of communication technology*, 23–46. Chichester: Wiley Blackwell.
- Statistics Finland. 2020. *At risk of poverty indicators by age and sex of person 1966–2018*. (http://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin__tul__tjt__pienituloisuus/statfin_tjt_pxt_122t.px). (Accessed 2020-06-22).
- Turner, Graeme. 2004. *Understanding celebrity*. London: Sage.
- 2010. *Ordinary people and the media: The demotic turn*. London: Sage.
- Van Oorschot, Wim & Halman, Loek. 2000. Blame or fate, individual or social? An international comparison of popular explanations of poverty. *European Societies* 2(1). 1–28.
- Vasquéz, Camilla. 2014. *The discourse of online consumer reviews*. London: Bloomsbury.
- Vauhkonen, Teemu & Kallio, Johanna & Kauppinen, Timo M. & Erola, Jani. 2017. Intergenerational accumulation of social disadvantages across generations in young adulthood. *Research in Social Stratification and Mobility* 48. 42–52.
- Wass, Hanna & Kauppinen, Timo M. 2020. Palkkakuitti äänestyslippuna: Tulojen yhteys äänestysaktiivisuuteen ja puoluevalintaan [Payslip as ballot paper: The link between income and election turnout and choice of party]. In Mattila, Maija (ed.), *Eriarvoisuuden tila Suomessa 2020* [The shape of inequality in Finland in 2020], 157–186. Helsinki: Kalevi Sorsa -säätiö.

Contact information:

Lotta Lehti
Department of Languages
P. O. Box 24
FI-00014 University of Helsinki
Finland
e-mail: lotta(dot)lehti(at)helsinki(dot)fi

Milla Luodonpää-Manni
Faculty of Educational Sciences
P. O. Box 9
FI-00014 University of Helsinki
Finland
e-mail: milla(dot)luodonpaa-manni(at)helsinki(dot)fi

Jarmo Harri Jantunen
Department of Language and Communication Studies
P. O. Box 35
FI-40014 University of Jyväskylä
Finland
e-mail: jarmo(dot)h(dot)jantunen(at)jyu(dot)fi

Aki-Juhani Kyröläinen
Department of Linguistics and Languages
Togo Salmon Hall 513
McMaster University
1280 Main Street West
Hamilton, Ontario L8S 4M2
Canada
e-mail: akkyro(at)gmail(dot)com

Aleksi Vesanto
Department of Future Technologies
FI-20014 University of Turku
Finland
e-mail: avjves(at)gmail(dot)com

Veronika Laippala
School of Languages and Translation Studies
FI-20014 University of Turku
Finland
e-mail: mavela(at)utu(dot)fi