Space of lifestyles in Finland, 2007 and 2018: Continuity, change, and the role of online activities and everyday participation

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Abstract

Has the space of lifestyles – a relational, holistic model of cultural stratification in a society – changed in recent years, marked by the rise of digitalization and social media? Does a better coverage of mundane “everyday participation”, besides conventional cultural indicators, change our view of the space of lifestyles? To tackle these questions, we construct the space of lifestyles in Finland for 2007 and 2018 using two repeated surveys, applying multiple correspondence analysis. With identical sets of indicators, we project observations from 2018 to the model of 2007 as supplementary individuals, which allows us to examine gradual changes in the space. We then build a more comprehensive model for 2018 that includes indicators of online and everyday practices not available in 2007. Measured identically, the results show considerable stability, whereas adding the impact of online and everyday practices subjected the space of lifestyles to profound change.

Keywords: Cultural change, cultural practices, everyday participation, multiple correspondence analysis, online cultural practices, space of lifestyles

Introduction

A classical problem in longitudinal research and measurement theory in general is that the same measurements at different points in time may not correctly capture the same concept, because different measures may be appropriate at different historical moments if the phenomenon of interest has changed fundamentally enough during the research period (e.g., Golembiewski et al., 1976; Menard, 2002; Taris, 2008). However, changing the method of measurement is always problematic because if “there appears to be a change, we cannot be certain whether the change results from change in the concept we are trying to measure, or change in the measurement of the concept” (Menard, 2008, p. 7). Indeed, when the measurements are done in the same way over time, there is a need for structural stability to make meaningful interpretations of the changes that have taken place; the quantity of the measured change “is only meaningful insofar as the structure of the concept of interest has remained unchanged” (Taris, 2008, p. 141). If this is not the
case, classical notions refer to “frame-breaking”, “discontinuous”, or “second order” changes, capable of changing “the system itself”, in contrast to the incremental “first-order” changes occurring “within a given system which itself remains unchanged” (Watzlawick et al., 1974, p. 10–11). The frame-breaking changes would warrant at least “a redefinition or a reconceptualization” of the whole domain under investigation (Golembiewski et al., 1976, p. 135).

Researching cultural and social change, such fundamental changes may usually appear unlikely (e.g., Kiley & Vaisey, 2020; Vaisey & Lizardo, 2016). Nevertheless, the problem is relevant, especially for research over sufficiently long periods, including transformations in which sticking with identical measurements and operationalizations may end up being counterproductive and no longer sensitive to capture new, emerging phenomena. Although keeping the measurements constant has usually been strongly preferred because of symmetry and comparability, it is widely recognized that “using the same operationalization of the same concept over [time] may not always be the best approach” (Menard 2008, p. 8). Thus, it is a trade-off between technical feasibility (targeting comparability over time) and substantial sensibility and precision (capturing the essential at a certain moment).

In this paper, our empirical case is the change in the organization of lifestyles and cultural practices across recent times – the 11-year period between 2007 and 2018 – in Finland. Following the approach made famous by Bourdieu (1984) and subsequently applied in different national contexts (e.g., Bennett et al., 2009; Purhonen et al., 2014; Roose et al., 2012), we construct the so-called space of lifestyles, a holistic and relational model of cultural stratification in a society, using nationally representative surveys from both years, including unusually rich lifestyle indicators, and, as a method, multiple correspondence analysis (MCA; Le Roux & Rouanet, 2010). Specifically, we address the question of whether it matters to examine the change in the space of lifestyles by using an identical set of indicators or – taking seriously the possibility that the suitable indicators themselves have changed over this period – by two sets of different indicators, using additional indicators for 2018 that were not available in 2007. This enables us to investigate how dramatic the recent changes in the patterning of cultural practices have been: Are they just incremental changes within the stable structures of the space of lifestyles, or have we witnessed a frame-breaking change transforming the main dimensions of the space itself (cf., Ginsburger, 2022)?

Thus, changes during the period of interest are addressed from two perspectives. First, we examine how the 2018 space of lifestyles is different from that of 2007 when these spaces are constructed with identical indicators of cultural practices covering, as in previous major studies both internationally and in Finland (Bennett et al., 2009; Purhonen et al., 2014), the fields of music, television and movies, literature, food, sport, visual arts, and internet use. Second, we build the space of lifestyles for 2018 with additional lifestyle indicators regarding a more thorough coverage of online activities (e.g., social media, gaming), on the one hand, and mundane practices of “everyday participation” (e.g., gardening, doing handicrafts), on the other hand. These indicators were not available in the 2007 data and are either known to rise in importance since then, as in the case of online activities (e.g., Lindell, 2018; Mihelj et al., 2019; Purhonen et al. 2021), or have been argued to be the potential blind spot despite their relevance in previous studies in cultural stratification, as in the case of everyday participation (e.g., Heikkilä, 2022; Miles & Gibson, 2016; Stevenson, 2019).

In the next section, we provide a brief overview of the key discussions and hypotheses concerning the mapping of changes in the space of lifestyles. We then present our research design, including the data, methods, and variables used in the analysis. The results section that follows is divided into two analytic steps: first, after starting with the construction of the space of lifestyles for 2007, we analyze how it has changed until 2018 when using an identical set of lifestyle indicators; and, second, we create a more complete space of lifestyles for 2018 by also using indicators that were not available in 2007 – the online activities and forms of everyday participation. We conclude the paper by summarizing the findings and discussing their significance for the study of cultural change over time.
Mapping the space of lifestyles and changes over time: Hypotheses

The space of lifestyles is a model of how cultural tastes and practices are organized in a society in relation to each other (Bourdieu, 1984; Lebaron, 2009). Individuals and their cultural characteristics, measured by a variety of indicators, are mapped onto the geometric space in relation to other individuals and their cultural practices. This complex space can then be reduced and visualized to include major structuring dimensions (usually two or three) that separate different lifestyles. Importantly, constructing the space of lifestyles allows for inspecting whether its dimensions – or the cultural hierarchies they reveal – correspond or are “homological” with socio-economic divisions. Bourdieu's seminal work (1984) has inspired, especially from the early 2000s onwards, almost countless studies in different national contexts to examine the space of lifestyles and its potential homologies with social divisions (e.g., Atkinson, 2022; Bennett et al., 2009; Coulangeon & Duval, 2015; Coulangeon & Lemel, 2007; Roose et al., 2012). These studies typically aim to construct the holistic or “general” space of lifestyles in their national setting, thus being different from more specialized studies constructing the space of a single cultural field (such as food or media use; Atkinson, 2021; Purhonen et al., 2021). Often, the results of these studies resemble those of Bourdieu’s (1984) in that they find the high versus popular opposition related to the degree of symbolic value or cultural legitimacy (or by Bennett et al., 2009, cultural “engagement” versus “disengagement”) to be the most powerful and homologous with the total volume of capital. However, and different from Bourdieu (1984), the second most important dimension of the space has often been found to be the opposition between traditional and modern (or “established” and “emergent”, Bennett et al., 2009) culture, homologous with age-related differentiation (e.g., Purhonen et al., 2014; Roose et al., 2012).

Remarkably, many of these studies have been conducted in the Nordic countries (e.g., in Finland: Kahma & Toikka, 2012; Purhonen et al., 2014; in Sweden: Broady, 1998; Lindell 2018; in Norway: Flemmen et al., 2018; Rosenlund, 2019; and in Denmark: Prieur et al., 2008), although the Nordic welfare states are generally thought to be perhaps the most egalitarian societies in the world (Esping-Andersen, 1999). However, while the applicability of Bourdieu to the Nordic context has often been questioned, studies have proven that the nature of cultural stratification and the patterning of lifestyles in these countries are hardly different from those elsewhere in the Western world (Hjellbrekke et al., 2015; Purhonen et al., 2014).

Against this background, studies inspired by Bourdieu’s (1984) model and utilizing MCA in the study of societal change and potentially evolving patterns of lifestyles and their social correlates are conspicuously rare. Weingartner and Rössel (2019) examined changes in the space of lifestyles in Switzerland during 1976–2013 by conducting separate MCA models for three different time points using categorically similar but varying indicators of lifestyles. They concluded that while different modes of cultural consumption patterns remained stable during the timeframe, the social correlates of lifestyles changed. Roselund (2019) compared populations of Norwegian urban area Stavanger from two different time points, 1994 and 2009, using an identical set of social and lifestyle indicators. Using 44 indicators of cultural practices, he constructed the space of lifestyles with the main dimensions of volume and composition of capital (thus closely resembling Bourdieu’s classic model). His main results were that over time, citizens had become richer in both cultural and economic forms of capital and that the differentiating power of capital composition had increased. Coulangeon (2013) examined changes in French cultural practices using survey data from 1981 and 2008 with a set of 13 identical lifestyle indicators. He concluded that the main structuring principles in the inequalities of cultural participation have remained stable.

Ginsburger’s (2022) study of material consumption in France from 1985 to 2017 using six waves of household budget surveys did not construct the space of lifestyles but nevertheless aimed to clarify the different options when examining social spaces by MCA across time. He identified the strategy adopted in the first part of our analysis as easy to interpret and most often used (e.g., Coulangeon, 2013; Rosenlund, 2019), although including the key limitation that “changes in the structure are ironed out” (Ginsburger, 2022, p. 713). Thus, to remedy this limitation, we specifically aim to supplement this strategy with an alternative strategy in the second part of our analysis that is sensible for the changes in the structure. Against
the background of the results produced by the first strategy, we examine how the results regarding change over time are different when using additional indicators, given the potential “frame-breaking change” (Watzlawick et al., 1974) of the whole structuring principles of the space of lifestyles. The hypotheses set for our analysis are described below.

As a common denominator for this field of studies, the “homology thesis” is an important starting point for examining cultural tastes and practices, as it assumes that individuals’ social position, habitus, and lifestyles are intertwined (Weingartner & Rössel, 2019). As these relationships may shift over time, are there any changes in the space of lifestyles and their relationship to social determinants in Finland, either in the scale of the main distinctive dimensions that separate lifestyles or in locations of individual cultural indicators in the space of lifestyles? Following the results of previous studies examining temporal changes that have mostly emphasized stability (Coulangeon, 2013; Rosenlund, 2019; Weingarther & Rössel, 2019), we hypothesize that:

\[ H_1: \text{The main dimensions in the space of lifestyles have remained stable during the eleven-year period.} \]

Due to the temporal dimension in our study, distinguishing between intra- and inter-cohort effects in change (e.g., Putnam, 2000) would be crucial to understand the change that happened in the space of lifestyles from 2007 to 2018. However, our data do not allow for separating these different change dynamics from each other. Some inter-cohort effect should be observable, however, and in any case more significant than intra-cohort changes in lifestyles (at least in the field of music, where tastes acquired during youth often persist in adulthood; see, e.g., Glevarec & Cibois, 2021). If the inter-cohort effects are more prominent, we should then expect the individuals of the latter sample to reject the forms of cultural practices favoured by the oldest generation in the former, on average, due to the absence of the cohort. Thus:

\[ H_2: \text{Comparing individuals of 2018 in the space of 2007, due to the inter-cohort effect, the mean position of individuals shifts towards the location where the cultural items favoured by the younger respondents are.} \]

Given that H1 holds true, the organization of the lifestyles in Finland can be interpreted as unchanged, and any changes that happened within that system, such as H2, can be interpreted as a first-order change, a change that happened within an unchanged system (cf., Watzlawick et al., 1974).

Our period of interest, 2007–2018, is marked by the rapid digitalization of cultural consumption and production in Finland as elsewhere. The distinctive dimension of digital consumption as an emerging form of cultural capital has changed from whether one uses digital services to how and which ones they use (Prieur et al., 2023, p. 369). Social media platforms, such as Facebook, Instagram, and Twitter, have become increasingly important in daily life, and cultural goods, such as music, are, in theory, easily accessible regardless of time and space (e.g., Arditi, 2021). Importantly, 2007 is exactly the year that can be considered the very last “pre-social media” moment in the history of the country (Purhonen et al., 2014, 2021). Recent studies have shown the importance of the rise of social media for “overall” media use in Finland (HeikkiLä et al., 2022; Purhonen et al., 2021). What is not known, however, is how the rise of social media and online activities has impacted the patterning of lifestyles more generally in Finland or, to our knowledge, any other national context. Based on the vast literature on “digital inequality” (e.g., Mihelj et al., 2019; for the case of Finland, Koiranen et al., 2020), we hypothesize that:

\[ H_{3a}: \text{Online practices are mainly related to younger and middle-aged individuals with a higher overall volume of capital (i.e. in our study, occupational position and level of education).} \]

In previous research concerning the space of lifestyles, some individuals have been found to have culturally disengaged or “passive” lifestyles in the sense that they seem to not practice or like almost any of the lifestyle indicators included in the research (e.g., Bennett et al., 2009; Roose et al., 2012). However, in
In line with more recent research on “everyday” participation and cultural non-participation (Heikkilä, 2022; Heikkilä & Lindblom, 2023; Miles & Gibson, 2016; Stevenson, 2019), we can ask whether this passive cluster of individuals found in prior research of the space of lifestyles can be really taken as a realist result, or is it rather attributable to the structure of survey instruments used to collect the data and their emphasis on the narrow definition of “culture” and failure to cover practices common among lower social strata (cf., Purhonen et al., 2023)? To investigate this, we include additional indicators of mundane everyday practices in our analysis. In line with Miles and Gibson’s (2016) argument against an orthodoxy of approaching cultural engagement based on a narrow definition, which “obscures the significance of other forms of cultural participation (…) situated locally in the everyday realm” (p. 151), we expect that:

\[ H_{3b} \]: The additional everyday practices occupy locations in the space of lifestyles that are otherwise (in terms of the narrower definition of culture) related to cultural “passivity” (dislikings and never doings).

Given these assumptions, we assume that including indicators related to both online and everyday practices in 2018 will produce a change in the space of lifestyles compared to 2007 that can be interpreted to be “frame-breaking”, second-order change (Watzlawick et al., 1974) in the organization principles and hierarchies of cultural practices and tastes. Online-related activities have truly emerged only in the 2000s, whereas everyday practices have been part of the cultural landscape longer but underutilized as a component in studies of the space of lifestyles. Once inserted into the examination, we assume that the interpretation of the most important dimensions that compose the space of lifestyles will change considerably, thus altering the system within which relationships between cultural practices are composed.

\[ H_4 \]: Augmenting the space of lifestyles with online and everyday practices will produce a second order change in the space of lifestyles.

**Research design**

**Data and variables**

In the analysis, two nationally representative postal surveys from Finland were used. These surveys were collected by Statistics Finland in 2007 and 2018. These datasets are “Culture and Leisure in Finland, 2007” (N = 1,388, response rate 46.3%; sample size 3,000) and “Culture and Leisure in Finland, 2018” (N = 1,425, response rate 40.8%, sample size 3,500). Both surveys consist of an 18–74-year-old mainland population in Finland. The surveys are cross-sectional, but they are designed to allow comparison, and there is correspondence in terms of topics covered and exact formulations of questions and items mentioned in the questions. In the 2018 survey, there are also additional indicators of more contemporary cultural items. Following Le Roux and Rouanet (2010, p. 62), individuals who did not respond to more than 20% of the active variables (54 observations in 2007 and 104 in 2018 datasets) were excluded.

The space of lifestyles was constructed using a set of indicators that covered a wide range of cultural practices and tastes. In the first step of the analysis, fields covered in the space of lifestyles are the following seven: music, literature, visual arts, television, and movies, sports, dressing, and embodiment, food and drinking, and online. To construct the map, 78 active variables were used, and the number of active modalities was 187. In addition to active variables in the analysis, we also used 6 supplementary, socio-economic variables, with a total number of 27 modalities. Excluding the field of online practices, which consisted of only 3 modalities, all fields had a similar number of modalities, ranging from 26 to 35. This choice of cultural indicators was used to construct two spaces of lifestyles at different time points, 2007 and 2018, with sets of identical cultural items. In the second step of our analysis, additional indicators from the fields of online and everyday practices are introduced. These new variables yielded 30 and 29 addition-
al modalities, respectively. The choices of individual indicators were necessarily arbitrary; however, the point was to focus on their relationships, and the main results were robust for alternative item selection, as we tested the analyses in several alternative ways. A full list of variables, their distributions, and assigned fields included in each of our models can be found in the Appendix A1.

Analytical design

Our analysis was twofold. First, we simultaneously conducted two separate MCA models for data from 2007 and 2018. After examining and comparing these models, we then constructed a new model with the observations from 2007 as active individuals and the observations from 2018 as supplementary individuals (i.e., as observations that do not contribute to the model construction, but which can be projected to the space built by the active individuals). This allowed us to compare both locations of clouds of individuals and cultural items and to examine the changes. Second, we complemented the 2018 model with additional indicators related to digital and mundane everyday practices and examined the space of lifestyles created with a comprehensive set of indicators.

MCA is a dimension reduction method for categorical data, and it allows the representation of relationships between (possibly plentiful) set of categorical variables in low-dimensional space (see Hjellbrekke, 2019; Le Roux & Rouanet, 2010). When applying MCA, it is expected that most of the information in the data is defined by several latent dimensions, which are extracted using this method. For interpretation, the final solution is often found using between two and four dimensions that explain the majority of the variance in the data. Therefore, the objective of applying MCA is to reveal and analyze hidden structures and their dynamics in our datasets.

In this article, the main analysis method is specific multiple correspondence analysis (SpeMCA; Le Roux & Rouanet, 2010, p. 61). This variant of MCA is used to exclude “junk categories” that are not in scope of interest, from the analysis. We used SpeMCA to exclude categories that represented missing values from the analysis.

To examine changes that have happened during the 11-year period in the space of lifestyles in Finland using identical sets of indicators, we employed the method proposed by Le Roux and Rouanet (1998, p. 204) and originally Benzécri (1992, p. 410). We combined the data from both years and conducted the analysis using observations from 2007 as active individuals and observations from 2018 as supplementary individuals. From this analysis, we used the coordinates of supplementary individuals in the first and second axes.¹

Previous studies using geometric data analysis have developed different methodological approaches to consider various restrictions in studying temporal change (e.g., Coulangeon, 2013; Ginsburger, 2022; Roselund, 2019; Weingartner & Rössel, 2019). Hjellbrekke and Jarness (2022) combine MCA and class specific MCA to study change and stability of cultural dimensions with five time points from 2000 to 2016. Cassor and Le Roux (2019) use a combination of correspondence analysis with weighting and doubling procedures and Euclidian ascending hierarchical clustering in a methodologically oriented study of French space of trust from 2012 to 2016. Their approach for temporal analysis differs from the other men-

¹ Put more technically, the location \( p \) of modality \( i \) on axis \( j \) among individuals of 2018 on space constructed from observations in 2007 is calculated by Formula 1:

\[
p_{ij} = \frac{1}{K} \sum_{k=1}^{K} c_{i,j,k} \sqrt{\lambda_j}
\]

where \( c = \) coordinate of individual \( k \) who chose modality \( i \) on axis \( j \), \( K = \) number of respondents that chose modality \( i \) and \( \lambda_j = \) eigenvalue of axis \( j \).
tioned studies, as they create a reference space using one time point and examine how different clusters of trust orientations travel through the space at other time points (Cassor & Le Roux, 2019, pp. 340–341). Ginsburger (2022, pp. 712–714) proposes a novel strategy which combines MCA and PCA in a two-step procedure to obtain a global space, in addition to providing a thorough overview of different strategies for temporal analysis using MCA. The approach utilized in this article is, to our knowledge, currently the most frequently used, besides being technically simple, as the modeling process itself is done in one step (Ginsburger, 2022, p. 713). However, it does not allow direct investigation of changes in terms of dimensionality, structure, or direction of primary axes (Hjellbrekke & Jarness, 2022, p. 155) but rather uses a reference space as a proxy for the global space in the case of high similarity between the annual spaces (Ginsburger, 2022, p. 712). To compensate for this shortcoming, we conducted separate models for the two time points to roughly evaluate the dimensionality and structural stability of the space.

Analysis

Space of lifestyles in 2007 and 2018 with identical sets of indicators

The top rows of Table 1 show key statistics for the three first dimensions produced by MCA by respective years. The number of modalities per field and the contribution of each field to the first and second axes and overall are shown in the bottom. The modified rates of explained variance are 56.4 and 53.7 for the first axis, and 28.6 and 30.8 for the second axis, constituting 85% and 84.5% of variance explained in the data in 2007 and 2018, respectively. Thus, the explanatory power of the first two dimensions remained very stable. Moreover, the first two dimensions in both models were sufficient to reach the recommended 80% (Hjellbrekke, 2019) of the explained variance.

In both the 2007 and 2018 analyses, the field of visual arts clearly contributed the most to the first axis, comprising a third of the total contributions of all fields. Following visual arts, music and literature are the next most contributing fields for the first axis. Together, these three fields compose about 70% of the contribution to the axis. On the second axis, music is the most contributing field, with 30% and 26% of the total contribution to the axis, followed by literature and food. A major change from 2007 to 2018 occurred in the contribution of music and literature to the second axis; the total contribution of the field of music diminished, and the contribution of the field literature increased by about 4–5 percentage points.

Figure 1 presents the space of lifestyles in 2007 (see Appendix A2–A3). The space of lifestyles in 2018 is presented in Appendix Figure A6 (see Appendix A4–A5). Before proceeding to a more careful examination of the spaces, we can conclude that both spaces consist of similar main dimensions; thus, it is sufficient to present only the space of lifestyles in 2007 here.

Figure 1 confirms the findings of previous studies using the same data and MCA, although the indicators used are somewhat different (Kahma & Toikka, 2012; Purhonen et al., 2014). This shows that the most important dimension on the x-axis aligns with the degree of legitimacy. The modalities located on the positive side of the x-axis (right) are indicators of a legitimate, even relatively conventional “high culture” lifestyle, and correspondingly, indicators of low legitimacy are located on the negative side (left). The second dimension, on the y-axis, aligns with the opposition between modern and traditional culture: items on the positive side (top) are indicators of modern lifestyle, with traditional items being on the opposite side of the axis (bottom). Together, these dimensions construct a two-dimensional space of lifestyles.

Most legitimate practices include indicators of lifestyles, such as visiting opera or jazz concerts or liking movies by Almodovar. Most of the legitimate practices are also traditional, for example, visiting opera, which is among both the most legitimate and traditional practices. Liking modern arts and liking arts by Andy Warhol are more modern indicators of legitimate lifestyles. The most illegitimate indicators of lifestyle mostly include, but not exclusively, negative items measuring disliking or never doing, such as
never visiting museums or never watching movies. The most traditional lifestyle indicators include liking books by Laila Hirvisaari, never visiting bars or nightclubs, Nordic walking, and the aforementioned legitimate practices. Most modern indicators of lifestyles are piercings (other than ear), tattoos, and watching The Simpsons.

Table 1. Key statistics for the first three axes for 2007 and 2018 spaces of lifestyles (above). Contribution of the fields included in the analysis for first and second axis in 2007 and 2018 (below).

<table>
<thead>
<tr>
<th>Year</th>
<th>Axis</th>
<th>Eigenvalue</th>
<th>% of explained variance</th>
<th>Benzecri’s modified explained variance</th>
<th>Cumulative explained variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>1</td>
<td>0.110</td>
<td>7.9</td>
<td>56.4</td>
<td>56.4</td>
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<tr>
<td></td>
<td>2</td>
<td>0.082</td>
<td>5.8</td>
<td>28.6</td>
<td>85.0</td>
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<td></td>
<td>3</td>
<td>0.039</td>
<td>2.8</td>
<td>4.4</td>
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</tr>
<tr>
<td>2018</td>
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<td>0.105</td>
<td>7.5</td>
<td>53.7</td>
<td>53.7</td>
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<tr>
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<td>0.082</td>
<td>5.9</td>
<td>30.8</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Year</th>
<th>Fields</th>
<th>Number of modalities</th>
<th>Contribution for first axis, %</th>
<th>Contribution for second axis, %</th>
<th>Contribution for first and second axis, %</th>
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<tbody>
<tr>
<td>2007</td>
<td>Music</td>
<td>35</td>
<td>18.6</td>
<td>30.2</td>
<td>24.4</td>
</tr>
<tr>
<td></td>
<td>Tv and movies</td>
<td>34</td>
<td>12.1</td>
<td>14.0</td>
<td>13.0</td>
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<tr>
<td></td>
<td>Literature</td>
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<td>16.0</td>
<td>15.3</td>
<td>15.7</td>
</tr>
<tr>
<td></td>
<td>Food and drinking</td>
<td>30</td>
<td>13.0</td>
<td>19.2</td>
<td>16.1</td>
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<tr>
<td></td>
<td>Visual arts</td>
<td>28</td>
<td>33.9</td>
<td>9.2</td>
<td>21.6</td>
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<tr>
<td></td>
<td>Sports, dressing and embodiment</td>
<td>26</td>
<td>3.9</td>
<td>10.3</td>
<td>7.1</td>
</tr>
<tr>
<td></td>
<td>Online</td>
<td>3</td>
<td>2.5</td>
<td>1.8</td>
<td>2.1</td>
</tr>
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<td>Music</td>
<td>35</td>
<td>17.5</td>
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<td>1.5</td>
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</table>

Next, we created the space of lifestyles for individuals of 2007, with individuals of 2018 added as supplementary individuals. This allowed us to compare the changes that occurred over the 11-year period. The locations of individuals in the space are presented in Figure 2. The means and variances of the locations along dimensions are presented in Appendix A7.
Figure 1. The space of lifestyles in Finland 2007. Point size corresponds to the number of respondents who have chosen the modality. Only items with higher than mean contribution in either axis are shown.

The cloud composed of individuals from 2007 and 2018 exhibits similarity in locations, but some shifts are significant. In the first dimension, the shift of individuals is towards the legitimate side in the space (mean position change from 0.00 to 0.08, p < 0.001). In the second dimension, 2018 individuals were more modern than individuals in 2007 (mean position change from 0.00 to 0.06, p < 0.001). Variance in both dimensions is similar among 2007 as in 2018 individuals. The shift towards the modern side of the space can be partly explained with a cohort effect – the most traditional group in 2007 was not present in 2018 data, and the oldest cohort in 2018 data did not prefer as traditional cultural indicators as the previous cohort. Moreover, even though individuals in 2018 were, on average, more modern than individuals in 2007, no individuals in 2018 were clearly more modern than most modern individuals in 2007. This might be explained by the identical set of indicators selected before the first survey in 2007. Items considered
most modern in 2007 were still most modern in 2018 due to the lack of more contemporary modern lifestyle indicators in the analysis; this was remedied by alternative measurement strategy in the second part of the analysis.

Figure 2. Cloud of individuals of 2007 and 2018 in the space of lifestyles constructed with individuals from 2007 data.

Next, Figure 3 demonstrates whether and how the locations of socioeconomic indicators – indicative of homology – have changed from 2007 to 2018, when superimposed on the space of lifestyles. Legitimate indicators are favoured by individuals with higher levels of education and more prestigious occupational positions and vice versa. The second dimension is structured mainly by age, with younger cohorts being on the modern side of the space.
Figure 3. Socioeconomic indicators of 2018 projected in the space of lifestyles constructed with 2007 data. The size of the point corresponds to the frequency of the modality.

The locations of the socioeconomic indicators mostly remained stable during the 11-year period. Changes occurred mainly in the same direction, as presented in Figure 2. Individuals became more legitimate and modern on average. Age groups are distributed on the modern–traditional axis; the youngest age groups are on the modern and older on the traditional side. Although age and the second dimension correlate strongly, age groups are also separated in terms of their legitimacy. The age groups of 25–34 and 35–44 had the most legitimate lifestyles, and the oldest age group was the most illegitimate.

The locations of groups of the same age, for example, being 35–44 years old, are relatively close to their counterparts in 2007 and 2018. Age groups that experienced the largest changes in their locations included three 10-year age groups from 35 to 64, each of which became more modern in 2018 compared to people in their respective age in 2007. These cohorts did not adopt traditional practices as they aged.
but rather kept their (more or less) modern practices, which explains their more modern position in 2018 (cf., Kiley & Vaisey, 2020). This would suggest that the most traditional cultural practices, such as visiting operas or reading religious literature, might perish from the landscape of cultural practices over time, as the most traditional cohorts age and younger cohorts do not adopt their cultural practices.

Education level and occupational position both move mainly along the first axis. Higher education levels and more prestigious occupational positions are found on the legitimate and traditional sides of the space. Occupational status accompanies attained educational level, moving mainly on the illegitimate–legitimate axis. Prestigious occupational positions, such as chief executives and professionals, are located on the legitimate side of the space, and farmers and construction workers are located on the illegitimate side, the former being more modern and the latter more traditional. Correspondingly, individuals living in the countryside are more often located in the area of illegitimacy, while individuals living in cities are located on the legitimate side. Rural residents retain their position in the space, whereas urban residents become more traditional and modern. The included categories of gender become more legitimate and modern. Females are more legitimate, and men are more modern in both years, but both groups are located close to the origin of the space.

**Space of lifestyles in 2018 with additional online and offline indicators**

In the second step of our analysis, we appended the space of lifestyles in 2018 presented in the Appendix Figure A6 with additional active variables representing online activities and everyday practices. Full information of comprehensive model for 2018 can be found in Appendix A8–A9.

**Table 2. Key statistics for the first three axes for comprehensive spaces of lifestyles in 2018 (above). Contribution of the fields included in the analysis for first and second axis (below).**

<table>
<thead>
<tr>
<th>Axis</th>
<th>Eigenvalue</th>
<th>% of explained variance</th>
<th>Benzecri’s modified explained variance</th>
<th>Cumulative variance explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.095</td>
<td>6.4</td>
<td>48.6</td>
<td>48.6</td>
</tr>
<tr>
<td>2</td>
<td>0.079</td>
<td>5.4</td>
<td>32.4</td>
<td>81</td>
</tr>
<tr>
<td>3</td>
<td>0.038</td>
<td>2.6</td>
<td>5.4</td>
<td>86.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fields</th>
<th>Number of modalities</th>
<th>Contribution for first axis, %</th>
<th>Contribution for second axis, %</th>
<th>Contribution for first and second axis, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music</td>
<td>35</td>
<td>14.7</td>
<td>21.6</td>
<td>18.1</td>
</tr>
<tr>
<td>Tv and movies</td>
<td>34</td>
<td>11.2</td>
<td>10.9</td>
<td>11.0</td>
</tr>
<tr>
<td>Literature</td>
<td>31</td>
<td>14.0</td>
<td>20.0</td>
<td>17.0</td>
</tr>
<tr>
<td>Food and drinking</td>
<td>30</td>
<td>15.9</td>
<td>8.8</td>
<td>12.3</td>
</tr>
<tr>
<td>Visual arts</td>
<td>28</td>
<td>21.2</td>
<td>19.0</td>
<td>20.1</td>
</tr>
<tr>
<td>Sports, dressing and embodiment</td>
<td>26</td>
<td>4.1</td>
<td>7.8</td>
<td>5.9</td>
</tr>
<tr>
<td>Online</td>
<td>26</td>
<td>13.4</td>
<td>6.2</td>
<td>9.8</td>
</tr>
<tr>
<td>Everyday practices</td>
<td>26</td>
<td>5.5</td>
<td>5.7</td>
<td>5.6</td>
</tr>
</tbody>
</table>

The top rows of Table 2 provide key statistics for the comprehensive model for 2018. Two dimensions sufficiently describe the comprehensive space of lifestyles in 2018. The difference between the first and second axes is relatively smaller than in the first part of the analysis. At the bottom of Table 2, fields and their sizes in the analysis are presented along with contributions to the first, second, and both axes. Compared to the previous step of the analysis, this solution contains 23 additional online and 26 everyday
practice modalities. Visual arts is important for both axes; it is the most important field for the first and third important field for the second axis in terms of contribution to the axis. In the first axis, visual arts are followed by eating and drinking, music, literature, and online practices. On the second axis, the most important fields before visual arts are music and literature.

Figure 4. Space of lifestyles in 2018 with comprehensive set of indicators. The size of the point corresponds to the frequency of the modality. Modalities added to the space in the second step are highlighted by red color. Items with higher than mean contribution in either axis are shown.\(^2\)

\(^2\) Two modalities locating in the bottom left area, Hunting+ and Fishing++, are not contributing more than mean contribution to neither axis but are inserted manually due to their relevance to Hypothesis 3b.
Figure 4 presents the space of lifestyles. The relationships between the new main structuring dimensions of the space and the sociodemographic modalities are presented in Figure 5. The model’s interpretation changed significantly after including additional online and everyday practices in the analysis; two distinct dimensions of legitimacy emerged. The first, the x-axis, represents the legitimacy of lifestyle indicators in the contemporary dimension. Most illegitimate items are never or rarely using the internet or never eating out. The most legitimate items in the contemporary dimension are liking movies by Pedro Almodovar, having piercings, and liking arts by Andy Warhol and modern arts in general. This dimension is strongly correlated with several sociodemographic variables, of which the most notable was the strong negative correlation with age (Figure 5). Socioeconomic status, measured by education and occupational position, increases with the axis. The difference between males and females is small, but the difference between urban and rural living is notable. Contemporary legitimate lifestyles seem to be more prevalent among people living in cities.

The second dimension, the y-axis, represents the legitimacy of the items but in the traditional dimension. In this dimension, the most legitimate items include visiting opera, liking books of Laila Hirvisaari, and liking arts by Ellen Thesleff. Items that are most illegitimate in the traditional dimension are related to playing video games and liking The Simpsons. Contrary to the first axis, this axis is positively correlated with age. Socioeconomic status is correlated with the axis, as in the first dimension. The distinction between urban–rural residential areas is insignificant, but the difference between males and females is more important, with women being more legitimate in the traditional dimension.

On the positive side of the axes are items that are legitimate in both contemporary and traditional dimensions, with well-established indicators of highbrow lifestyles, such as visiting art galleries or liking impressionism. This area is characterised by high socioeconomic status, with varying relationships with age, depending on the axis. On the negative side of both axes are illegitimate items in both contemporary and traditional dimensions. Items in this area of the space indicate predominantly dislikes and never doings, such as never visiting museums or theatre and not knowing or disliking Vincent Van Gogh. Some positive modalities located in this area are liking the Finnish soap opera Salatut elämät or the old Finnish television game show Speden Spelit. Some of the everyday practices are in this area, namely hunting and fishing.

On the negative side of the y-axis and the positive side of the x-axis, we find legitimate contemporary practices that are illegitimate in the traditional dimension. The most notable items of contemporary legitimacy but traditional illegitimacy include playing shooter games or playing video games in general, visiting night clubs, and using social media services frequently. This area of space describes contemporary, legitimate youth and young adult lifestyles that are not legitimate in terms of traditional legitimacy. The last area, the negative side of the contemporary legitimate and positive side of traditional legitimate, includes items such as liking literature by old Finnish writers and using the internet only a few times per week. Many everyday practices, such as doing crossword puzzles and sudokus, gardening and foraging berries or mushrooms, are located here, as are modalities related to never or seldom doing online activities and using social media platforms.

The findings reveal that for a comprehensive space of lifestyles, one dimension of legitimacy is insufficient to describe the structure of the space. This is in contrast with Bourdieu’s (1984) original model and most of the subsequent studies as they assume the existence of only one unitary dimension of legitimacy in a society. Cultural items and lifestyle indicators are stratified along with socioeconomic status similarly in both dimensions, but the stratification is principled in two distinct ways that follow age cohorts. The importance of the dimension of traditional legitimacy might decrease in the future due to the cohort effect.
Figure 5. Supplementary variables in the space of lifestyles in 2018 with comprehensive set of indicators. The size of the point corresponds to frequency of the modality.

Conclusions

In this article, we have presented a two-step analysis of the change in the space of lifestyles in Finland from 2007 to 2018. First, we analyzed change using identical sets of indicators with which we constructed the space of lifestyles for both years, and subsequently treated the space of 2007 as the base model on which individuals from 2018 were included as supplementary; this strategy allowed us to inspect the gradual changes inside the space while leaving the structures of the space intact (cf., Ginsburger, 2022). Second, we analyzed change using additional indicators of two areas – online practices (gained in significance due to the rise of social media and online cultural consumption; Arditi, 2021; Koiranen et al., 2020; Purhonen...
et al., 2021) and everyday practices (typically overlooked in previous cultural surveys, possibly creating a biased view of certain low-status and older populations as “culturally passive”; Heikkilä, 2022; Miles & Gibson, 2016; Stevenson, 2019). This strategy allowed us to inspect the possibility of a more foundational “second-order” change (Watzlawick et al., 1974) in the structural dimensions of the space of lifestyles. Using both measurement strategies and considering their results against each other gave us a unique opportunity to comprehensively address the question of stability and change in the patterning of lifestyles over the last few years.

In the first step of our analysis, using identical indicators, we established that two dimensions – high/low legitimacy and modern/traditional – are sufficient to represent the space of lifestyles in Finland, both 2007 and 2018. Thus, the main separating dimensions of the space of lifestyles remained stable during the 11-year period when measured this way, which confirms Hypothesis H1. Similar structural stability in cultural consumption is found in France (Coulangeon, 2013) and in the space of lifestyles in Switzerland (Weingartner & Rössel, 2019) in 1981–2008 and 1976–2013, respectively. We find that the legitimacy of lifestyles is highly homological with education, and traditionality with age. In the analysis of individuals from both years in the same two-dimensional space constructed using individuals of 2007, those in 2018 are comparatively more legitimate and, as formulated in Hypothesis H2, more modern. We consider one main component in this change to be the cohort effect, because as oldest (and, at the same time, the least educated) cohorts, which are both illegitimate and traditional, pass away, the mean point of individuals in both axes shifts towards a more legitimate and modern location in the two-dimensional space of lifestyles (cf. Coulangeon, 2021; Vaisey & Lizardo, 2016).

Outside of Finland, similar results have been found in studies of lifestyles. Specifically, the second structuring dimension, modernity–traditionality, has been found in numerous studies with similar research designs, although sometimes interpreted with varying labels, such as “contemporary” and “established” (e.g., Bennett et al., 2009; Coulangeon, 2013; Roose et al., 2012). This highlights the importance of age as a central structuring factor in the space of lifestyles. Our analysis also hints that the average position of the age cohort remained relatively stable from 2007 to 2018, which indicates that cultural tastes are linked to the cultural history of the generation individuals come from (Glevarec & Cibois, 2021). In other words, inter-cohort effects seem more significant in the changing cultural landscape than intra-cohort ones. Our results resonate with Kiley and Vaisey (2020), who found support for the role of the continuing influence of durable dispositions acquired early in life.

In the second step of the analysis, applying a comprehensive set of indicators in 2018 resulted in significant changes in the structure of the main dimensions of the space of lifestyles. The main axes of the space are contemporary and traditional legitimacy, which are structured by contrary relationships with the age of individuals inclined to participate in practices in these dimensions. Our results resonate with arguments made by Prieur et al. (2023, p. 367) on how the younger people rich in cultural capital consume traditional legitimate culture while simultaneously appreciating also less canonical and emerging forms of culture, as well as by Coulangeon (2021) who has emphasized the historical role of massification of higher education in restraining the traditional forms of cultural capital to be the only source of legitimacy. Thus, the result suggests a notable shift – something not recognized by Bourdieu’s (1984) original model nor the subsequent studies that mostly still assume the existence of a unitary dimension of legitimacy – in understanding the legitimacy of cultural items in the space of lifestyles. In studying the social stratification of cultural practices, it is essential to consider the legitimacy of cultural practices in both modern and traditional dimensions instead of one shared dimension of legitimacy. We argue that the inability to capture legitimacy in a space of lifestyles constructed using a comprehensive set of lifestyle indicators with only one dimension stems from major changes in the offerings of cultural goods, most notable in the digital sphere, which represent a form of emerging cultural capital (Prieur & Savage, 2013; Prieur et al., 2023) that has received importance along more traditional forms of legitimate (highbrow) culture.

We find both support and contradicting expectations for Hypothesis 3a. Younger and middle-aged people are more inclined to engage in digital practices, but the legitimacy of the practices differs depend-
ing on the axis of legitimacy they are evaluated. In terms of contemporary legitimacy, these practices are favoured by individuals with higher education and prestigious occupational positions, but from the viewpoint of traditional legitimacy, this is not the case. Practicing another group of lifestyle indicators inserted into the analysis, mundane activities, are located somewhat evenly in the space. Male-dominated activities such as hunting and, to a lesser extent, technical work are located in the area of the space that is characterized by non-liking and non-doing, thus confirming Hypothesis 3b.

Taken together, based on these results, we can argue for both first- and second-order changes when examining the space of lifestyles in Finland during the 11-year period. Measuring with the identical set of lifestyle indicators reveals that systems that have experienced changes do not remain the same (cf., Ginsburger, 2022). The degree of legitimacy and modernity are sufficient measurements for the lifestyles of individuals and, subsequently, for cultural practices and tastes, and these attributes can be evaluated for everyone on the same scale. However, expanding the scope of the examination to cover both emerging and understudied fields of cultural practices subject the system of lifestyles to a profound, even a “frame-breaking” (Watzlawick et al., 1974) change, thus confirming Hypothesis 4. The organization of lifestyle indicators becomes more nuanced, and one axis of legitimacy is no longer sufficient to represent the degree of prestige of cultural practices. Rather, legitimacy takes two forms, depending on whether it is evaluated in a modern or traditional mode. In this space of lifestyles, forms of legitimate practices exist that are recognized on one axis but refused on another.

Our study is not without limitations. First, although the range of lifestyle indicators is more comprehensive than in most other studies of lifestyles, not all fields of cultural participation are included in the examination, for example, travelling. Further, the assortment of lifestyle indicators is necessarily restricted due to space limitations in the surveys. This forces us to exclude genres and forms of participation within a field altogether or to place various subgenres under an encompassing genre label. While recognizing the impossibility of covering all aspects of lifestyles, we call for future research to overcome these limitations by utilizing novel data-collection methods, such as using open-ended questions to enquire into preferred genre orientations, which can then be economically analyzed with natural language processing tools. Second, the simplicity of our methodological approach to combine geometric data analysis and study of temporal change has a trade-off with more complex but arguably better suited state-of-the-art approaches (cf., Ginsburger, 2022; Cassor & Le Roux, 2019; Hjelbrekke & Jarness, 2022). Third, our ability to delve into the societal change that is occurring due to contemporaneous exposure to cultural influences is limited due to the nature of our data. To test the relationship more formally between cohort effects and the effects of exposure, or the acquired dispositions model versus fragmentation model, as coined by Vaisey and Lizardo (2016), longitudinal data on cultural participation, taste, and knowledge would need to be generated and analyzed.

**Supplemental material**

Supplemental material for this article is available online (Appendix A1–A9).

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