## Project Description Towards climate friendly vacations and travels Lars Kjerulf Petersen

**The purpose** of this project is to investigate and support socio-cultural transition towards climate friendly vacation practices.

The topic of sustainable vacations is pertinent to green transition for several reasons. Firstly, green transition cannot be achieved only through technological innovation; it must also, and will necessarily, comprise cultural, social and behavioural changes 2. In order to meet Danish and European GHG reduction goals we need to consider, involve and provide the research base for behavioural change. Understanding how social practices and practice *changes* are constituted is essential for understanding how to foster green transitions and is, hence, of crucial societal relevance.

Secondly, vacations and in particular vacation travels and tourism are in need of green transition – in ways that also address behaviour. Tourism accounts for approximately 8% of global greenhouse gas emissions, while the decarbonisation achieved through technological progress is more than offset by increasing demand<sup>3</sup>. Aviation alone accounts for 2.2% of global CO<sub>2</sub> emissions and 4-5% of the anthropogenic climate impact, and person kilometres covered by aviation has in recent years increased by 7% annually<sup>4</sup> <sup>5</sup>. A major share of the carbon footprint from tourism stems from high-income countries<sup>6</sup>. Indeed, the number of passengers from Danish airports has grown with almost 50% over the past decade; a growth to which overseas travels have contributed considerably<sup>7</sup>. Moreover, aviation is one of the most unsustainable practices individual citizens can pursue<sup>8</sup>. Other widespread vacation types also have unsustainable profiles; one example being cruise tourism with its significant CO<sub>2</sub> and wastewater emissions, besides its serious air pollution of hosting cities<sup>9</sup> <sup>10</sup>.

Thirdly, vacation practices constitute a critical case for the socio-cultural dynamics of green transition and for the integration of sustainability concerns in people's lifeworld. Vacationing is embedded in strong cultural values. It is constituted as a treasured aim during the course of everyday life and is enacted as a field of pleasurable living. And quality of life is associated with vacations away from home and with the speedy and long reach travelling that aviation affords. To the extent that climate and sustainability concerns can be integrated into the values, imaginaries and sentiments that pervade vacation practices, such concerns may succeed to become an important part of people's lifeworld. An investigation of change processes in this field of practice will thus provide valuable lessons regarding the socio-cultural dimension of green transition in general.

Finally, the still ongoing Covid-19 pandemic has disrupted our customary vacation activities and holiday imaginaries, at least for a while; thereby providing new experiences with alternatives to hitherto habitual destinations and travel forms. Long-term effects of the pandemic will continue to

unfold in the coming years and potentially tie in with a long-range integration of climate and sustainability concerns in vacation practices.

In this project we therefore *aim to develop an in-depth comprehension of people's potential adoption of climate friendly vacations, the socio-cultural benefits they may provide and the barriers they are likely to encounter* – whether sustainable vacations come in the shape of low carbon transport, different destinations, local travel, stay at home vacations, low-GHG dining, or preference for low/zero carbon activities and accommodation.<sup>11</sup>

**Theoretical foundation and state of the art:** In order to provide an in-depth understanding of a transition towards climate friendly vacation practices, the project draws on and integrates research in environmental sociology, environmental communication and environmental learning. The theoretical foundation is primarily inspired by *practice theory*<sup>12</sup> <sup>13</sup> <sup>14</sup> drawing also on the analytical approach of *actor-network theory*<sup>15</sup>. Accordingly, the project reaches beyond an understanding of people's behaviour as a matter of individuals making informed choices, thereby seeking to optimize personal benefit or self-identity. Rather, vacation practices are understood as patterns of action, which are shaped and changed through the interplay between different factors:

- Meanings: People's ideals for the good vacation and inherent orientation towards certain favoured destinations, pleasures and events, as these orientations may vary according to social, cultural and national context.
- Materiality: This includes infrastructures for different kinds of transport and accommodation and IT infrastructures for booking, as well as destinations' characteristic landscapes, urban spaces, food, weather, risks etc.
- *Embodied competences*: Such as the skills to navigate planning, booking and different transport means, as well as foreign geographies and customs.
- *Regulation*.<sup>16</sup> E.g., tax exemptions for aviation fuel, or border closings.

Based on this approach, it is our ambition to *contribute new theoretical and empirical insights* to research in sustainable vacation practices *and* to the understandings in social/cultural science of *pro-environmental transition processes and how media influence and informal learning are involved in such processes*.

Although this project investigates vacation practices and sustainable transition rather than tourism per se, the field of *sustainable tourism*, including the issue of tourism *transport*, is relevant for this project and has been the subject of a considerable body of academic work<sup>17</sup> <sup>18</sup>. It is broadly acknowledged that tourism and vacation practices are shaped by and changed through the influence of many factors, and that sustainable development in tourism cannot rely on technological innovation

alone, but also relies on a range of social influences<sup>19</sup><sup>20</sup>. Thus, studies have addressed the importance of otherness for the pleasurable tourism experience, i.e. otherness of landscapes, weather, food, culture, etc., and distance is a key factor for achieving this otherness<sup>21</sup>. Other studies show how the feeling of happiness as an integral part of the tourist experience is tied to needs for novelty and change, which in turn are tied to increasing distance and the speed that is required to cover it<sup>22</sup>.

Our project continues and adds to the above-mentioned focus on social influences and their interaction with other factors such as technological and material conditions. In particular, it adds to this research by investigating the *role of media* in the development of new vacation imaginaries and competences and the *processes of informal learning* through which new imaginaries and competences are integrated in social practices.

Thus, our project contributes new insights to the field of *climate change communication* and *media's role* in pro-environmental practice change. Climate change communication is a research field that engages with the roles of communication in conveying, mediating and constituting climate change as a pertinent issue<sup>23</sup>. In this context, publics or citizens are seen as highly relevant due to the significant level of GHG emissions associated with individuals' behaviour<sup>24</sup>. A majority of studies on climate change communication assume a strategic or persuasive approach to mitigation of the climate crisis, aiming to identify effective ways to communicate climate change as a means to evoke behaviour change<sup>25</sup> <sup>26</sup>. Several scholars advocate that emotions might be an important communication tool to engage lay people with climate change and induce pro-environmental behaviour<sup>27</sup> <sup>28</sup>.

Although this research agenda is important, its strategic outlook frequently infers theoretical and methodological positions that assume simplistic, transmission-oriented views of communication<sup>29</sup>. Often labelled the 'information deficit model', such mechanistic understandings tend to focus on the role of rational, cognitive abilities of the human mind, neglecting the complex of meanings<sup>30</sup> <sup>31</sup>. However, scholars increasingly argue that there is a need for empirical studies, which acknowledge communication as a constitutive element in complex networks of practices<sup>32</sup> <sup>33</sup> <sup>34</sup>.

Adopting practice theory as a theoretical entry point will allow the project to reach beyond information deficit models and understand the broad socio-technical and socio-cultural context into which climate change communication – and indeed media dissemination of vacation and sustainability imaginaries – is integrated. There are only few studies, which from a practice theoretical perspective acknowledge and consider the role of media content in processes of practice change<sup>35</sup>. However, project leader LKP has developed an original approach, whereby the interaction between media content and practice change is analysed as an actor-network consisting of human actors, items of media content, material objects, and institutional actors<sup>36</sup>. Meaning content of media texts is analysed according to the ways in which it connects to people's values and meanings, to their competences, to material conditions, and to governmental regulations. This project contributes to practice theory and climate change communication by illuminating such ties between media content and people's values and meanings, which in turn furthers our understanding of how people's imaginaries and sentiments are formed, learned and maintained in the context of green transitions.

Our project will also contribute new insights regarding the *informal learning* processes through which social practices are developed, and the diverse factors that influence these learning processes<sup>37</sup>. We analyse transformation of vacation practices – and the imaginaries that inform them – as dynamic learning processes. How do people partaking in specific vacation practices learn about the challenges that these practices entail, and how do they potentially change their part in these practices?<sup>38</sup> Through a specific focus on non-formal learning, i.e. social learning in arenas beyond formal education, the project will emphasize and investigate the importance of media influence, friends, family, NGOs and other potential arenas – with respect to the social and cultural context that saturates and is enacted in these non-formal learning arenas<sup>39</sup>.

Processes of learning and practice change are neither linear nor causal. Research on learning as social processes, developing through different communities of practice, have led to a more nuanced understanding of the multiple factors that reinforce or change patterns of action<sup>40</sup> <sup>41</sup> <sup>42</sup>. However, much of the research into non-formal learning has focused on face-to-face interactions in physical and localized settings. There is need for a deeper understanding of the dynamics of learning and change processes that to a large extent are influenced and even directed by factors outside face-to-face interaction, i.e., by publicly mediated conceptions and imaginaries that go beyond the specific scope of what can be experienced by individuals<sup>43</sup> <sup>44</sup>.

To summarize: this project will contribute to current and future research because it:

- Develops a deeper understanding of the imaginaries and sentiments that pervade and inspire vacation desires and planning, and the bearing climate/sustainability concerns may have on these.
- Improves our understanding of the interaction between media narrations (on various platforms) and social practices in processes of sustainable transition.
- Advances our understanding of informal learning processes through media and in real life interaction as an integral part of sustainable transition.
- Identifies emergent trends in and preconditions for further integration of green transition perspectives in people's lifeworld.
- Through these contributions advances Danish research in behavioural aspects of green transition, thereby, and contributing project findings to the Danish research environment in this field.

**Research Plan:** The project integrates its three core disciplines – sociology, communication and pedagogy – in all parts of its research activities, which are organized in *phases*, and which will involve

all the core project members: Lars Kjerulf Petersen (LKP), Anne Gammelgaard Ballantyne (AGB), Jonas A. Lysgaard (JAL) and the PhD scholar, and in part will include Ana Horta, Lisbon (AH) and Stefan Bengtsson, Uppsala (SB). Experienced project leader LKP is in charge of project management overseeing budget and work plan. Four physical and three online meetings are planned, in which we collectively will evaluate progress, assess risks, plan next steps and delegate academic and practical tasks.

Empirical investigations will focus on the vacation practices of two demographic groups, which are overrepresented in unsustainable vacation practices<sup>45</sup> <sup>46</sup> <sup>47</sup>: (A) Young adults who have their first experiences of vacationing/travelling without their parents, and who often take time off education and work to embark on formative travels and tank up on new experiences. (B) Middle-aged and older people, age 50-75, who seek pleasures and cultural experiences for the extra leisure time they have attained after their children moved out/after retirement, and who have economic means to spend on a broad range of holiday activities. In both segments, the project will target different social and cultural groups, in order to discern the influence different backgrounds may have on vacation imaginaries and practices and on the impact of climate concern.

**Phase 1, Theoretical frame**: The purpose of P1 is to refine the theoretical framework, methodology and specific research design to support the empirical studies in phases 2-4. This is done through a literature study, synthesizing insights regarding vacation practices from the scholarly literature on sustainable tourism, environmental sociology, communication and informal learning. Output: 1 working paper, theoretical overview (all), to be drawn upon in subsequent articles.

**Phase 2, Conceptions and competences of individual vacationers**: The purpose of P2 is to explore sentiments, imaginaries and competences associated with vacation practices. We employ a mixed methodology, where the quantitative approach of questionnaire surveys is combined with the qualitative approach of focus groups and semi-structured interviews<sup>48</sup>. In addition, we invite 6-8 respondents from each age group to keep diaries<sup>49</sup> for a period of one year on vacation plans and activities. The qualitative approach allows for a holistic and in-depth exploration of respondents' experiences, perceptions, and expectations – and changes herein. The survey, to be distributed in Denmark, Sweden and Portugal, allow for an analysis of quantitative occurrences of, and socio-demographic variations in, certain practices and perceptions. Including Sweden and Portugal in the survey enables a comparison across significant national differences. Sweden is like Denmark a high-income country, but it has maintained and is seeking to expand<sup>50</sup> a strong rail transport culture and has recently seen an emergence in the phenomenon of flight shame<sup>51</sup>. Portugal is a low-income country and a net recipient of tourists and may thus provide a different perspective on sustainable vacationing.

The following (preliminary) themes shall be explored: • Imaginaries that pervade and inspire vacation desires and the potential influence of climate concern on these imaginaries. • Values, pleasures and displeasures associated with *un*sustainable and sustainable vacations respectively. • The process of vacation planning. • The competences needed to navigate current holiday forms and sustainable alternatives. • Sources of inspiration for respondents when planning and altering vacation activities. • Respondents' media use. Output: 2 articles, *Middle-aged, vacation pleasures and climate* (LKP, AGB, AH), *Clashing vacation and climate imaginaries of young adults* (AGB, JAL, PhD). 1 conference presentation. 1 popular scientific article.

**Phase 3, Public imaginaries**: The purpose of P3 is to identify imaginaries and narratives associated with vacation practices as these are communicated in general and social media. Such perspectives are explored through analysis of media content. Based on respondents' replies regarding sources of inspiration and media use (in P2), specific items from social media and channels of conventional media are selected for further analysis. Applying the methodologies of netnographic<sup>52</sup> and qualitative/thematic content analysis<sup>53</sup>, we investigate how climate concerns, vacation imaginaries, material and regulatory conditions, and competences are represented in the selected media items. In doing so, we consider also the socio-cultural differences between various media forms, contents and audiences. Results from media analyses are juxtaposed with the results from P2. By comparing vacationers and media, we identify similarities, differences, connections and influences between imaginaries and competences articulated in public narrations and by vacationers respectively. We thereby map the network between vacationers and mediated/other sources of inspiration and identify which actors make which differences<sup>54</sup>. Output: 2 articles, *media-practice interactions* (AGB, LKP), *learning and social media* (PhD, JAL). 2 conferences.

**Phase 4, Vacationers revisited**: The purpose of P4 is to follow up on, test, qualify and add to results from P2-3, to elaborate the processual and learning aspects of practice change and to project our findings into possible future vacation concepts. Respondents' diaries initiated in P2 are collected and analysed and respondents are interviewed. Moreover, results from P2-4 are synthesized into ideal types of climate friendly and carbon heavy vacation forms respectively and these ideal types are employed in further activities: (A) We meet students from (folk) high schools in focus groups, confront them with the ideal types and ask for their reactions. (B) We arrange an outreach workshop for key actors in tourism and compare project results with their ideas for climate friendly/sustainable vacations. This serves as outreach and communication of results and as source of empirical data. Output: 1 peer rev. article, *actor-networks in developing new travel concepts* (PhD, LKP); 1 academic seminar; 1 outreach workshop; 1 popular brief of the outreach workshop.

**Phase 5, Synthesis:** The purpose of P5 is to synthesize results from P1-4 into an overview of vacationers' potential adoption of climate friendly vacation processes, the knowledge, competences,

imaginaries, infrastructural conditions and regulations that influence people's adoption and the process through which it is achieved. The project's concluding theoretical and empirical contributions are formulated. Output: 2 articles, *climate concern in the lifeworld of young adults* (PhD), *informal learning through media* (PhD, JAL, AGB, SB). 1 conference. 1 PhD thesis.

The **PhD scholar** will be in involved in all phases of the project, but will in particular have the task to analyse content and role of social media in inspiring and shaping vacation/travel practices of young adults. The project will arrange a **PhD course** on the issue of green transition and behaviour, involving project findings and drawing on the expertise of visiting fellows.

**Internationalisation**: (1) Dr Horta, University of Lisbon (environmental sociology and tourism research) and Dr Bengtsson, Uppsala University (sustainability learning) will be involved directly in project activities, contributing to the theoretical frame and the questionnaire study. To facilitate this, LKP will visit Lisbon in Q4 and SB will visit Denmark in Q7. (2) Prof Wibeck, Linköping University, Prof Wals, Wageningen University, and Dr Van Poeck, Ghent University will give lectures at an academic seminar in Denmark on the nexus between media, learning and practice change and at the concurrent PhD course on green transition and behaviour. (3) The PhD scholar will be stationed at a relevant university abroad for 5 months in Q10-11, 2024 in order to attain theoretical and analytical training.

**Publication of results**. We will publish our results in 7 peer-reviewed articles in international journals, 1 working paper, 4 conference presentations, 1 PhD thesis, 1 popular scientific article, 1 popular brief, an academic seminar, and an outreach workshop. Anonymized empirical data will be made available at relevant repositories.

	Management	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
2022	Recruit PhD					
Q1	Project meet					
Q2	Project e-meet w					
	int. partners					
Q3		1 work paper				
Q4			LKP-visit Lisbon			
			2 conf. pres.			
2023	Project e-meet w		2 articles			
Q5	int. partners					
Q6						
Q7	Project meet incl			2 articles	SB visit at AU	
	writing camp			2 conf. pres.		
Q8	PhD course				Academic	
					Seminar	
2024	Project e-meet				Outreach	
Q9	-				workshop	
Q10	Project meet				1 article	PhD stay at
Q11						foreign Uni
Q12						
2025	Project meet					2 articles
Q13						1 conf. pres.
Q14						PhD thesis

## References

<sup>1</sup> Dubois, G., B. Sovacool, C. Aall, M., Nilsson, C., Barbierg, A. Herrmanne, S. Bruyèrea, C. Andersson, B. Skold, F. Nadaudi, F. Dornere, K. R. Moberg, J.P. Cerona, H. Fischer, D. Amelung, M. Baltruszewicz, J. Fischer, F. Benevisea, V.R. Louis, R. Sauerborne (2019): It starts at home? Climate policies targeting household consumption and behavioral decisions are key to low-carbon future. *Energy Research & Social Science*, 52: 144-158.

<sup>2</sup> Linnér, B-O. & Wibeck, V. (2020): Conceptualising variations in societal transformations towards sustainability. *Environmental Science and Policy*, 106: 221-227.

<sup>3</sup> Lenzen, M, Sen, Y-Y., Faturay, F., Ting, Y-P., Geschke, & Malik, A. (2019): The carbon footprint of global tourism. *Nature Climate Change*, 8: 522-528

<sup>4</sup> ICAO Annual report 2018 <u>https://www.icao.int/annual-report-2018/Pages/the-world-of-air-</u> transport-in-2018.aspx

<sup>5</sup> Gudmundsson, Henrik (2019): *Flyrejser, klima og kompensation*. Notat, Concito.

<sup>6</sup> Lenzen, M, Sen, Y-Y., Faturay, F., Ting, Y-P., Geschke, & Malik, A. (2019): The carbon footprint of global tourism. *Nature Climate Change*, 8: 522-528

<sup>7</sup> Gudmundsson, Henrik (2019): *Flyrejser, klima og kompensation*. Notat, Concito.

<sup>8</sup> EEA (2016): Transition towards a more sustainable mobility system. EEA Report No 34/2016

<sup>9</sup> Caric, H. & Mackelworth, P. (2014). Cruise tourism environmental impacts – The perspective from the Adriatic Sea. *Ocean & Coastal Management*, 102: 350-363.

<sup>10</sup> MacNeill, T., & Wozniak, D. (2018): The economic, social, and environmental impacts of cruise tourism. *Tourism Management*, 66: 387-404.

<sup>11</sup> Sørensen, F., Bærenholdt, J.O., & Greve, K.A.G.M. (2020). Circular economy tourist practices. *Current Issues in Tourism*, 23 (22): 2762-2765.

<sup>12</sup> Reckwitz, Andreas (2002). Toward a theory of social practices: A development in culturalist theorizing. *European journal of social theory*, 5(2): 243-263.

<sup>13</sup> Shove, E., Pantzar, M., & Watson, M. (2012). *The dynamics of social practice: Everyday life and how it changes*. Sage.

<sup>14</sup> Warde, Alan (2005). Consumption and Theories of Practice. *Journal of Consumer Culture*, 5(2): 131-153.

<sup>15</sup> Petersen, Lars Kjerulf (2020): Media's role in pro-environmental practice changes – proposing an ANT perspective. *Environmental Sociology*, 6(1): 42-53.

<sup>16</sup> Gram-Hanssen, Kirsten (2009). Standby Consumption in Households Analyzed with a Practice Theory Approach. *Journal of Industrial Ecology*, 14(1): 150 – 165.

<sup>17</sup> Streimikiene, D., Svagzdiene, B., Jasinskas, E., & Simanavicius, A. (2021). Sustainable tourism development and competitiveness: The systematic literature review. *Sustainable Development*, 29(1): 259-271.

<sup>18</sup> Sørensen, Flemming & Bærenholdt, Jørgen Ole (2020): Tourist practices in the circular economy. *Annals of Tourism Research*, vol. 85, article 103027.

<sup>19</sup> Cohen, S.A., Higham, J.E.S. & Reis, A.C. (2013): Sociological barriers to developing sustainable discretionary air travel behaviour. *Journal of Sustainable Tourism*, 21(7): 982-998. Luzecka 2016)
<sup>20</sup> Luzecka, P. (2016). "Take a gap year!" A social practice perspective on air travel and potential transitions towards sustainable tourism mobility. *Journal of Sustainable Tourism*, 24(3): 446-462.
<sup>21</sup> Larsen, G.R. & Guiver, J. W. (2013): Understanding tourists' perceptions of distance: a key to reducing the environmental impacts of tourism mobility. *Journal of Sustainable Tourism*, 21(7): 968-981.

<sup>22</sup> Ram, Y., Nawijn, J., & Peeters, P.M. (2013): Happiness and limits to sustainable tourism mobility: a new conceptual model. *Journal of Sustainable Tourism*, 21(7): 1017-1035.

<sup>23</sup> Moser S.C. (2016): Reflections of climate change communication research and practice in the 2<sup>nd</sup> decade of the 21<sup>st</sup> century: what more is there to say? *WIREs Climate Change*, 7: 345-367.

<sup>24</sup> Whitmarsh L., O'Neill, S. & Lorenzoni, I. (2013): Public engagement with climate change: What do we know and where do we go from here? *International Journal of Media and Cultural Politics*, 9(1): 7-25.

<sup>25</sup> Davis L., Fähnrich B., Nepote A.C., Riedlinger, M. & Trench, B. (2018): Environmental Communication and Science Communication – Conversations, Connections and Collaborations. *Environmental Communication*, 12(4): 431-437.

<sup>26</sup> Wang, S., Corner, A., Chapman, D. & Markowitz, E. (2018): Public engagement with climate imagery in a changing digital landscape. *WIREs Climate Change*, 9.

<sup>27</sup> Moser, S.C. (2016) Reflections of climate change communication research and practice in the 2<sup>nd</sup> decade of the 21<sup>st</sup> century: what more is there to say? *WIREs Climate Change*, 7: 345-367.

<sup>28</sup> Chapman D.A., Lickel, B, & Markowitz (2017): Reassessing emotion in climate change communication. *Nature Climate Change*, 7: 848-852.

<sup>29</sup> Ballantyne, Anne Gammelgaard (2016): Communicating Climate Change: What can we learn from communication theory? *Wiley Interdisciplinary Reviews: Climate Change* 7(3): 329-344.

<sup>30</sup> Hart, P.S. & Nisbet, E.C. (2012): Boomerang effects in science communication: how motivated reasoning and identity cues amplify opinion polarization about climate mitigation policies. *Communication research*, 39(6): 701-723.

<sup>31</sup> Nabi, R.L., Gustafson, A. and Jensen, R. (2018): Framing climate change. Exploring the role of emotion in generating advocacy behaviour. *Science Communication*, 40(4): 442-468.

<sup>32</sup> Wibeck, V. (2014): Enhancing learning, communication and public engagement about climate change - some lessons from recent literature. Environmental Education Research, 20(3): 387-411. <sup>33</sup> Ballantyne, Anne Gammelgaard (2016): Communicating Climate Change: What can we learn from communication theory? Wiley Interdisciplinary Reviews: Climate Change 7(3): 329-344.

<sup>34</sup> Cook, B.R. & Overpeck, J.T. (2018) Relationship-building between climate scientists and publics as an alternative to information transfer. WIREs Climate Change, 10(2).

<sup>35</sup> Ferrucci, Martina & Petersen, Lars Kjerulf (2019): Towards a new understanding of information effects on discourses and practices: The role of online newspapers in sustainable household changes. Interactions: Studies in Communication and Culture, 10(1-2): 129-146.

<sup>36</sup> Petersen, Lars Kjerulf (2020): Media's role in pro-environmental practice changes – proposing an ANT perspective. *Environmental Sociology*, 6(1): 42-53.

<sup>37</sup> Lysgaard, Jonas (2018): Learning from Bad Practice in Environmental and Sustainability Education. Palgrave

<sup>38</sup> Illeris, K. (2018) *Learning, Development and Education: From Learning Theory to education* and Practice. Routledge.

<sup>39</sup> Lysgaard, Jonas (2018): Learning from Bad Practice in Environmental and Sustainability Education. Palgrave.

<sup>40</sup> Altomonte, S., Logan, B., Feisst, M., Rutherford, P., Wilson, R. (2016) Interactive and situated Learning in Education for sustainability. International Journal of sustainability in Higher Education. 17(3).

<sup>41</sup> Nygaard, S. E. (2019): Sustaianbility Psychology: In the relation between sustainable living and subjective well-being. PhD thesis, Aarhus University, Department of Psychology and Behavioural Sciences.

<sup>42</sup> Stevenson, R. B. & Dillon, J. (2010): Engaging Environmental Education: Learning, Culture and Agency. Sense publishers.

<sup>43</sup> UNESCO (2017): Education for sustainable Development Goals. Paris:UNESCO

<sup>44</sup> Lysgaard, J., Bengtsson, S., Laugesen, M. (2019): Dark Pedagogy. Palgrave.

<sup>45</sup> Czepkiewicz, M., Ottelin, J. Ala-Mantila, S., Heinonen, J., Hasanzadeh, K., Kyttä, M. (2018): Urban structural and socioeconomic effects on local, national and international travel patterns and greenhouse gas emissions of young adults. Journal of Transport Geography, 68: 130-141.

<sup>46</sup> Carlsson-Kanyama, A. Lindén, A-L. (1999): Travel patterns and environmental effects now and in the future: implications of differences in energy consumption among socio-economic groups. Ecological Economics, 30(3): 405-417.

<sup>47</sup> Husted, P (2020): Unge, midaldrende og veluddannede rejser mest. *Politiken.dk* 10. jan. 2020, kl. 08.36

<sup>48</sup> Brannen, J. (2005). Mixing Methods: The Entry of Qualitative and Quantitative Approaches into the Research Process. *International Journal of Social Research Methodology*, 8(3), 173-184.

<sup>49</sup> Alaszewski, Andy (2006): Using Diaries for Social Research. London: Sage

<sup>50</sup> Trafikverket 2020: Nattågstrafik till Europa. Slutrapport 2020-04-27.

<sup>51</sup> Wollin, Elisabeth (2020): Flygskam, klass och ändrade resvanor: Nätnarrativ om tågsemestrande.
 *Kulturella perspektiv – Svensk etnologisk tidskrift*, 29(1-2): 46-51

<sup>52</sup> Kozinets, R. V., Dolbec, P., & Early, A. (2014). Netnographic analysis: Understanding culture through social media data. In Flick, U. (ed.) (2014). *The SAGE Handbook of Qualitative Data Analysis*. London: SAGE, p. 262-276.

<sup>53</sup> Altheide, David L., & Schneider, Christopher J. (2013): *Qualitative Media Analysis*, 2<sup>nd</sup> edition.
 Los Angeles & London: Sage.

<sup>54</sup> Petersen, Lars Kjerulf (2020): Media's role in pro-environmental practice changes – proposing an ANT perspective. *Environmental Sociology*, 6(1): 42-53.