Smartphoned tourists in the phygital tourist experience

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Goal and objectives of the dissertation
Goal
The thesis "Smartphoned Tourists in the Phygital Tourist Experience" explores how the tourist experience is influenced by the use of smartphones. The study puts smartphones at the centre of the experience and looks into the behaviour of tourists who use smartphones. The thesis calls this type of tourist "smartphoned tourist" because their experience is mediated by this technology. While smartphones are technologies created to carry out tasks instead of humans, they also impose behaviours on humans (Tussyadiah & Wang, 2016; Wang et al., 2016). Therefore, their use brings changes in the tourist experience both in terms of activities and emotions. The term phygital (a combination of the words physical and digital) indicates how, when using technology, the tourist experience is not only physical or only digital, but both at the same time (Mieli, 2022).

The aim of the thesis is to investigate the role of smartphones in mediating tourists' experiences, particularly in information behaviour and the spatiotemporal dimensions of their journeys. The research questions address the impact of smartphones on information behaviour and the exploration of phygital worlds, challenging dichotomies in tourism theory and emphasizing the complexity and complementarity inherent in tourists' reality.

Objectives
The thesis focuses on two aspects: first, the influence of smartphones on tourist information behaviour, exploring how tourist information channels are valued by tourists when they can constantly access information through their smartphones. The second aspect is how smartphones influence tourists' experiences of phygital worlds. The author reflects on the boundaries between everyday life and the tourist experience and how they are mediated by smartphone use. Then, she analyses how time-space constraints are reconfigured when tourists have access to the internet and the computing capabilities of the smartphone throughout the trip.

The two aspects are explored with conceptual and empirical work in four papers, each of them offering a distinct theoretical contribution with important practical implications for tourism.

Methodology
The researcher employs a qualitative, multi-method approach, drawing from various disciplines and perspectives. A constructivist-interpretive paradigm guides the research, emphasizing relativist ontology and subjectivist epistemology (Denzin & Lincoln, 2000). The thesis consists of four papers, three of which are empirical (Papers I, III, IV) and one methodological (Paper II).

Two methods are used in the research: interviews and Experience Sampling Method (ESM). The study focuses on millennials, conducting 30 qualitative semi-structured interviews and employing the Experience Sampling Method for real-time data collection. Abductive reasoning drives the analysis, emphasizing early coding and theory generation (Charmaz, 2014). Sensitizing concepts, such as "planned serendipity" and "phygital," guide the research (Charmaz & Bryant, 2016).

Results
The first paper explores how smartphones influence tourists' relationships with traditional, analogue information sources, in particular the guidebook. The study applies Holbrook's (1999) theory of consumer value to understand how guidebooks are not only used for information purposes, but are also valued as objects of consumption. Tourists attribute to the guidebook values such as: efficiency, quality, fun, aesthetics, status, esteem, ethics and spirituality. When tourists attribute value to the guidebook,

however, they always consider it in relation to the alternative of using smartphones instead of the book. The second paper presents a qualitative methodology which combines an innovative data collection method, called Experience Sampling Method, with semi-structured interviews (cf. Larson, & Csikszentmihalyi, 1983; Hektner et al., 2007). The third paper offers a critical review of tourist information search behaviour literature and adopts the concept of planned serendipity to show how planning and spontaneity are simultaneously reduced and amplified through smartphone use. The fourth paper focuses on how tourists' time-space behaviour is mediated by smartphones, and how such mediation makes the experience phygital. The paper offers a new conceptualization of Torsten Hägerstrand's (1970, 1973) time geography, adapted to the phygital tourist experience.

Theoretical conclusions
Postphenomenology is used to examine the complex relationship between tourists and smartphones, proposing the concept of *smartphoned* tourists (cf. Ihde, 1990; Rosenberger & Verbeek, 2015; Verbeek, 2005, 2016; Wellner, 2016). The thesis also explores two key concepts, "phygital" and "planned serendipity", which throughout the thesis are used to challenge assumptions in tourism scholarship and emphasize the complementary nature of physical and digital realities, as well as planning and serendipity.

Paper I offers a new conceptualization of guidebooks not only as tourist information channels but also as objects of consumption, highlighting how tourists can attribute different types of value to them (Holbrook, 1999). Moreover, the study shows that hedonic, non-utilitarian values are becoming increasingly important in the choice of using guidebooks for tourist information.

Paper II offers a contribution to the methodological landscape of tourism studies, by developing a methodology that challenges the distinctions between qualitative and quantitative research and allows for unobtrusive data collection on site, during the trip. Despite challenges in integrating qualitative and ESM data, the researcher emphasizes the need for innovative methods in qualitative research, aligning with the digital age's context.

The literature review in Paper III critically examines and challenges key assumptions underlying seminal theories of tourist information search behaviour (e.g. Vogt & Fesenmaier, 1998; Fodness & Murray, 1999; Jeng & Fesenmaier, 2002), emphasizing the impact of smartphones on information sources, needs, strategies, and hierarchies. Digital technologies reshape information channels and tourists integrate online and offline sources in a hybrid information search behaviour (Zillinger, 2020). The study identifies a shift from a destination-centric focus to a more tourist-centric orientation, where continuous, iterative information searches aim to optimize the overall travel experience. The concept of planned serendipity emerges as a key theme, illustrating how tourists leverage smartphones for flexible and contingent planning. Contrary to assumptions, the research highlights that flexibility doesn't necessarily lead to greater spontaneity, but rather to a continuous optimization of the trip. The thesis challenges four assumptions: plans are flexible, information search is iterative and specific, the object of search is the tourist, and the aim is to optimize rather than gain knowledge.

Paper IV contributes to the understanding of the spatio-temporal dimensions of the experience by proposing an adaptation of Hägerstrand's (1970, 1973) time geography to the digitalized tourist experience. The study identifies new constraints that emerge from smartphone use and discusses how old constraints have changed. In the phygital time-space, tourists orient themselves in physical spaces, influenced by digital information; they create phygital paths and move between attractions that result from the combination of digital information and physical space. Tourists' plans have become much

more optimized thanks to the use of digital maps and location-based services, which allow them to calculate the most efficient path to go from one place to another, without getting lost or wandering at the destination. At the same time, the thesis also shows that getting lost, wandering and serendipity are important parts of the tourist experience. While travelling with smartphones makes people want to optimize their trip, this is not always the best thing for a rich tourist experience. In fact, relying on the internet for information also means that attractions and places to see are defined by the online systems based on complex algorithms. However, these places may not be what the local tourism organizations would like tourists to see. So it is important for organisations to actively work on delivering the right information at the right time.

Practical application of the dissertation

For practitioners it is important to understand how consumers think, perceive and behave and the thesis explores how technology influences different relationships that are at the basis of the tourist experience: between physical and digital information sources; between flexibility and optimization; between serendipity and information overload; between physical and digital environment in spatial movements and in time. It also explores how consumer values are changing due to the influence of digitalization and how physical objects gain more hedonic value in the phygital context.

Content of the dissertation

Abstract of Chapter 1

Introduction

The chapter introduces the topic of the thesis by exploring the transformative impact of Information and Communication Technologies (ICT) on tourism, emphasizing the role of smartphones in shaping the modern tourist experience. The chapter highlights the multifunctional nature of smartphones and their significance in mediating tourists' behaviour, blurring traditional dichotomies in the tourist experience.

Abstract of Chapter 2

Tourists with smartphones: technological mediation

The chapter presents the overarching ontological position of the study, that is, how the tourist and the experience are to be understood in relation to technology. The protagonists of the thesis, in fact, are the *smartphoned* tourist and the phygital tourist experience. That is, a technologically-mediated tourist whose experience and behaviours are influenced and shaped by their use of technology (Wellner, 2016). This chapter introduces the philosophical school of thought called postphenomenology and the theory of technological mediation (Ihde, 1990; Rosenberger & Verbeek, 2015; Verbeek, 2005, 2016; Wellner, 2016).

The smartphone, like any technology, has the potential to mediate the tourist experience (Liu et al., 2022). By adopting mediation as the ontological approach of the thesis, the mediation becomes the focus of the inquiry, as the argument about mediation is that technologies cannot be neatly distinguished from their human users. Instead, it is necessary to focus on how users use technologies and what behaviour results from the interactions between humans and technologies.

Abstract of Chapter 3

Understanding tourists and the tourist experience

The chapter offers an overview of some fundamental concepts that are used in the thesis, which are often subject to debate and misunderstandings. In particular, the terms tourist and tourist experience and how they are used in this thesis, are discussed (cf. Chhetri et al., 2004; MacCannell, 2013; Pearce,

2019; Quan & Wang, 2004; Uriely, 2005; Volo, 2009). After defining the terms, the chapter goes on to elaborate on the relationship between everyday life and the tourist experience, which is further discussed in Paper II (cf. McCabe, 2002; Larsen, 2008; 2019). Lastly, the attention is turned to the importance of studying the on-site stage of the experience, which is the focus of the empirical material collected for the research.

Abstract of Chapter 4
The phygital tourist experience
The chapter explores the concept of "phygital," a blend of the physical and digital, shaping modern tourist experiences (Mieli, 2022). The term challenges the dichotomy between physical and digital realms, emphasizing their seamless integration. Rooted in the ubiquity of technology, the phygital landscape prompts ontological questions, providing a nuanced vocabulary for academic discussions.

Focusing on the on-site stage of tourism, the research highlights the transformative role of smartphones. These devices redefine traditional phases, enabling anticipatory, experiential, and reflective activities on-site. Social media, coupled with smartphones, redefines social networks, allowing for a form of "co-presence". The study delves into the phygital information environment, where digital markers shape tourists' perceptions of destinations. Mobile technologies augment physical spaces with real-time, personalized information, influencing choices (Wellner, 2016). Beyond existing concepts, the term phygital emphasizes the inseparability of physical and digital contexts. Drawing on time geography (Hägerstrand, 1970, 1973), the thesis explores constraints on *smartphoned* tourists' spatial behaviour, contributing to an understanding of the interplay between physical and digital mobility.

Abstract of Chapter 5
Information behaviour during the trip
In this chapter, the author challenges traditional theories of tourist information behaviour, particularly during the trip, in the context of ubiquitous smartphone use (e.g. Vogt & Fesenmaier, 1998; Fodness & Murray, 1999; Jeng & Fesenmaier, 2002). The research explores the evolving landscape of information search and consumption, emphasizing the need for a more holistic and critical approach (Zarezadeh et al., 2019). Departing from conventional dichotomies, such as planned vs. spontaneous, the thesis introduces the concept of "planned serendipity" to capture the nuanced interplay between planning and unexpected encounters facilitated by smartphones. The author advocates for a more nuanced understanding of tourist information behavior in the smartphone era, urging researchers and practitioners to embrace the complexity of planned serendipity and move beyond simplistic dichotomies in conceptualizing tourist experiences.

Abstract of Chapter 6
Research design
The chapter presents the methodological approach and research design of the studies that were conducted for the thesis. After explaining the ontological and epistemological stance of the author, it contextualizes the choice of a qualitative research approach and multi-method design (Denzin & Lincoln, 2000; Bianchi, 2019). An interdisciplinary field of study like tourism offers the possibility to combine different theories and disciplines, and this thesis draws from theories of marketing, clinical psychology, tourist information search, human geography. The chapter presents the different methods used in the thesis, semi-structured interviews and Experience Sampling Method, and reflects on ethical implications of the chosen methodology.

Abstract of Chapter 7

Summary of papers
The chapter summarizes the four papers that comprise the thesis.
Paper I: Mieli, M., & Zillinger, M. (2020). Tourist information channels as consumer choice: The value of tourist guidebooks in the digital age. *Scandinavian Journal of Hospitality and Tourism*, 20(1), 28-48.
Paper II: Mieli, M. (2022). Experience Sampling Method in a Qualitative Study of Tourists' Smartphone Use. In Okumus, F., & Rasoolimanesh, S. M. (Eds.). *Contemporary Research Methods in Hospitality and Tourism*. Emerald Publishing Limited.
Paper III: Mieli, M. (2023). Planned serendipity: exploring tourists' on-site information behaviour. *Current Issues in Tourism*, 1-15.
Paper IV: Mieli, M., Zillinger, M., Nilsson J.H. (Forthcoming) Phygital time geography: what about smartphones in tourists' time-space behaviour?

Abstract of Chapter 8
Conclusions

The chapter concludes the dissertation by answering the initial research questions. The thesis aimed to investigate the role of smartphones in shaping the tourist experience, employing a postphenomenological approach. It delves into how smartphones blur the boundaries between everyday life and tourism. The study, embracing postphenomenology, goes beyond mere usage analysis to explore how smartphones mediate the very reality of the tourist experience.

The thesis explores tourists' channel choices, revealing that smartphones mediate the evaluation of traditional guidebooks, shaping the value tourists attribute to them. It introduces the concept of planned serendipity, wherein smartphones amplify and reduce both planning and serendipity in tourist information behaviour. The thesis addresses how smartphones mediate tourists' experiences in phygital (physical-digital) worlds, delving into the spatiotemporal aspects of the tourist experience, and revealing how smartphones reconfigure time-space constraints, paths, bundles and vacation prisms. Methodologically, the thesis contributes by developing a qualitative application of the Experience Sampling Method, allowing unobtrusive on-site experience study using participants' smartphones.

References

Bianchi, L. (2019). *Un piano d'azione per la ricerca qualitativa. Epistemologia della complessità e Grounded Theory costruttivista*. Franco Angeli.

Charmaz, K. (2014). *Constructing grounded theory*. Sage. https://doi.org/10.7748/nr.13.4.84.s4

Charmaz, C. & Bryant, A. (2016) Constructing grounded theory analyses. In Silverman, D. (Ed.). *Qualitative Research*. 4 ed. SAGE. https://doi.org/10.4135/9781446268261.n14

Chhetri, P., Arrowsmith, C., & Jackson, M. (2004). Determining hiking experiences in nature-based tourist destinations. *Tourism management*, 25(1), 31-43. https://doi.org/10.1016/s0261-5177(03)00057-8

Denzin, N. K., & Lincoln, Y. S. (2000). Introduction: The discipline and practice of qualitative research. In Denzin, N. & Lincoln S. (Eds.) *The handbook of qualitative research*. Sage, 1-28

Fodness, D., & Murray, B. (1999). A model of tourist information search behavior. *Journal of travel research*, 37(3), 220-230. https://doi.org/10.1177/004728759903700302

Hektner, J. M., Schmidt, J. A., & Csikszentmihalyi, M. (2007). *Experience sampling method: Measuring the quality of everyday life*. Sage. https://doi.org/10.4135/9781412984201

Holbrook, M. B. (1999). *Consumer value: a framework for analysis and research*. Psychology Press. https://doi.org/10.4324/9780203010679

Hägerstrand, T. 1970. What about people in regional science? *Ninth European Congress of the regional science association. Regional Science Association Papers*, 24(1), 6–21. https://doi.org/10.1007/bf01936872

Hägerstrand, T. (1973). The domain of human geography. In Chorley I.R. (ed.) *Directions in Geography*. London: Methuen. https://doi.org/10.4324/9780429273292-4

Ihde, D. (1990). *Technology and the lifeworld: From garden to earth*. Indiana University Press

Jeng, J., & Fesenmaier, D. R. (2002). Conceptualizing the travel decision-making hierarchy: A review of recent developments. *Tourism analysis*, 7(1), 15-32. https://doi.org/10.3727/108354202108749925

Larsen, J. (2008). De-exoticizing tourist travel: Everyday life and sociality on the move. *Leisure Studies*, 27(1), 21-34. https://doi.org/10.1080/02614360701198030

Larsen, J. (2019). Ordinary tourism and extraordinary everyday life: Rethinking tourism and cities. In Frisch, T., Sommer, C., Stoltenberg, L., & Stors, N. (Eds.). *Tourism and everyday life in the contemporary city*. Routledge, 24-41. https://doi.org/10.4324/9780429507168-1

Larson, R., & Csikszentmihalyi, M. (1983). The Experience Sampling Method. *New Directions for Methodology of Social & Behavioral Science*, 15, 41-56.

Liu, X., Wang, D., & Gretzel, U. (2022). On-site decision-making in smartphone-mediated contexts. *Tourism Management*, 88, 104424. https://doi.org/10.1016/j.tourman.2021.104424

MacCannell, D. (2013). *The Tourist: a new theory of the leisure class.* University of California Press.

McCabe, S. (2002). The tourist experience and everyday life. In Dann G. (Ed.) *The tourist as a metaphor of the social world*. Cabi, 61-75. https://doi.org/10.1079/9780851996066.0061

Mieli, M., & Zillinger, M. (2020). Tourist information channels as consumer choice: The value of tourist guidebooks in the digital age. *Scandinavian Journal of Hospitality and Tourism*, 20(1), 28-48. https://doi.org/10.1080/15022250.2020.1717991

Mieli, M. (2022a). Phygital. In Buhalis, D. (Ed.) *Encyclopedia of Tourism Management and Marketing*. Edward Elgar Publishing https://doi.org/10.4337/9781800377486.phygital

Mieli, M. (2022b). Experience Sampling Method in a Qualitative Study of Tourists' Smartphone Use. In Okumus, F., & Rasoolimanesh, S. M. (Eds.). *Contemporary Research Methods in Hospitality and Tourism*. Emerald Publishing Limited. https://doi.org/10.1108/978-1-80117-546-320221012

Mieli, M. (2023). Planned serendipity: exploring tourists' on-site information behaviour. *Current Issues in Tourism*, 1-15. https://doi.org/10.1080/13683500.2023.2197198

Mieli, M., Zillinger, M., Nilsson J.H. (Forthcoming) Phygital time geography: what about smartphones in tourists' time-space behaviour?

Pearce, P. L. (2019). *Tourist Behavior – the Essential Companion*. Edward Elgar Publishing.

Quan, S., & Wang, N. (2004). Towards a structural model of the tourist experience: An illustration from food experiences in tourism. *Tourism management*, 25(3), 297-305. https://doi.org/10.1016/s0261-5177(03)00130-4

Rosenberger, R., & Verbeek, P. P. (2015). *Postphenomenological investigations: essays on human-technology relations*. Lexington Books.

Tussyadiah, I. P., & Wang, D. (2016). Tourists' Attitudes toward Proactive Smartphone Systems. *Journal of Travel Research*, 55(4), 493–508. https://doi.org/10.1177/0047287514563168

Uriely, N. (2005). The tourist experience: Conceptual developments. *Annals of Tourism research*, 32(1), 199-216. https://doi.org/10.1016/j.annals.2004.07.008

Verbeek, P. P. (2005). *What things do: Philosophical reflections on technology, agency, and design*. Penn State Press. https://doi.org/10.1515/9780271033228

Verbeek, P.P. (2016). Toward a Theory of Technological Mediation: A Program for Postphenomenological Research. In: J.K. Berg O. Friis and Robert C. Crease (Eds.) *Technoscience and Postphenomenology: The Manhattan Papers.* Lexington Books, 189-204

Vogt, C. A., & Fesenmaier, D. R. (1998). Expanding the functional information search model. *Annals of Tourism Research*, 25(3), 551-578. https://doi.org/10.1016/s0160-7383(98)00010-3

Volo S. (2009) Conceptualizing Experience: A Tourist Based Approach, *Journal of Hospitality Marketing & Management,* 18(2-3), 111-126 https://doi.org/10.1080/19368620802590134

Wang, D., Xiang, Z., & Fesenmaier, D. R. (2016). Smartphone use in everyday life and travel. *Journal of travel research*, 55(1), 52-63. https://doi.org/10.1177/0047287514535847

Wellner, G. (2016). *A postphenomenological inquiry of cell phones: Genealogies, meanings, and becoming.* Lexington Books.

Zarezadeh, Z., Benckendorff, P., & Gretzel, U. (2019). Lack of progress in tourist information search research: A critique of citation behaviour and knowledge development. *Current issues in tourism*, 22(19), 2415-2429. https://doi.org/10.1080/13683500.2018.1459511

Zillinger, M. (2020). Hybrid tourist information search German tourists' combination of digital and analogue information channels. *Tourism and Hospitality Research*, 20(4), 510-515. https://doi.org/10.1177/1467358420935164