

# Four Arguments Why Places and Information About Places Are Inextricably Interwoven

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## Abstract

Research on information about places can often practically not be clearly demarcated from research on the places themselves. This is not a problem itself but raises the question of how geographical information science and human geography mutually relate. This paper discusses four arguments as to why places and information about them are inextricably interwoven in many cases. The difficulty in finding a demarcation between the two lines of research is thus not due to a lack of academic engagement with these topics but rather due to the subject matter itself. Consequently, research on the role of information in the context of places is indispensable for the study of places themselves. This raises the question again as to whether the separation of geographical information science and geography, as they are currently lived by distinctly different communities of practice, is justified.

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## 1 Introduction

We encounter places in everyday life, but they can also be found in numerous forms in the geographical, environmental psychological, and humanities literature. Even if corresponding concepts sometimes differ significantly, they are aimed at a phenomenon that is borrowed from our world of experience. The divergence of existing place concepts is therefore not primarily due to the differences between the places but to the way in which places are conceptualized and described. Tuan [33, 34] describes places by means of our perception, emotions and the sense of place; Seamon [27, 28] refers to human movement patterns; and Malpas [17] focusses on how we attribute our experiences to places. Cresswell [4] describes places as social constructions and Thrift [31, 32] by means of non-representational theory. These concepts are clearly different from the ones of location and point of interest. Further types of description exist.

Representations of places are highly diverse [20]. They include names and symbols; oral narratives, news paper articles, essays, and poems; paintings, photography, video, and sound. In addition, souvenirs, various objects such as stones, patterns on the beach, traditions, and even places themselves can serve as representations. Such place representations are more than a representamen (an object, quality, or phenomenon) that refers to the place. Rather, the way in which such a representamen is used, often as part of communication, constitutes the representation [21]. Such mechanisms are in many cases quite complex, as has been discussed in the example of photographs of a place [29].



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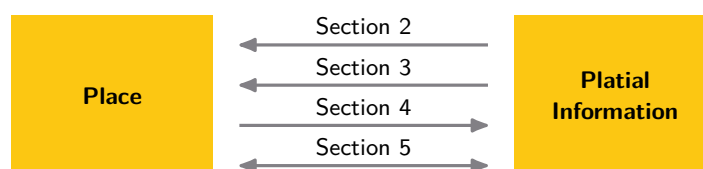
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## 16:2 Four Arguments Why Places and Information About Places Are Interwoven

In this paper we investigate the relationship between places and information about places (or platial information in short), that is, information that refers to one or more places and therefore contains place representations. It is self-evident that information can only refer to places if they exist in some form, either physically, virtually, or imaginarily. However, it is less clear that place-making (the process that creates places) and representation-making (the process that creates place representations) are related and thus places and information closely interwoven. Four such relationships are discussed in the following, as is also illustrated in the diagram below. Section 2 argues why information about a place is a necessary precondition for *social* place-making. Further, as is discussed in Section 3, platial information has performative qualities. These can characterize and even create places. Section 4 examines how representation-making can be part of the place-making when places represent places. And finally, Section 5 focusses on virtual places, that is, cases in which the place itself is located in virtual space and is therefore, in a sense, a representation of itself. The paper ends with a discussion and conclusion.



### 2 Social place-making requires communication and thus place representation

Places are often lived socially. We share our homes with our partners and relatives; our workplaces with our colleagues; and coffeehouses, pubs, libraries, and other third places with people from society, many of whom are strangers to us. Such sharing of places is assumed to presuppose that we shape common ideas and expectations through the exchange of corresponding expectations ('definition of the situation') [25]. At least, Thomas theorem claims in this context that the different individual ideas and conceptualizations of a place have an effect on how we share and jointly live it: '[i]f men define situations as real, they are real in their consequences.' [30, p. 572]. If the various individual experiences and conceptualizations of a place were not exchanged, this would result in independent performative consequences, according to the Thomas theorem. These, in turn, would make the successful sharing of the place possible only by pure chance. In other words, the experience and conceptualization of a place needs to be communicated in order to render the sharing of the place through the place-making possible. It is unlike many other concepts that a shared place cannot exist without communication.

The circumstance previously referred to as intertwining makes the sharing of places possible because it is based on communication. The latter is understood as the exchange of information, that is, actions that convey ideas from one person to another and make them comprehensible for the other person. Examples of such actions include conversations about shared experiences, such as about the atmosphere in a pub; as well as the display of expectations through repeated demonstrative behaviour, such as cleaning up the kitchen and the associated but not verbally communicated request to the partner to take part in the clean-up in the future. These actions, which often involve several people participating in the place, do not imply an exchange of information in a static sense but are rather part of a dynamic

process in which context is negotiated and communication takes place. Such communication must refer directly or indirectly to the people's respective individual perceptions of the place, or at least some of its qualities, to be able to intertwine the individual perceptions. Such references will be referred to as *representations of a place* in the following.<sup>1</sup>

I would like to illustrate the central role that representations play in the place-making with a thought experiment. Two people move into two copies of one and the same flat. Since the two flats are identical copies of each other, that is, they are in the same location, furnished in the same way, and without any other differences, both people find identical conditions when moving in. The two people cannot communicate with each other, nor can they pass on information to each other. After moving in, the flats become the home of the respective person, as both people create and get used to routines, notice the play of light through the windows and the noise of the nearby street, and get to know the surroundings of the flat on a day-to-day basis. Due to the identical conditions, the two people have possibly similar experiences. After a while, however, it seems inevitable that individual preferences, different perceptions, and different external lifeworld<sup>2</sup> circumstances lead to different patterns of behaviour and perception. What the place created in this way means to the two people, what emotions they experience, and what identity is formed in that place no longer appears to depend solely on the initial identical starting situation but on the two people and their way of living their respective homes. Even if the two people share some common cultural background or are similar in other ways, different patterns of behaviour and perception would eventually emerge because the perception of a place is highly individual and depends on individual personality. If now the two people perceive their homes in a practically similar way,<sup>3,4</sup> then this would be purely coincidental if the two people did not synchronize consciously or unconsciously through the exchange of information. Similar shaping of the two places seems thus only possible if the two people gain knowledge of each other's places or are at least led to develop similar patterns of behaviour, experience, and thinking about their home through joint action.

### 3 Information about places can create places

Platial information has descriptive qualities, because it can describe how a place is lived, how it feels like to be in that place, and how its identity is perceived. The numerous examples of such corresponding place representation can be found in or related to news paper articles, works of art and pieces of music, and souvenirs brought along from a holiday trip [20]. Platial information, which includes such representations, can describe not only existing but also imaginary places. Such imaginary places exist only in our imagination, sometimes only in parts. Mentally, these imaginary places are in a sense similar to existing places, but they lack both the physical and the social counterpart of the place. For example, we can imagine what it will be like to move to a new flat in another city, to make new friends there, the daily routines that we will establish after having moved there, et cetera. We exchange corresponding information, for example, when we consider moving to a new place with a partner or family, or when we discuss concrete steps for the move.

<sup>1</sup> The notion of a representation used here differs from the ones introduced by Peirce [23] and Eco [6].

<sup>2</sup> Lifeworld refers to the 'taken-for-granted pattern and context of everyday life' [27].

<sup>3</sup> This is, for example, the case when one flat (instead of two copies of a flat) is shared by two people.

<sup>4</sup> Here we would have to discuss what similar perception actually means for different people. It could indeed be argued that a comparison of two people's perception and thus also the notion of similarity in this regard is only defined if the two people interact with each other and thus set their respective experiences in a common context.

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In addition to descriptive qualities, spatial information has also prescriptive and performative qualities, as the information can describe how a place should and will be. This is crucial in planning processes, as (elaborate) imaginary places are created and communicated in order to convey an idea of how the planned future place can and should be, such as by means of renderings and 3D models as well as written and oral narratives. The planned imaginary places and the places that later become reality are different by definition, but the intention is that both places share similarities. In this way, information about imaginary places creates and shapes non-imaginary places. Without an effect of the planned place on the later existing places, planning would be useless.

An example relevant in this context is the *Nya Kiruna Centrum*, a planned and currently emerging new city centre in Kiruna, Sweden [16]. Due to iron ore mining, parts of the city are subsiding, which poses risks to buildings and people. The city centre thus needs to be moved to a location outside the city, meaning that what defines the city will be destroyed and a newly built city centre will influence how the city is experienced and which identity it develops. The planning of the new centre intentionally incorporates the feeling of the old city centre in a number of ways, such as by the complete relocation of some buildings including a church and the creation of other buildings that fit in with the identity of the existing context of the old city centre. In this way, it is hoped that the overall idea of the moved future place as it is actually lived partly resembles the old place but also improves and further develops it. The continuity of the city centre without major interruptions seems to be important in this respect. Information about the planned, imaginary place can be assumed to have at least some influence on how the place-making later establishes the new place in this case.

### 4 Places can represent places

Some places were created for the purpose of representing other places. Examples of such type of places are planned capitals, such as Canberra in Australia, Brasília in Brazil, Karlsruhe in relation to the Margraviate of Baden-Durlach, and Fujiwara-kyō, Heijō-kyō, Kuni-kyō, Nagaoka-kyō, and Heian-kyō as former capitals of Japan. These cities were created solely because of their representative role and to fulfil an organizational and administrative function on behalf of the territory [5]. There are many more examples of places that represent other places, among them Salzburg, which stands for Europe in the context of American and Japanese culture mainly because of the musical drama film *The Sound of Music* [8, 10, 15, 20]; and the Tower Bridge, which stands for London and England as touristic places [20]. What these places have in common is that they stand for other places and remind us of them, as they are in a relationship of dependency to the represented place, at least in the context of the respective representation but often also in the context of the place itself. Although the representative function is designed into planned capitals, place-making, that is, the everyday living of these cities as places, is essential because only then the above-mentioned places become true representations [11]; without actually fulfilling the organizational and administrative function, a capital would not represent the corresponding territory.

In the case that places represent other places, representations of places and the places themselves are obviously mingled. This is interesting insofar as the boundaries between place-making and representation-making become blurred: the processes that create places also partly represent places, and the processes that represent places partly create places. Place-making can itself become a representation, for example, when the practice of an assembly of national representatives both establishes a place, such as the parliament, while also standing for the territory due to its charge of meaning. When visiting the *Parlement*

*français, United States Congress, Parlament Österreich, European Parliament, or Samiskt parlamentariskt råd*, the flair of the particular place as well as the feeling of being at the centre of the corresponding territorial place are inextricably mixed. The fact that the focus here is not (only) on nation states but on the respective place can easily be seen in case of the *Samiskt parlamentariskt råd*, which represents the societies and places lived by Sami people in Norway, Sweden, and Finland (and not only one of these). Even though these examples demonstrate that places can represent and representations can induce places, this does not imply that every place would necessarily be a representation or every representation would induce a place. Rather, it highlights the close link that can arise between the two.

## 5 Places can be virtual and thus merge with their representation

When using digital technologies and the World Wide Web, non-digital and digital aspects intermingle. For example, (digital) technologies intervene in physical places in the context of smart cities, and the World Wide Web enables social interaction, which also plays a role in places, during online games, and in metaverse-like online realities. Virtual, augmented, and mixed reality can also mediate and modify the visual perception of the locale as well as influence the affordances offered by the physical environment [2]. The places created, influenced, and experienced digitally in this way, either in part or in their entirety, could be called *virtual places*, because they expose qualities similar to those of non-digital places apart from being in the virtual realm, at least to some degree [1, 13, 24, 3].

Virtual places are by definition based on objects and processes that can be (and in fact are) represented and communicated digitally if they are shared socially. This is remarkable insofar as the existence of a socially shared virtual place already implies the existence of corresponding information about this place. At the same time, such digital communication already covers large parts of what is needed to create the corresponding social virtual place, as the communication constitutes the only possibility of mediation between participants in virtual places, at least if the places occur in a purely virtual form. The place and the representation would therefore be very similar, if not identical.

## 6 Discussion and Conclusion

The four arguments presented show a strong, inextricable interweaving of places and their representations. The one cannot exist without the other. Correspondingly, platial information is not exclusively based on the place, as is often the case with other types of information, but also the place is based on platial information. The arguments are yet subject to limitations. It has been argued that place-making requires place representation *if* the place is socially shared; and that platial information *can* induce place-making, but no argument has been provided for why it does so in any case. Further, we have argued that places *can* represent other places; and that virtual places merge with their representations, but most places are *not* virtual in nature. Despite these limitations, a frequent symbiosis between place-making and representation-making can be observed. Whether the two processes are only related or even identical in some sense remains subject to further research.

Even if no equality is assumed, the interweaving of places and corresponding platial information as discussed here raises profound questions. If we assume that being a place and being a representation of a place are strongly interwoven, is it possible to study platial information without studying the places themselves, and to study the places without studying corresponding information? In other words, is the empirical study of places necessary in

order to be able to examine their representation at all, and vice versa? While this paper does not provide clear answers to these questions, it does show that at least an exchange between the study of places and the study of their representation is indispensable. Perhaps, and this remains to be discussed, this is also the reason for the limited progress made so far in this subject area [19, 35, 9].

Assuming that further research on platial information and place representation must be interlinked with research on places themselves,<sup>5</sup> it seems logical to apply the geographical methods used to analyse places to platial information as well. This would mean, for example, that the practice of representation would need to be scrutinized and the diversity of platial information empirically analysed. Also, it would have to be accepted that there are few generalizable rules for the treatment of platial information and that idiosyncratic approaches with partly anecdotal character would be adequate. At the very least, the relevance of aiming for a structured approach to platial information should be (re-)considered, given the pronounced individuality of places themselves.

There are consequences of the mutual dependency of place and platial information far beyond what we discussed so far, such as on the relationship between geography and geographical information science. This is particularly interesting in view of the fact that geographical information science has its roots in quantitative geography, while human geography has developed to encompass more qualitative methods. The relationship between these two fields has accordingly been discussed in diverse ways and the nature of their respective methods has been critically compared [26, 14, 12, 7, 36]. It is often assumed that an information science refers to information about the object of investigation of the related discipline, that is, geographical information science to geographical information, and that this defines an order between the discipline and its corresponding information science. The arguments put forward here call this order into question, because in the case of human geography, the discipline must also be based, at least in part, on its corresponding information science.

If a mutual dependency is assumed at the level of the two fields, the various philosophical stances of human geography would also have to be considered in geographical information science, such as humanistic including phenomenological approaches, post-structuralism including non-representational theory, and methods from critical theory including activist geography. Initial proposals on how both fields can benefit from and complement each other have been provided [22, 18], but fundamental research seems necessary to further advance our understanding of how place and platial information are interwoven.

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## References

- 1 Paul C. Adams. Cyberspace and virtual places. *The Geographical Review*, 87(2):155–171, 1997.
- 2 David Evans Bailey. *Synchronous reality. Place and memory in virtual installation*. Phd thesis, Auckland University of Technology, Auckland, New Zealand, 2020.
- 3 Erik Champion, editor. *The phenomenology of real and virtual places*. Routledge, New York, NY, 2019.
- 4 Tim Cresswell. *Place. A short introduction*. Blackwell, Malden, MA, 2004.
- 5 Andreas W. Daum. Capitals in modern history: inventing urban spaces for the nation. In Andreas W. Daum and Christof Mauch, editors, *Berlin, Washington, 1800–2000. Capital cities, cultural representation, and national identities*, pages 3–28. Cambridge University Press, Cambridge, UK, 2005. doi:10.1017/CB09781139052412.

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<sup>5</sup> While this link has been argued in this paper, it is largely ignored in the general context of geographical information science, as is suggested by a literature review [35].

- 6 Umberto Eco. *La struttura assente. Introduzione alla ricerca semiologica*. Bompiani, Milano, Italy, 1968.
- 7 Nuria Font-Casaseca and Maria Rodó-Zárate. From the margins of geographical information systems: limitations, challenges, and proposals. *Progress in Human Geography*, 2024. doi:10.1177/03091325241240231.
- 8 Gundolf Graml. (Re)mapping the nation. Sound of Music tourism and national identity in Austria, ca 2000 CE. *Tourist Studies*, 4(2):137–159, 2004. doi:10.1177/1468797604054380.
- 9 Ehsan Hamzei, Stephan Winter, and Martin Tomko. Place facets: a systematic literature review. *Spatial Cognition and Computation*, 20(1):33–81, 2020. doi:10.1080/13875868.2019.1688332.
- 10 Holly Hyunjung Im and Kaye Chon. An exploratory study of movie-induced tourism: a case of the movie *The Sound of Music* and its locations in Salzburg, Austria. *Journal of Travel & Tourism Marketing*, 24(2–3):229–238, 2008. doi:10.1080/10548400802092866.
- 11 Jan Kampmann. *Planhauptstädte im 20. Jahrhundert. Vision und Wirklichkeit an den Beispielen Brasilia und Canberra*. Akademische Verlagsgemeinschaft, München, Germany, 2011.
- 12 Rob Kitchin. Positivist geographies and spatial science. In Dydia DeLyser, Steve Herbert, Stuart C. Aitken, Mike Crang, and Linda McDowell, editors, *The SAGE handbook of qualitative geography*, pages 21–29. SAGE, Los Angeles, CA, 2010. doi:10.4135/9780857021090.
- 13 David Kolb. Real places in virtual spaces. *Nordic Journal of Architectural Research*, 19(3):69–77, 2006.
- 14 Robert W. Lake. Planning and applied geography: positivism, ethics, and geographic information systems. *Progress in Human Geography*, 17(3):404–413, 1993. doi:10.1177/030913259301700309.
- 15 Kurt Luger. The Sound of Music country: Austria’s cultural identity. *Media, Culture & Society*, 14(2):185–192, 1992. doi:10.1177/016344392014002003.
- 16 Elisa López. Stadsomvandlingen i Kiruna: planering och politik i ett urbant megaprojekt. In Gabriella Körling and Susann Baez Ullberg, editors, *Megaprojekt – kritiska perspektiv på storskalig infrastruktur*, pages 77–95. Svenska Sällskapet för Antropologi och Geografi, Stockholm, Sweden, 2021.
- 17 Jeff E. Malpas. *Place and experience. A philosophical topography*. Cambridge University Press, Cambridge, UK, 1999.
- 18 Franz-Benjamin Mocnik. *Patterns, laws, and structures in geographical information*. Habilitation thesis, University of Salzburg, Salzburg, Austria, 2021.
- 19 Franz-Benjamin Mocnik. Putting geographical information science in place – towards theories of platial information and platial information systems. *Progress in Human Geography*, 46(3):798–828, 2022. doi:10.1177/03091325221074023.
- 20 Franz-Benjamin Mocnik. On the representation of places. *GeoJournal*, 88(4):4109–4126, 2023. doi:10.1007/s10708-023-10831-8.
- 21 Franz-Benjamin Mocnik. Place representation as a prerequisite to place communication. *Proceedings of the 4th International Symposium on Platial Information Science (PLATIAL’23)*, pages 39–44, 2023. doi:10.5281/zenodo.8286263.
- 22 David O’Sullivan. *Computing geographically. Bridging GIScience and Geography*. Guilford, New York, NY, 2024.
- 23 Charles Sanders Peirce. Logic as semiotic: the theory of signs. In Justus Buchler, editor, *Philosophical writings of Peirce*, pages 98–119. Dover, New York, NY, 1940.
- 24 Edward Relph. Spirit of place and sense of place in virtual realities. *Techne*, 10(3):17–25, 2007. doi:10.5840/techne20071039.
- 25 Ingo Schulz-Schaeffer. Handlungszuschreibung und Situationsdefinition. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 61(2):159–182, 2009. doi:10.1007/s11577-009-0049-6.
- 26 Nadine Schuurman. Lessons in constructing a science: promises and pitfalls of GIS. *Cartographica*, 36(4):23–50, 1999. doi:10.3138/4374-6903-77Q6-1225.
- 27 David Seamon. *A geography of the lifeworld*. Croom Helm, London, UK, 1979. doi:10.4324/9781315715698.

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- 28 David Seamon and Christina Nordin. Marketplace as place ballet. A Swedish example. *Meddelanden från Göteborgs Universitets Geografiska Institutioner. Serie B*, 67:35–41, 1980.
- 29 Ali Shobeiri. *Place: towards a geophilosophy of photography*. Leiden University Press, Leiden, the Netherlands, 2021.
- 30 William I. Thomas and Dorothy Swaine Thomas. *The child in America. Behavior problems and programs*. Alfred A. Knopf, New York, NY, 1928.
- 31 Nigel Thrift. Steps to an ecology of place. In Doreen Massey, John Allen, and Philip Sarre, editors, *Human geography today*, pages 295–322. Polity, Cambridge, UK, 1999.
- 32 Nigel Thrift. *Non-representational theory. Space, politics, affect*. Routledge, London, UK, 2008.
- 33 Yi-Fu Tuan. *Space and place. The perspective of experience*. University of Minnesota Press, Minneapolis, MN, 1977.
- 34 Yi-Fu Tuan. Space and place: humanistic perspective. In Stephen Gale and Gunnar Olsson, editors, *Philosophy in geography*, pages 387–427. Reidel, Dordrecht, the Netherlands, 1979. doi:10.1007/978-94-009-9394-5\_19.
- 35 Daniel Wagner, Alexander Zipf, and Rene Westerholt. Place in the GIScience community – an indicative and preliminary systematic literature review. *Proceedings of the 2nd International Symposium on Platial Information Science (PLATIAL'19)*, pages 13–22, 2020. doi:10.5281/zenodo.3628855.
- 36 René Westerholt. Teaching GIScience in the multidisciplinary nexus. *Journal of Spatial Information Science*, 26:129–136, 2023. doi:10.5311/JOSIS.2023.26.299.