State, power and space

W. Zierhofer

Programm Mensch Gesellschaft Umwelt, Universität Basel, Vesalgasse 1, CH – 4051 Basel, Switzerland

Abstract. "Space" may take many different significations of which, however, two are paramount for human geography: Space as a part of the world with specific characteristics and with activities located in or on it (object-space), and space as a frame of reference, used to locate and thereby order the relations among persons, things, activities and immaterial items (space as locational scheme). This paper argues that, from the viewpoint of an observer, every object-space presupposes a locational scheme, but not vice versa. Spaces as locational schemes are discussed as instruments, which individuals and organizations use to co-ordinate their activities. Therefore, space is a constitutive element of the reproduction of the social and is not something external to the social, as most geographies and social theories would have it. Under modern conditions, it is, above all, the meta-institution of the state that has the power to define interpretative schemes, thereby constituting entities and controlling their interactions. The discussion of the mutual constitution of spaces and institutions reveals that, from a methodological point of view, in the end the analysis of space, society and power coalesce. By disclosing the constitutive conditions of institutions and power structures, the analysis of spaces as locational schemes turns out to also be a deconstructive practice.

1 Introduction

Scientists and philosophers conceive of space in manifold ways and operate with a variety of notions of space. So do all people in their everyday practices. Despite the differences among their understandings of space, they are all quite successful. In this paper I will introduce and plead for a specific academic conception of space that is very formal and internally differentiated, which allows one to encompass the most different particular interpretations of space. As I will elabo-

Correspondence to: W. Zierhofer
(wolfgang.Zierhofer@unibas.ch)

rate, such an approach is universal in the sense that it is open to any kind of space – it does not exclude any space a priori. Yet, it is not universal in the sense of claiming validity for any case or situation. On the contrary, this approach is only consistent if it is understood as a perspective of certain instrumental or use value, competing with alternative ones. I want to emphasize the attribute academic: The primary purpose of such a construction is not to help identify locations, find a way between them, and make sense of places or creating regional identities. Rather, it is intended to provide an ordering framework for all these everyday functions of conceptions of space, in order to integrate them in a systematic and consistent way into social theory and epistemology. This conception of space is thus to be regarded as an epistemic instrument, and the intention of this paper is to demonstrate its specific theoretical use value.

Within the heterogeneity of academic approaches to space (e.g. Crang and Thrift, 2000; Curry, 1996; Maresch and Werber, 2002; Miggelbrink, 2002; Reichert, 1996a; Simonsen, 1996; Werlen, 1995) one may distinguish between two particular perspectives, which imply two different ideal-types of space: 1) What one might call the traditional or mainstream understanding of space in social sciences and humanities, takes space as a part of the surface of the Earth, as the extension of matter or as something similar. Space is regarded as an object that has structures, features and qualities, and on which or in which activities and events may take place. One can observe this space, and it possesses facticity. Therefore, its features are empirically disputable. 2) From another point of view, however, space allows locating items; it is a frame of reference that provides a variety of positions. This space is a cognitive scheme with which observers constitute objects and their qualities. Therefore, it is anchored on the subject-side of observations. As a precondition for observation, space as locational scheme is not immediately empirically disputable. Of course, as a cognitive scheme, this kind of space might be regarded as a social fact, and therefore being an object. Indeed, this is what I will suggest in the second half of this paper, where I will also systematically

discuss the theoretical use value of this option. But this view implies shifting the point of view from the acting individual to an external observer, who then operates with different cognitive schemes.

Space, conceived as a cognitive tool, like any other cognitive instrument, cannot be but a historically, culturally, socially, biographically and situationally contingent entity. Hitherto this aspect of space has been noted and demonstrated (e.g. Reichert, 1996a) but not systematically developed with respect to social theory and epistemology. While the mainstream of human geography used the term "space" to denote some parts of the surface of the Earth and aspects of the environment, some scholars (e.g. Soja, 1996) used this term with various significations, but only a few referred explicitly and primarily to spaces as locational schemes or as classificatory terms (for an overview see, Miggelbrink, 2002:70–78). Among this little group, however, the focus was, above all, on the making of geographies, thus how spaces inform actions, provide orientation in the world and make persons, activities and things cognitively accessible. But how do these spaces come into being?

Kant regarded space and time as epistemological categories, but attributed to them a transcendental (metaphysical) status (Werlen, 1995:206–222). Most contemporary social theories and epistemologies, however, deliberately avoid transcendental categories. They thereby deny the possibility of any absolute point of reference external to the observer or the observation. When I use the term "non-representational theory" in the following, I refer to Richard Rorty (or language pragmatic approaches, in general) and to Nigel Thrift, who coined that expression within the geographical debate. In his "Mirror of Nature" (1979) Rorty argued against epistemologies, which conceive of knowledge production as a kind of more or less accurate copying of an external objective world. Rather, the same reality (mental activities were Rorty's example) allows for different valid (or true) representations (e.g. neurological, phenomenological or hermeneutical ones) at the same time. Their validity is a matter of context relative to empirical and methodological arguments, but does not depend on an absolute point of reference. Thrift (1999) does not refer directly to Rorty, but emphasizes the fact that cognitive activities establish corporeal relations with the world, which are constitutive for the way of being in the world. "Theory becomes a practical means of going on rather than something concerned with enabling us to see, contemplatively, the supposedly true nature of what something is" (Thrift, 1999:304). Non-representational theories do not deny representation, but stress that theory (or knowing, in general) is less a representation of an outside world, but an active way of being and participating in a world. Non-representational theories take epistemological categories (including their own) as contingent and as empirical facts, which are constituted, reproduced and altered in the course of all sorts of cognitive activities, especially communications and interventions in the world.

Seen from this angle, in order to understand the making and shaping of the surface of the Earth (often called the "production of space" – but not in this paper), geography could and should also investigate the making of spaces as frames of reference in the course of actions, particularly communications. This requires integrating space into the conception of discourses, organizations and institutions, and, consequently, to grant these forms of interactions the capability to make and reproduce their own particular spaces.

Following Michel Foucault's "Order of things" (Les mots et les choses) (1966) and Edward Said's "Orientalism" (1978), as well as Lefebvre's (1991) notions of conceived and lived space, human geographers focused upon "Geographical Imaginations" (Gregory, 1994). However, we have to distinguish carefully between the imagination of an object-space and a locational scheme, although they may be closely related. Take, for instance, Said's account: The Orient, although an imagination, would be clearly an object-space, while the distinction between Occident and Orient is an interpretative scheme that constitutes two particular locations. Said's book is not only an attempt to disclose this specific locational space as a practice – therefore: Oriental*ism* –, but by performing a deconstructivist discourse analysis, it is also an attempt to discredit and disempower the discriminating connotations involved.

Thus, Said's work illustrates the methodological gain and some of its political consequences for human geography clearly: If space is regarded as an ordering concept, it necessarily informs certain structures of power and rule. But those object-spaces that are so common in geography and many other disciplines bear the danger of reifying and naturalizing their underlying locational schemes. The "Orient" and its characteristics would then appear as naturally given. Taking space, however, as an ordering tool and therefore as a constitutive component of power relations and systems of rule, offers a deconstructive-critical approach to social reality. It draws spaces into the realms of critique, legitimation and political struggle and thereby constitutes them as contested "whose"-spaces and "what for"-spaces.

2 The range of spaces

In order to discuss the pros and cons of specific conceptions of space and the functions they may perform, it is appropriate to elaborate an overview over the range of meanings that space often takes in geographical discourse. Let me list some of them:

– The (possible) extension of the physical world.

– Outer space.

– The surface of the Earth.

– A section of the surface of the Earth; an area or field, with more or less sharp demarcations.

– A two- or three-dimensional container.

– The natural or socially produced structures and properties of an area, field or container.

- The activities that structure and shape an area or a field; the appropriated space, the lived space.

- The environment of a being, its ecological niche.

- The subjective or social meaning of physical environmental structures, thus a social construction or imagination.

- A virtual world (e.g. cyberspace).

- A range of possibilities or options.

- The positions and relations in a network (connectivity-space, space of flows, relational spaces).

- The dimension and the possible values of a variable, thus one or more vectors or scales.

- A range of possible perceptions, a phenomenological space (e.g. colour-space, sound-space).

Although this list is by no means comprehensive and demarcations between some of its entries are fuzzy, it illustrates a broad spectrum of meanings of space and the often mixed or hybrid character of these significations with respect to the ideal-typical distinction between space as an object and space as a frame of reference. While the 4th and the 13th space correspond unequivocally to these two types, all other spaces allow for ambiguous interpretations in this respect.

Space as object and space as locational scheme embody two basic representational epistemological functions: The first notion denotes a set of related entities, and it is a bearer of qualities. The function of the second notion is to offer possibilities of distinction. Actually, if the object-space is not meant to denote the whole world, it makes only sense as a distinct one beside other spaces. But then, by consequence, object-spaces must be "places", which take a position within a set of possible locations, which itself is constituted by a space of the second sort. Instead of object-spaces, one could synonymously speak of areas, fields or regions, whether they are physical or imagined, void or filled with life. Statements on object spaces are empirically testable; they may be true or false.

Although it is no problem to imagine various locational systems, the simultaneous usage of different locational systems makes no sense. Either they are convertible into each other like currencies, and therefore redundant, or they are unconnected and mutually irrelevant. Moreover, beside the rather abstract circumscription as locational schemes or frames of reference, there are no common synonyms for "the space" at hand. Space – in singular – serves as a fundamental category of order in knowledge. One of its functions is to offer individuality or difference to potentially indistinguishable items, particularly to all corporeal items. The relation between space as object and space as frame of reference is asymmetrical: The identification of objects presupposes a tool for distinction, but not vice versa. With respect to the world, all objects are necessarily partial. They are always objects beside others. Locational schemes, however, may be

designed to capture and differentiate the whole world. They are then "universalistic" in this specific instrumental sense. Locational schemes may be useful or of little help, but they cannot be true or false, hence not claim the same kind of validity like object-spaces.

When geographers refer to space they often fail to distinguish strictly between space as an object beside others and space as a basic locational scheme. Particularly, if space or spatiality should serve as a central notion (in the sense of space and time), the methodological consequences of such a mistake are fatal: There is a considerable risk to take the observation for the object, the category for the item, and semantics for reality. And indeed, the geographic literature is full of examples where "space" (in singular) is treated like an ordinary empirical object. The opposite, though, taking object-spaces or places as locational schemes, is quite unlikely to happen, since the application of various locational schemes will obviously not provide unequivocal results. If geographers want to rely on space or on spatiality as a foundational concept for their discipline – in analogy to "time" for history – it is to their advantage to operate with a notion of space as locational scheme and to be very explicit about it. Object-spaces will of course remain important objects of their empirical study – as for many other disciplines. But it might be wise to call them "real-and-imagined" (Soja, 1996) places, locations, areas, regions and so on.

Also, a deeper inquiry into the history of philosophical attempts to develop a basic epistemological concept of space (Werlen, 1995:141–234) reveals an oscillation between and a mixing of space as object and space as locational scheme. In most cases, however, space was tightly related to the physical world, either as an intrinsic feature of the physical world (object-space) or as a mental tool to order the physical world (locational scheme). Following that line of reasoning, geographers dealing with basic conceptions of space in the context of disciplinary reflection, also tended to restrict space to the physical world (e.g. Werlen, 1995:234–243; Reichert, 1996b; Hard, 1999; Weichhart, 1999), although it was probably never their intention to discredit, exclude or discard purely formal spaces as such.

However, if space is determined to serve as a universal (not necessarily transcendental!) epistemic category, then, ideally, it should be completely formal and empirically empty. Any empirical content would link that category to particularities and to preceding frames of reference, which, by implication, restrict the range of meaningful applications. An example may illustrate the argument: In order to determine an amount of items, the use of purely formal units – numbers – has proven to be very successful. Indeed, precisely because numbers are not related in any substantial way to particular objects, we can apply them to all sorts of entities. Empirically charged measures, say "a spoon full of X", are not universal. In the context of nutrition such a unit may work for X=salt, but it won't make sense for X=calories. Actually, numbers offer a space, which locates amounts of discrete entities. Any space, which should fulfil a general locational function, has to be empirically empty. The distinction

between physical and non-physical aspects in the world is perhaps quite a useful one, yet it is not "natural" or given, but a contingent cognitive tool. Restricting the function of space to locations for physical entities only, as philosophers and geographers often did, means to presuppose another locational scheme, which divides the world into a physical and a non-physical realm. Such a space is not yet the most formal one possible, and its function as foundational epistemic category – "space" in singular – is disputable.

From a purely formal point of view, a locational scheme offers at least two different positions. These could be for instance "here/there" or "present/absent", but, in order to avoid any connotation with the material world, I propose to think of space as the distinction of "either/or", or "0/I". Indeed, the success of informatics is not only due to computing capacities but also to a consequence of the universality of its purely formal binary code. Elsewhere (Zierhofer, 1999; 2002:1369) I proposed to distinguish between a first order and a second order space. The first order space is purely formal and consists of two different "locations". This space offers nothing but the possibility of distinction. Therefore, it serves as a blueprint or template for all subsequent distinctions of "something", that is for all empirically enriched or second order spaces.

The benefit of this distinction between first and second order spaces is to combine a notion of space as fundamental epistemic category, on the one hand, with the infinite empirical richness of particular object-spaces and locational schemes, on the other hand. At this point it is imperative to realize that the function and value of a universal epistemic category rests in the possibility to be applied to contents of any kind, but that this does not imply a claim of universal validity. Only an interpretation of first order space as a contingent cognitive tool – a distinction produced and used in a certain communicative context – would be compatible with a non-representational approach. By consequence, the distinction of first and second order spaces locates itself on the side of second order spaces – it is one among many others. Like any other conception of space, a purely formal space is also basically an instrument that serves certain cognitive purposes, but not others.

I have to bring out a warning here: One might interpret the container as the purely formal distinction between inside and outside – or between system and environment, what systems theory takes as its outset –, thus as a formulation of the first order space. Indeed, container-spaces overcrowd the geographic literature. Most of these containers, however, are treated as an amount of ingredients with mutual relations. Hence, those container-spaces are object-spaces with a certain empirical content, that is second order spaces.

What about time? Often space and time are treated as a couple, which fulfils complementary and similar functions. Usually time locates events and periods. Often, space and time are meant to represent together the individualities and dynamics of the corporeal world. From the formal point of view, however, time is a locational scheme and therefore a form of space. While first order space offers just two sides of

distinction, formal time introduces direction or irreversibility: It makes a difference if one moves from one side of the distinction to the other side or vice versa. That difference, although still a formal one, is an additional distinction. Therefore, formal time is a purely formal second order space. It is constituted by at least two different distinctions. Also, in systems theory, one would call time a second order distinction (Gren and Zierhofer, 2003: 623–625). The relation of space and time (in singular) is thus asymmetric.

If, according to my argument, spaces are regarded as contingent frames of reference, the following questions arise: Where do these frames come from, who is applying them, in what situations, and for what purposes? As "spaces in use" all second order spaces inform in one way or another human activities. These spaces are of course important objects of empirical investigations in human geography and other social sciences. They are even a key to the understanding of activities and the explanation of social structures and processes. This empirical level and its myriads of second order spaces must not be conflated with the epistemological level and its notion of first and second order space, though.

3 Space and society

In general, social theory conceives of the social as a self-constituted and quite autonomous sphere. Whether explicit or implicit, whether as an ontological assumption or as a methodological instrument, the trilogy of social world, subjective world and physical world (Werlen, 1993:31 and 79) is almost omnipresent in the social sciences. Because space is so often paralleled with corporeality in the first instance, the social and the spatial are treated like two related but specifically independent spheres: While in some form space is always given to society, social activities take place in space and thereby shape it. Such might be a summary of the mainstream understanding, which determines the labour division between "core" social sciences, like sociology, cultural anthropology or political science, on the one side, and the "kind of" social science of human geography, on the other side. The former investigate social relations and interactions, the latter deals with their spatiality and spaces (in the sense of territories, landscapes, regions, cities, places and so on).

Taking space as a frame of reference that informs and guides activities (Werlen, 2005), however, implies giving up the traditional separation of society and space. Particularly, non-representational approaches should refrain from assuming a given space "out there", because all object-spaces are necessarily constituted on the basis of some preceding differentiations, codes or semantics. This neither implies the denial nor the confirmation of objective structures. Rather, frames of interpretation are the means through which observers "articulate" their environment. Without the ability to distinguish apples from other items, one will never be able to "see", still less to count apples. Also, the detection of objective structures presupposes a distinction between objective and non-objective data. The conception of preceding frames

of interpretation (or discourses in post-structuralist terminology) means that the observer constitutes her reality. Yet, this does not imply that she would be free to fantasize any reality. On the contrary, constructivist approaches are particularly strong in disclosing the biographical, social and situational contingency, or even restrictedness, of cognitive activities. Usually, reality is conceived as a form of independence and resistance that reveals itself within certain cognitive schemes. If you do not possess a conception of a particular illness, you will never suffer from that illness, but from others, even if it kills you (see Fleck, 1980 with respect to syphilis). An epistemology of interpretative schemes thus does not deny the facticity of an external reality but emphasizes both the active contribution of the observer and her limitations within cognitive processes. On the one hand, spaces as ordering schemes inform and structure interactions among human beings and with their environment – spaces thus constitute society. On the other hand, all interactions are cognitive processes, which reproduce or alter the involved ordering schemes – society thus constitutes spaces. We may conclude, therefore, that in the empirical analysis of the constitution of contingent second order spaces, the social and the spatial coalesce.

Basically, there is no need to reserve second order spaces to human beings. Actually, all agents which operate with distinctions use some kind of space. According to systems theory, social systems (Luhmann, 1995), psychic systems and organic systems (Maturana and Varela, 1987) constitute themselves by distinguishing themselves from an environment. Both object-spaces and spaces as interpretative (and locational) schemes are therefore necessary conditions of living beings. However, machines may also be constructed for applying spaces. A refrigerator, for instance, steers its compressor on the basis of a binary temperature space. This accepted, it is obvious that forms of interactions and their power relations, whether simple routine encounters or complex systems of rule, are also constituted by the spaces of the involved agents.

Since institutions and organizations exist through co-ordinated and rule-guided actions, their structures and regularities presuppose complementary orientations among the individual members. In this sense, organizations are constituted by sets of specific spaces, which distinguish at least an inside and an outside world, elements of an internal structure, networks of related actions, members and non-members, purposes and functions. Usually organizations can only operate through the representation of many physical items and their locations. An enterprise, for instance, functions on the basis of schemes of social hierarchy and functional dependency, on a legal framework, on choreographies of machines, human bodies and raw materials, on settings of work-places and on an implicit understandings of what it means to produce goods or services and to work as an employee of this firm. While all these orderings serve the purpose to make entities of the most different kinds mutually available, only some features of this complex ordering are physical and correspond to traditional geographical notions of space.

Post-structuralist approaches (e.g. Foucault, Derrida), as well as language pragmatics (e.g. Habermas, Lyotard, Rorty), regard discourses as the medium through which social order – institutions, organizations, routines of interaction and other activities – is legitimized and challenged, reproduced and altered. However, an interpretation of discourses as purely verbal interactions, like discussions and debates, would be too narrow because it ignores the performative side of communication and the social meaning of non-communicative actions. For social analysis discourses are particularly interesting because they constantly examine the acceptance of significations and the legitimacy of social orders. Understood in this sense, discourses are also the medium through which systems of rule and their power structures are reproduced, reformed or overturned. Particularly because discourse analysis focuses upon the explicit and implicit, the obvious and hidden (re)production of meaning – often captured by conceptions of significative difference – it may be understood as an analysis of living through spaces and spaces in use.

When the traditional understanding in social science and geography was that social life takes place in space, the question is now how spaces come into existence through social life. The answer has to be more and something else than a "history" of notions of space or of spatial imaginations. The answer offered here radicalises the contingency of space by regarding space as a constitutive element of the reproduction of the social without placing it outside the social. An analysis of spaces (in the sense elaborated here) is at the same time an analysis of social conditions and their power-relations – and vice versa. Insofar as such an analysis discloses the arbitrary presuppositions and assumptions of taken-for-granted or naturalized significations, it demonstrates the contingency of social order and renders it available to political debate – it is thus a form of deconstruction.

4   State and space in modernity

Spaces inform actions. But at the same time they are also outcomes of actions. Discourses create, recreate and alter spaces – and so do institutions and organizations. Although granting all forms of interactions a constitutive role for spaces, their contributions and their influence may vary considerably. Moreover, although social life is basically a global network, within this network some institutions are designed to cut out segments by concentrating and co-ordinating activities in their interior, and by limiting exchange with their environment. Tribes, clans, kingdoms are such typical institutions under non-modern social conditions. In modernity, it is the nation-state that divides the world-society through territorial segmentation into a cluster of similar political and social communities (Taylor, 1994, 1995; Luhmann, 1998). With respect to structures of domination and rule, the institution "state" claims the status of a meta-institution (Zierhofer, 2004). There are other meta-institutions, like language, family or religion. But their dominion is a comparatively

selective and small one. The modern state, however, concentrates on a whole set of regulative competences in itself (e.g. Tilly, 1990; Opello and Rosow, 1999; Brenner et al., 2003).

Like no other institution, the state is constructed and equipped to determine frame conditions for other institutions. States are the ultimate power containers on a territory, usually circumscribed by sovereignty and the monopoly of legal violence (Giddens, 1985). Their constitutions and tribunals are the last legal point of reference, also for international law, supra-national institutions and bilateral contracts. Their legislative and executive bodies are the last instance of the political representation of their population. States edit money, determine tax systems and tax rates, approve diploma; they build networks of infrastructure and offer services in administration, health and education. They control the exploitation of natural resources and sometimes even operate production plants. Through colonization, the interstate-system was stretched across the planet so that today on the global level only states are a valid form of political sovereignty and viable addresses, whereas within the states, the vast majority of addresses are controlled and defined by the internal institutions of the state. This is not to deny that the position of the state in the political sphere and some of its functions are constantly challenged by a broad variety of competing institutions, like TNCs, NGOs, social movements, supranational organizations (UN, WTO, EU), criminal and terrorist networks and so on.

In order to fulfil its numerous regulating, sanctioning and representative functions, each state has to set up frames of reference and systems of observation, which make the target items available to its sub-institutions. States create internal orders which encompass not only the human individuals and their interactions, but also all other relevant entities, whether a dangerous virus or valuable mineral resources. Although most entities are rendered available already by the semantics of everyday language, the decision to follow these classifications or not, to alter them or substitute them by others, rest by and large with the institutions of the state. Therefore, in the end by operating with certain spaces the state and its administrative bodies constitute many entities. These spaces not only constitute hierarchical and functional orders, but also the items that fill these orders with life. Sub-institutions of the state define, for instance, what counts as citizens and subjects, as goods, as property transactions, as humans, as living or dead bodies, as children or adults, as tax payers, as soldiers, as married couples, as crimes, as territory, as legal or illegal organizations, as profession, as work, as money, as correct units of measurement and so on. The list is nearly endless.

By regulating and standardizing many activities and realms of social life the modern state contributes considerably to a certain homogenisation of ways of coping with problems and of carrying out tasks. In analogy to the concept of economic styles one might also speak of politico-administrative styles. Aspects like centralism versus federalism, individualism and liberalism versus social- and welfare-economy, corruption versus correctness, distrust or faith in

authorities, sense of responsibility versus opportunism, durability or short-term solutions, pomp versus understatement and similar features are at least quite common dimensions by which people compare everyday life in various states. Moreover, states develop a considerable energy to shape the culture of their population by establishing national languages, historical myths, geographical imaginations and many other forms of affirmative self-representation through the curricula of the school system, arts and symbolic architecture. Even if willingly conceding that the state not only coins money, but also its subjects, in the end the state is constituted by activities of theses subjects who pursue different interests and who struggle for dominance. Through that recursive relation of ordering activities the state functions not only as a cultural container but also as a producer of culture.

However, hitherto the debate on the relation between state and nation was framed by the implicit assumption of independence of state and culture. Culture was associated with the way of life of a people, particularly its language and religion. Often, particularly in the German context, the term "nation" referred to this connection of culture and population. Consequently, the problem of nation forming was then seen as the task to match the territories of a culturally homogeneous populations and a state. Although Ernest Renan (1996 [1882]) and particularly Benedict Anderson (1983) introduced non-culturalist notions of nation and identified the state as a major factor for the formation of national imaginations and self-identification, the fact that the state is able to shape and even manage the culture on its territory to a degree comparable to the importance of language and religion, did not receive sufficient theoretical consideration. Rather, because of the danger of implicitly transporting nationalisms, states are discredited as cultural containers and the constitutive role of its institutions is by and large ignored by social theory.

From a geographical point of view it is particularly interesting that states not only regulate the classifications of activities and things, but also have to locate them physically, in order to control them as concrete individual bodies and their interactions. In order to fulfil this task, individual items and locations are often represented by a name or a serial number, such as in passports or addresses (Klüter, 1986, 1999). A second, often "hidden" code translates these designations in territorial locations for a given moment. In addition, for its internal operations the institutions of the state have to operate with systems of segmentation, of which some also have to be related to physical properties. In this sense, for instance, the levels of community, province, state and the "supranational" level usually organize the administrative system of a state territorially.

Like these scales other systems of physical differentiation and location, including the scientific systems of representing physical time and space, are also not naturally given, but the outcome of human activities and the instruments involved. To the degree that states create mutually compatible or at least "translatable" frames of reference, they make subjects, activities and things available for each other. Therefore, we

should not only regard spaces as instruments for localization, but also as tools to extend the range of networks of interaction and therefore to foster globalisation (Zierhofer, 2004). No other institution eases global contacts and mobility of persons, goods, information and services as much as the state by guaranteeing standards for systems of representation. It is thus above all that the state creates spaces for certain purposes – only one of which is to let social life take place in a physical space in order to control it.

5   Conclusion

"Space" is an expression with a broad spectrum of meanings and functions. With respect to human geography, however, two of them are of paramount importance: Space as a part of the world that has specific features and in which certain activities take place; and space (in combination with time) as a frame of reference to locate persons, activities and other entities. The relation between these two types of spaces appears asymmetric: Object-spaces are empirical entities and presuppose spaces as locational schemes, but not vice versa. A distinction of a purely formal first order space and an infinite manifold of second order spaces, which are enriched with other distinctions and empirical content, permits one to integrate the whole spectrum of potential significations and functions of "space" in a consistent way.

Taking the stance of non-representational theories, which operate without transcendental epistemic categories, the issue of "who uses what kind of space for what purpose" arises. The argument of this paper is that all agents co-ordinate their activities by applying frames of reference, thus spaces. Therefore, the analysis of second order spaces coalesces with the analysis and deconstruction of the constitution of meaning and the orientation of actions. Among the institutions which structure modern life, the state plays a dominating role. It is designed to be sovereign and to regulate the frame-conditions of most other institutions, or even to rule them directly – if "necessary" by violence. In order to fulfil its tasks, the state operates with many sets of co-ordinated second order spaces, of which some also represent physical reality. In the course of these activities, spaces constitute many entities, some of which are human subjects and their power-relations.

In contrast to most of traditional and contemporary mainstream geography, the perspective elaborated here does not presuppose an ultimate or universal space. Therefore, it cannot presuppose a distinction between the social and the spatial, but has to set out from the contingent frames of reference of actors and investigate empirically their usages. Of course, it may seem odd to call all kinds of distinctions a space, but this is not the point of the argument. Rather, it is important to acknowledge that – from the point of view of non-representation theories – there is no given space at hand, but only meaning, which is processed as social life. Particularly, the interpretation of spaces as devices ordering interactions, opens an interesting path to the analysis of power structures. This perspective thus offers a way to integrate social and spatial analysis, as well as a variety of notions of space in a coherent way.

References

Anderson, B.: Imagined Communities, Verso, London, 1983.

Brenner, N., Jessop, B., Jones, M., and MacLeod, G. (Eds.): State/Space, Blackwell, Oxford, 2003.

Crang, M. and Thrift, N. (Eds.): Thinking Space, Routledge, London, 2000.

Curry, M.: On Space and Spatial Practice in Contemporary Geography, in: Concepts in Human Geography, edited by: Earle, C., Mathewsan, K., and Kenzer, M. S., Rowman and Littlefield, pp. 3–32, Lanham Md, 1996.

Giddens, A.: The Nation-State and Violence, Polity Press, Cambridge, 1985.

Gregory, D.: Geographical Imaginations, Blackwell, Oxford, 1994.

Gren, M. and Zierhofer, W.: The unity of difference: a critical appraisal of Niklas Luhmann's theory of social systems in the context of corporeality and spatiality, Environment and Planning A, 35, 615–630, 2003.

Foucault, M.: Les mots et les choses, Gallimard, Paris, 1966. [English: Foucault, M.: The order of things: an archaeology of the human sciences, Pantheon Books, New York, 1971.]

Fleck, L.: Entstehung und Entwicklung einer wissenschaftlichen Tatsache, Suhrkamp, Frankfurt a. M., 1980. [English: Fleck, L. and Trenn, Th. J. (Eds.): Genesis and Development of a Scientific Fact, University of Chicago Press, 1981.]

Hard, G.: Raumfragen, in: Handlungszentrierte Sozialgeographie. Benno Werlens Entwurf in kritischer Diskussion, herausgegeben von P. Meusburger, S. 133-162, Franz Steiner Verlag, Stuttgart, 1999.

Klüter, H.: Raum als Element sozialer Kommunikation, Giessener Geographische Schriften, 60, Geographisches Institut der Justus Liebig-Universität, Giessen, 1986.

Klüter, H.: Raum und Organisation, in: Handlungszentrierte Sozialgeographie. Benno Werlens Entwurf in kritischer Diskussion, herausgegeben von P. Meusburger, S. 187–212, Franz Steiner Verlag, Stuttgart, 1999.

Lefebvre, H.: The Production of Space, Blackwell, Oxford, 1991.

Luhmann, N.: Social Systems, Stanford University Press, Stanford, 1995.

Luhmann, N.: Der Staat des politischen Systems, in: Perspektiven der Weltgesellschaft, edited by: Beck, U., pp. 324–380, Suhrkamp, Frankfurt a. M., 1998.

Maresch, R. and Werber, N. (Eds.): Raum Wissen Macht, Suhrkamp, Frankfurt a. M., 2002.

Maturana, H. and Varela, F.: The Tree of Knowledge, Shambala, Boston, 1987.

Miggelbrink, J.: Der gezähmte Blick, Beiträge zur Regionalen Geographie, 55, Institut für Länderkunde, Leipzig, 2002.

Opello Jr., W. and Rosow, S.: The Nation-State and Global Order, Lynne Rienner, London, 1999.

Reichert, D. (Hrsg.): Räumliches Denken, Vdf, Zürich, 1996a.

Reichert, D.: Räumliches Denken als Ordnen der Dinge, in: Räumliches Denken, herausgegeben von: Reichert, D., S. 15–45, Vdf, Zürich, 1996b.

Renan, E.: Was ist eine Nation?, Europäische Verlagsanstalt, Hamburg, [1882] 1996.

Rorty, R.: The Mirror of Nature, Princeton University Press, Princeton, 1979.

Said, E.: Orientalism, Routledge and Kegan Paul, London, 1978.

Simonsen, K.: What kind of space in what kind of social theory?, Progress in Human Geography, 20, 4, 494–512, 1996.

Soja, E.: Thirdspace, Journeys to Los Angeles and Other Real-and-imagined Places, Blackwell, Oxford 1996.

Taylor, P.: The state as container: territoriality in the modern world-system, Progress in Human Geography, 18, 2, 151–162, 1994.

Taylor, P.: Beyond containers: internationality, interstateness, interterritoriality, Progress in Human Geography, 19, 1, 1–15, 1995.

Tilly, C.: Coercion, Capital and European States, Blackwell, Oxford, 1990.

Thrift, N.: Steps to an Ecology of Place, in: Human Geography Today, edited by: Massey, D., Allen, J., and Sarre, P., pp. 295–322, Polity Press, Cambridge, 1999.

Weichhart, P.: Die Räume zwischen den Welten und die Welt der Räume, in: Handlungszentrierte Sozialgeographie. Benno Werlens Entwurf in kritischer Diskussion, herausgegeben von P. Meusburger, S. 67–94, Franz Steiner Verlag, Stuttgart, 1999.

Werlen, B.: Society, Action and Space, Routledge, London, 1993.

Werlen, B.: Sozialgeographie alltäglicher Regionalisierungen 1: Zur Ontologie von Gesellschaft und Raum, Franz Steiner Verlag, Stuttgart, 1995.

Werlen, B.: Regions and Everyday Regionalizations, in: B/ordering Space, edited by: Van Houtum, H., Kramsch, O., and Zierhofer, W., pp. 47–60, Ashgate, Aldershot, 2005.

Zierhofer, W.: Die fatale Verwechslung, in: Handlungszentrierte Sozialgeographie. Benno Werlens Entwurf in kritischer Diskussion, herausgegeben von P. Meusburger, S. 163–186, Franz Steiner Verlag, Stuttgart, 1999.

Zierhofer, W.: Speech acts and space(s), Environment and Planning A, 34, 8, 1355–1372, 2002.

Zierhofer, W.: "Your passport please!", in: Space Odysseys, edited by: Baerendholdt, J. O. and Simonsen, K., pp. 101–117, Ashgate, Aldershot, 2004.