Concepts of Space in Middle-earth's Landscapes or the Potential of Fantasy and Film for School Geography

Abstract

Peter Jackson's Oscar-winning *The Lord of the Rings* trilogy followed in the footsteps of J.R.R. Tolkien and the defining importance of his novel for fantasy literature. Film and literature have certainly both been imported into everyday educational life all around the world. Fantasy arguably has not. Thus, this paper argues that supposedly non-educational (fantasy) films can in fact be used effectively for educational purposes if educators view them through their individual scientific – in the case of this essay geographical – glasses. I seek to demonstrate my point by taking Peter Jackson's filmic interpretation of J.R.R. Tolkien's *The Lord of the Rings* as a starting point and by bringing it together with the fundamental geographical concept of space.

After establishing a theoretical basis for using film (as medium) and fantasy (as genre) in the classroom, the second part of this paper will focus on a discussion of strategies to adapt Tolkien's Middle-earth for geography education. To embed these discussions within a geography teaching frame, I will introduce various perceptions of geographical space: from the early – yet not outdated – concept of "material space" (e.g. through the concept of "ecozones") and "systematically ordered space" (e.g. through the "Central Place Theory") to a more constructivist perspective on spaces (e.g. through concepts of "individually perceived space" or "socially constructed space"). In doing so, various geographical and non-geographical educational media such as maps, graphs, text information and drawings from and of Tolkien's oeuvre will be used to enhance Jackson's *The Lord of the Rings* for the classroom and steer students through Middle-earth's landscapes, while changing their spatial perception on the way. Likewise, teachers and educators are provided with an example to unlock the educational potential of film and fantasy for their classrooms.

1 Introduction: Objectives of this paper

"Why don't we watch a film, Mr Keating?" – this question seems to re-echo every time during the school year when holidays are drawing closer. While both teachers and pupils tend to be willing to grasp the opportunity of responding to such a request in light of the nearing break, they most likely disagree on the

genre let alone the actual film. Teachers, on the one hand, favour documentaries on recently discussed topics; pupils, on the other hand, tend to unanimously agree on the latest Hollywood smash hit picture. Being a geography educator and film lover myself, I would argue that there is a wealth of films and series a teacher might choose from while still ensuring a balance of information and entertainment appropriate for the classroom.

Hence, this paper argues that supposedly non-educational films can in fact be used effectively for educational purposes if teachers view them through their scientific – in this case geographical – glasses. I seek to demonstrate my point by taking Peter Jackson's filmic interpretation of J.R.R. Tolkien's *The Lord of the Rings* as a starting point and by bringing it together with the fundamental geographical concept of "space".

After establishing a theoretical basis for using film (as medium) and fantasy (as genre) in the geography classroom, the second part of this paper will focus on a discussion of strategies to adapt Tolkien's Middle-earth for geography education. To embed these discussions within a geography teaching frame, I will introduce various perceptions of geographical space: from the early – yet not outdated – concept of "material space" (e.g. through the concept of "ecozones") and "systematically ordered space" (e.g. through the "Central Place Theory") to a more constructivist perspective on spaces (e.g. through concepts of "individually perceived space" or "socially constructed space"). In doing so, various geographical and non-geographical educational media such as maps, graphs, text information and drawings from and of Tolkien's oeuvre will be used to enhance Jackson's *The Lord of the Rings* for the classroom and steer students through Middle-earth's landscapes, while changing their spatial perception on the way. Likewise, teachers and educators are provided with an example how to unlock the educational potential of film and fantasy for their classrooms.

2 Film as an educational medium! Fantasy as catalyst for learning?

While the value and potentials of the mass medium film for use in educational purposes has been acknowledged since the very beginning of this medium when

the brothers Lumière created an international stir with their moving pictures in the late 19th century, the first purely educational films began to emerge some years later in 1910 with *The Minute Men* or *Life History of the Silk Worm* (Saettler 96-99). Not much later, in 1913, renowned inventor and progressive Thomas Edison confidently uttered his belief that "[it] is possible to teach every branch of human knowledge with motion picture [and that our] school system will be completely changed in ten years" (Saettler 98). And yet, contrary to Edison's predictions, modern-day education does not orbit around film: When different journals for geography education are tested for specific keywords in a purely quantitative approach, German journals show only ten,[1] the English-language *Journal of Geography* 27 entries for "film" in issues published since 1980.[2]

In order to be able to talk about modern film further on, the terminology should be established. Film – both with respect to its origins and a contemporary understanding of this mainstream medium – is constituted of three overlapping spheres, which had been developed by the late 19th century: For one thing, it deals with authentic reality. This also includes any form of a vaguely plausible reality: a secondary world like Middle-earth, for example, is not real per se; however, it is realistic and therefore authentic in its own ontology. Otherwise fictional films could not be considered part of the definition. Second, films use a narrative structure; movies tell stories. Even documentaries use literary devices in order to establish some form of narration. Narrators guide the recipient through the mass of information. Third, films use scenes, i.e. sequences of continuous action, which convey a sense of live broadcast (Faulstich 17-18). Each of these three characteristics by themselves is not radically new for a medium. Yet together, they create the pillars of this undisputedly popular mass medium. Moreover, from an educator's perspective, each of them can easily be linked to classroom teaching situations: Teachers always try to "bring reality" into the classroom by using real problems, real situations and real topics. They also try to weave a continuous thread that runs through their lessons, thereby establishing a narrative structure that highlights information relevant for their students' learning processes and omits anything not relevant (Schekatz-

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1 The journals under scrutiny are *Praxis Geographie, Geographie heute, Geographie aktuell & Schule* (and its predecessor), *Zeitschrift für Geographiedidaktik and Geographie und ihre Didaktik* (since its first issue).
2 The following keywords were used: "film", "movie", "video", "DVD", "television (TV)", and their German equivalents. The entries were not tested for appropriateness with regard to non-educational films, however.

Schopmeier 21-26).[3] And finally, teachers can only focus on a very specific and often limited fragment of information, which might be shown in just a few scenes. Due to these similarities, films as a medium can be assumed to be appropriate for the classroom.

In a didactic sense, films are first and foremost what has already been established, a medium. Media, in turn, can be described as carriers of information and are usually used "where genuine encounters are not possible"[4] (Brucker, "Womit unterrichten" 64). Since genuine encounters between students and an educationally relevant subject matter are indeed rarely possible – you cannot simply bring, for example, a volcano to the classroom – media play a major role inside of classrooms, potentially creating communication opportunities for teachers and students. However, educators often struggle with other problems. At first, viewers must overcome their expectations to be solely entertained when watching a movie. Moreover, teachers must settle technical and organisational issues: how to play the film, where to borrow the equipment (e.g. player, speakers) from etc. Only some schools offer broadband wifi connections in their classrooms, while others do not, which may complicate matters. What is more, films require at least a modest degree of media literacy: students must be aware of a film's bias and their awareness needs to be raised in regard to the fast-paced succession of images and sounds therein. The former is particularly true for the teacher who seeks to include telecinematic materials in their lessons. In addition, a teacher will have to work with what they are provided with: a film cannot be changed or adjusted by the teacher according to their didactic wishes. On the contrary, teachers must either aimfully choose a film that can be smoothly and efficiently integrated in their lesson plan or change their own plans in accordance with a certain film's content, message, structure or potential interactivity (Wüthrich 153).

When it comes to school audiences, moving images show their potential in other aspects, nonetheless. First of all, motivation plays a major role in the process of learning (Krapp, Geyer, and Lewalter 209). As teachers we may encourage our

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3 This is also known as "Didaktische Strukturierung" and forms a crucial part in developing or improving lessons according to the idea of "Didaktische Rekonstruktion" which again tries to consider both the perspectives of the individual learner and each discipline's requirements. For more information see Kattmann.
4 The original German reads: "wo die originale Begegnung nicht möglich ist".

students to watch films for their explicit visualisations on the one hand; on the other hand, films depict a certain degree of the real world and allow for this reality to enter the classroom. Furthermore, films can usually show dynamic processes much better than other – more static – media may be able to. While their high pace might make it more difficult for some viewers to process the information presented, films also offer the chance to rewind and pause but also interlace sound and imagery (Brucker, "Klassische Medien kreativ nutzen" 180).

It is this interlacing Allen Paivio underlines in his "Dual-Coding Theory". According to him, there are two different codes for representing information: the verbal and the imaginal. While verbal code (e.g. language) can stand by itself, imaginal code always includes verbal code. When an image comes to one's mind, most persons will process and potentially remember it both visually and verbally. People will verbalise the visual representation to a certain degree. Therefore, imaginal types of media can enhance memorising information and retrieving this memory at a later point in time (Clark and Paivio 151-156, 165-166; Paivio). Research by Beentjes and van der Voort from 1993 supports Clark and Paivio's theoretical assumptions: students would remember information better when they had extracted it from films rather than print media (Nieding and Ohler 389-390). Much of the potential of films is lost, however, when they are only used passively. The whole process of watching must be enriched by a process of working with the information given (Biddulph, Lambert, and Balderstone 195). This holds particularly true for landscapes in films which will be our main object of discussion later on. Carl argues that

> [w]hen reading landscapes in film, it is important to distinguish between the landscape prior to filming and the 'product' that we view in the film. Therefore, different layers of meanings, texts and symbols have to be acknowledged as well as the intention of the filmmaker to translate landscape into film; all of which can alter the pre-filmed landscape. In detail, we need to consider how and why the landscape was transformed. This leads to the mise-en-scène (in which way the image was shot and what was chosen to be the image in film), montage, sound and the narrative structure in which the landscape is portrayed. (33)

Non-educational feature films equally call for a much more active form of watching: "Seeing does not mean perceiving" (di Palma 48); only active engagement on the part of students might develop a deepened understanding of geographical content and enhance geographical knowledge. Here, media literacy also includes

that students understand the use of camera angles, lighting, colour, exposition and its sequence of images; they learn to interpret cinematographic language. Likewise, they will gain insights into cultural parameters which constitute film and learn to see its complexities as well as its (over-)simplifications (di Palma 48-49). Since films tend to exaggerate, they might also amplify geographical topics (Wilhelmi 57). In addition, narrative cinema allows for viewers to see the world from the very beginning of the film unlike literature, which must establish the frame step by step, word by word, over dozens of pages (Aitken 105). Thus, non-educational films can offer a variety of opportunities for educational purposes when their challenges are addressed, and a unique way to gather information, especially for geographers, as Lukinbeal remarks:

> Film offers geographers a realm of information which combines multiple perspective[s], imagination, art, objective and subjective qualities, geographical information and geographical imagination. Films may also provide one way to explore personal and cultural perceptions and attitudes towards landscapes. (5)

Furthermore, non-educational films are part of popular culture; nowadays, they often constitute only one small cog in the huge marketing machinery, which may involve books, video and board games, toys and other consumables but also landscapes and with them touristic destinations (Carl 42-43):

> Our modern civilisation, like all civilisations before it, has settled around a set of myths and legends as the basis of its culture. They are more complex, more interesting, more sophisticated, and with a much richer interaction between creators and fans than you might think. Far from being mere films or comic books, they are whole extended fictional universes, entirely self-consistent, with deep histories, hundreds of characters, and even a form of theological scholarship. (BBC)

When di Palma argues fictional films to be easier to deconstruct as they lack the pseudo-objectivity of documentaries (48) or for them being distinct by their "ontological rupture" (Fowkes 5), fantasy films should be even more deconstructible. They not only lack objectivity but openly enunciate their own fabricated reality. Cinematic images and their semiotic landscapes are reconstructed by their viewers; they assign meaning to the images (Aitken and Zonn 7-8). This "reminds us why fantasy films may be particularly rich: they excel in employing multi-faceted symbols that engage viewers on many levels" (Fowkes 173).

Whereas film and literature have both been imported and woven into everyday educational life all around the world, fantasy, arguably, has not. Using the same approach as before with the keyword "film", the results for "fantasy"[5] indicate only two (German journals) and six (English-language *Journal of Geography*) instances, respectively. Altogether, both film and fantasy – and especially the latter – can be considered a niche at best in our educational world. This is startling, as fantastical narratives have in fact been a well-established genre since the beginnings of film-production in the early 20th century. George Méliès' *Le Voyage dans la Lune* can be regarded as not only the first feature-length film with its barely double-digit running time but also the forerunner of modern film in general and modern fantasy films like *The Lord of the Rings* in particular (Faulstich 19-21). From a psychological standpoint, this also seems to be peculiar since it is especially genres with an arc of suspense (e.g. action, adventure or horror films) which activate their viewers on a cognitive level (Schweizer and Klein 160-161). The crux for educational use, however, lies in an emphasis on entertainment regarding these genres: "Fantasy films (like all mainstream movies) are first and foremost designed to entertain" (Fowkes 172). Thus, it is more challenging to use films in a learning environment than a cinema hall. Students must acquire the competence to draw information from these films first – as already pointed out before. Certainly, fantasy's inherent charm makes it all the more obvious for modern geographical education: "looking at the familiar from an unfamiliar perspective" (Worley 270). It is the unfamiliar perspective on Middle-earth which we shall zoom in on in the following.

3 *The Lord of the Rings* in geography education

A milestone for the fantasy film genre, Peter Jackson's *The Lord of the Rings* trilogy followed in the footsteps of J.R.R. Tolkien and his defining importance for fantasy literature (Fowkes 134). The vast scope of Tolkien's closed world with its own immanent history, languages and geography can be studied almost as thoroughly and coherently as the physically existing earth in which we live. Since fantasy does not entail unrealistic but rather unreal pieces of information and, hence, follows the rules which apply for reality as well, Middle-earth might

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5 The following keywords were used: "fantasy", "narrative (text)", "fairytale", "fiction", "fictional (text)".

be exactly the right thing when one seeks to integrate a fantastical basis into real-life geography education: It was Tolkien's "wonder and delight in the Earth as it is, particularly the natural earth" (Resnick 41) as well as his belief that a secondary world must not differ all too much from its primary source world which have led to an "inner consistency of reality" (*TL* 48). This consistency is visible throughout *The Lord of the Rings* (Fonstad ix):

> Northward the dale ran up into a glen of shadows between two great arms of the mountains, above which three white peaks were shining: Celebdil, Fanuidhol, Caradhras, the Mountains of Moria. At the head of the glen a torrent flowed like a white lace over an endless ladder of short falls, and a mist of foam hung in the air about the mountains' feet. (*FR* 347)

While Tolkien applies many descriptions of his world, only Jackson's visualisation can instantly offer access to it and prompt a complex network of individual images (Pinkas 145). Jackson brilliantly succeeds in rebuilding Tolkien's detailed world and in populating it; his world appears consistent and understandable (Butler 80-84). Landscape plays a major and active role within this world and the narrative of the films – not only as a background behind the story but also as meaningful environment that influences the characters (Carl 150). Nonetheless, Middle-earth's geography is fictitious and potential geographical topics within it are detached from reality. This, however, does not have to be a disadvantage for pupils might be able to think outside the box more easily when focusing on Middle-earth: "It feels familiar and nonetheless not quite the same" (John Howe on Jackson, *FR* disc 1). This also comes in handy when the teacher introduces rather abstract ideas like the inherently geographical concept of spatial perception, which I will present in the upcoming section; I will do so by choosing Tolkien's world and the images evoked through Jackson's films as my setting.

4 Spatial perception: everywhere and nowhere

Spatial perception or the perception of space is a key concept of geography and can be described as part of each geographer's conceptual content knowledge (Biddulph, Lambert, and Balderstone 143; Mittelstädt 140; L. Taylor,

9).[6] The German Geographical Society emphasises its pivotal position in geographical curricula as follows:

> Space, as well as time, is an existential aspect of our lives and it is therefore urgently necessary to consider it in detail. The ability to orient oneself spatially in different ways is therefore an important geographical competence, going well beyond the possession of basic topographic knowledge and serving as the foundation for the development of further geographical competences. However, students do not only acquire spatial orientation competence, but also analyse regions of the Earth at different scales, […] from different perspectives and with regard to various problems. In this way, they acquire fundamental regional geographical knowledge about regions, nations and groups of nations as well as the potential to develop a considered awareness of their home country, awareness as Europeans and cosmopolitan attitudes between the global and the local. (Deutsche Gesellschaft für Geographie 6)

Yet, each definition of the concept is very limited due to the wide array of geographical fields which all choose alternative approaches (Jackson 199). Accordingly, "space can be conceptualised radically different and applied in totally different ways depending on the scientific focus" (Seebacher 65).[7] Thus, these differing concepts are rarely amalgamated. Merging them nonetheless, might lead to epistemological or methodological problems (Seebacher 66). Hence, I will introduce only two variants of the concept and will do so sequentially: "space" versus "place" and Wardenga's four concepts of space.

4.1 Spatial perception: space versus place

This chapter will focus on the distinction between "space" and "place" as they – according to Tuan – "together define the nature of geography" ("Humanistic Perspective" 133; *Experience*). I would argue that they cannot even be defined satisfyingly without involving the other (Cresswell, "Space and Place" 55). Space, to begin with, has constituted a central aspect of geographical science for a long time. Yet, it cannot be reduced to its connotation of emptiness, which it shows

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6 Geographers do not necessarily agree on the terminology. In German-language geography "space" and "place" are often translated as one: "Raum". Furthermore, geographical concepts of space do not necessarily align with non-geographical ones, see Christine Vogt-William's essay in this volume, in particular chapter 5 "Liminal green "Othered" spaces". For more information on different approaches and the general geographical discussion about space and place see Seebacher (and here in particular pages 67-68) and Köck.

7 The original quote reads "[…] dass 'Raum' als Konzept höchst unterschiedlich gedacht wird und je nach Forschungsperspektive in völlig unterschiedlicher Weise […] eingesetzt werden kann."

in everyday speech and has been in existence since Plato. According to Newton and Leibniz space does not necessarily relate to emptiness but rather to a form of reality that is objectively measurable (Jonietz 20-21). Space in films can be visible through the landscape, for example. However, landscape in this sense is limited to a minor role as a mere setting that is somehow interchangeable (Carl 32).

> At one level, the space created by film is simply the frame within which a subject is located, and twenty-four of these frames pass before our eyes every second. This space enables the subject of the film to unfold in a variety of ways that may be controlled by the filmmaker. More than neutral space, however, these shots demand to be read as real places with their own sense of geography and history. (Aitken and Zonn 15-16)

The Shire, for instance, is described in many a material detail – verbally in Tolkien's books, visually in Jackson's films. Its perception transcends the physical description: it rather conveys a "sense" of the Shire: Its landscape seems inviting, harmonic and reassuring. It feels like home (Carl 62-63). Here, landscape has a more integral part in the narrative of the film and transforms the formerly known space into a place (Lukinbeal 68). Place, in short, "is a space with attitude" (P. Taylor 10). *The Lord of the Rings* uses landscapes much more actively and attributes certain features to these places (Carl 32). Landscape is thereby endowed with a certain purpose: "Place is a meaningful site that combines location, locale and sense of place" (Cresswell, "Place" 169).[8] While "location" can be defined by the measurable coordinates of a place, "locale" includes its surroundings, e.g. buildings, trees or specific areas. "A sense of place", however, adds emotional impressions to an otherwise objectively perceivable space. These emotions do not necessarily have to be distinct amongst individuals but can in fact be shared. It is especially this sense of place which is widely used in fantasy films and novels (Carl 33; Cresswell, "Place" 169-170) and may open a discussion of diegesis in *The Lord of the Rings* – and films in general. For instance, to what extent does Jackson's score change the visuals on an extradiegetic level? When do you see the subjectivity of the *The Lord of the Rings* otherwise stable and homogenous yet impossible world? Does this subjectivity lead to an instability

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8 For more information on how Tolkien has imbued his locations with locale and a sense of place see authors Wayne G. Hammond and Christina Scull in their art collections (*Hobbit; Lord of the Rings*). I find the development of Rivendell or Hobbiton especially noteworthy.

of the world (Pinkas 148-151)? Furthermore, places cannot exist without people (or hobbits, elves, dwarves etc.). Since places carry meaning for the creatures that inhabit them, they have been named: their names imply subjective, personal or collective pictures and connotations (Uhlenwinkel 182-187; on place names also cf. Tober and Traxel in this volume).

Categorisations of space and place are not cast in stone as already mentioned. Spaces, for instance, can turn into places when people begin to integrate them into their everyday lives. Individuals connect spaces with their experiences so that they eventually develop associations (Cresswell, "Place" 169-170). *The Lord of the Rings* and *The Hobbit* may have transformed many of their viewers' perspectives on New Zealand from being a mere space (with landscape) into being an actual place (of meaningful landscape). Experience may add another crucial factor in changing space into place: through kinaesthetic familiarity. There are specific environments through which individuals can move without thinking about where to put their feet; they are familiar with the place around them. Thus, place can be both constructed actively when attributing meaning to a space and experienced in unconscious ways as well (Cresswell, "Space and Place" 56).

Both space and place are visible in *The Lord of the Rings* in many different scenes and with regard to many different perspectives. When Frodo first learns about his quest and its purpose, i.e. to throw the One Ring into the fires of Mount Doom, he only begins to give meaning to the route to and into Mordor. Up until that moment, it had been but a distant location irrelevant for his life. But now, the space between his home and his goal becomes a burden, and hence a place (*FR*). Likewise, Gandalf hesitates to enter the Mines of Moria. He knows of its meaning which becomes visible in the many names given to this place: Halls of Durin, Khazad-dûm, Dwarrowdelf, Hadhodrond or Phurunargian (*FR*).

Not only the characters of *The Lord of the Rings* distinguish between space and place, also the viewers (or readers) do. Landscapes in *The Lord of the Rings* are usually used as places rather than spaces when they are described or visualised: dark landscapes, e.g. Mordor or Isengard (at least after Saruman's defection), imply lifelessness, destruction and – more generally – evil, whereas bright landscapes are full of sound, lush nature and good forces (Carl 61-70). Peter Jackson used meaningful places even when the spaces did not carry this

meaning by themselves: he changed, pre- or post-edited and ultimately distorted certain filming sites, e.g. the Shire – as I will discuss later on in more detail – in order to transport the intended associations (Carl 62-64). Probably even more meaning is infused into Mordor in its video game adaptation in *Middle-earth: Shadow of Mordor*. There, Mordor is incorporated much more focally and from a different perspective, featuring the more fertile Núrn and the bleak Udûn as in-game locations, while the Plateau of Gorgoroth is merely visible in the background. Native New Zealander and Weta Workshop Creative Supervisor Richard Taylor sums up different viewpoints on one and the same landscape when he says: "The sad thing about a lot of the sceneries in these movies is a lot of the world's population will think there's some clever piece of digital effect when actually they're just real locations around the country" (Jackson, *TT* disc 1 around 01:20 with creation design commentary on).

4.2 Spatial perception: four concepts of space

Sometimes overlapping, sometimes different from the aforementioned discussion between space and place, there is another element of geographical conceptual content knowledge that deals with different approaches to spatiality: Wardenga's four concepts of space.[9] They are regarded central in German geography education, e.g. by the Arbeitsgruppe Curriculum 2000+, and relate to changing core views on space in the history of this discipline. Here, Wardenga distinguishes between four concepts of space: material space, systematically ordered space, individually perceived space and, finally, socially constructed space (Deutsche Gesellschaft für Geographie 6; Wardenga, "Räume"; Wardenga, "Raumkonzepte" 8-11). While the former two concepts see space as a real, material geographical space, the latter two follow a perception-based stance. Nonetheless, all four concepts are accepted in geographical discussions but may lead to a different range of topics (Kaminske 21-25). Accordingly, they are illustrated in the following with regard to specific geographical contents within and surrounding Middle-earth.

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9 For purposes of misleading translations, only the term "space" will be used when referring to Wardenga's list of concepts. See also the Deutsche Gesellschaft für Geographie (6).

4.2.1 Material space

Geography has seen itself as a scientific discipline that defines its raison d'être by space itself. Alfred Hettner had introduced this idea well before it began to gain popularity in the late 19th century when an increasingly complex and extensive world made it necessary to present information in more concise ways. Regional geography has ever since approached spaces by defining and specifying them and then to describe their geographical contents. The concept of space used to be understood and applied as if it were a very restricted container for holding information which again would be constituted of the material, i.e. a measurable and openly perceivable world. Space would include natural (e.g. rock formations, climate, biota), anthropogenic (e.g. people, cities, infrastructure) and every other physically present detail without further reflection (Wardenga, "Räume" 47-49; Wardenga, "Raumkonzepte" 8-9). The focus was on location and locale without attaching sense.

When regional geographers described the uniqueness of certain landscapes as a specific container, they applied the concept of material space which can be described as a rather static piece of landscape. Likewise, Peter Jackson – as much as many other directors – regularly uses shots of static landscapes as openers for entire scenes as is visible in the collage of stills (see Figure 2). It is such shots that show a particular potential for the classroom (Wardenga, "Raumkonzepte" 9) and their abundance bears upon Tolkien's storytelling, in which a plethora of sceneries unfolds over the course of events, e.g. Hobbiton's green hilly countryside, the snow-capped Misty Mountains or the swampy Dead Marshes (Carl 59). Tolkien seems to have been very keen on delivering primary world geography to his Middle-earth by not only introducing landforms, vegetation etc. but also by creating entire ecosystems that show the dynamic interaction of these elements (Fonstad 179).
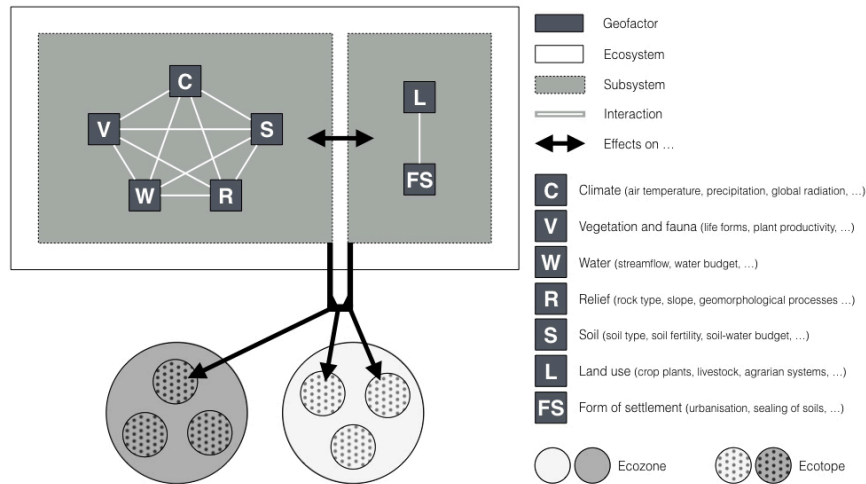
Figure 1: Relation between geofactors, ecosystems, ecotopes and ecozones (Bailey, *Ecosystem* 41-50; Engelmann and Scholz 9-10; Schultz 23-24)

In the classroom, the footage of such extraordinarily marked landscapes – interwoven with descriptions voiced by the narrator or the characters – can be analysed by adhering to the so-called concept of "ecozones".[10] By ecozones geographers generally refer to large-scale areal representations of ecosystems that are subject to geofactors such as climate, soils, water, vegetation and anthropogenic influences (see Figure 1). Their smallest sub-category is usually called "ecotope" or "microecosystem" (Bailey, *Ecosystem* 3-20; Engelmann and Scholz 8-10; Schultz 18-25). One may find clues about geofactors making up ecozones/ecotopes by exploring and examining specific landscapes in detail. Examples I will discuss are Jackson's Shire, Rohan and Mordor.[11] Independent from the landscape(s) chosen by a geography teacher, the task for the classroom might be something along the following lines: "Look at the landscape. Where could you film these scenes? Choose a single country which features all the geographical characteristics for you to shoot each of these three scenes."

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10 There are differences in the terminology within this idea. While some use the term "ecoregion" (Bailey, *Ecosystem*; *Ecoregion*), others use "geo-ecozones" (Engelmann and Scholz) or simply "ecozones" (Schultz). The scientific understanding does not vary considerably between these terms. For Schultz (18) it is merely a differentiation with regard to scale. For more information please see the aforementioned authors.

11 Obviously, there are many more examples for Middle-earthian landscapes to be scrutinised under the concept of ecozones, e.g. Rivendell, Isengard or the hills of Emyn Muil (Carl 62-76).
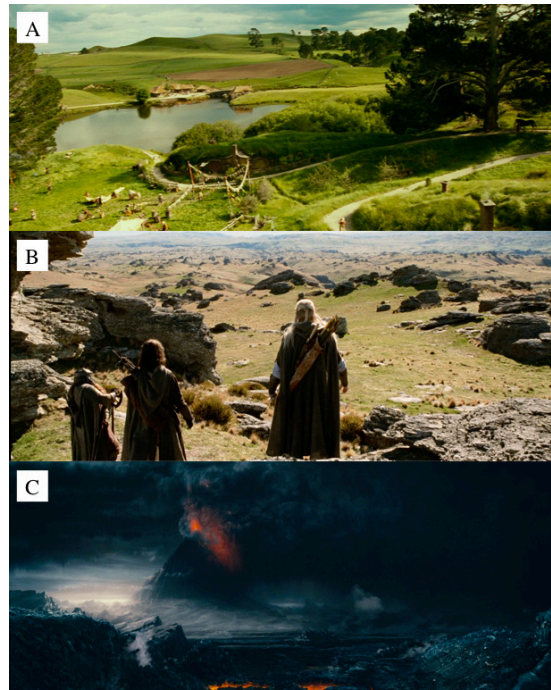
Figure 2: Stills from *The Lord of the Rings* by Peter Jackson
(A = Shire; B = Rohan; C = Mordor)

The Shire[12] (as in Figure 2, A) could be described with regard to its anthropogenic (or "hobbitogenic") overprint: Hobbiton is characterised by various species of livestock, e.g. cattle, pig, goat and sheep, and its visible agriculture; fields are ploughed and hoed; flowers, vegetables and other crops are cultivated. This already indicates highly fertile land. Lush and full vegetation – grass, bushes, hedges and trees – reinforce this impression, as well as streams, ponds and lakes suggest an adequate amount of precipitation and a humid climate. Deciduous forests alternate with fields; blooming flowers are omnipresent. The air temperature seems to be quite warm and stable when you compare night-time to day-time since the hobbits celebrate Bilbo's birthday in short sleeves. All this portends to the humid temperate domain with a maritime component and, thus, to merely 0.92 % of the global land area, e.g. in West Europe, British

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12 The information given here is mainly drawn from scenes in *FR* (Jackson, disc 1 08:52-16:30 and 20:00-25:49).

Columbia's coastal region, west Chile and New Zealand's southernmost part of the South Island (Bailey, *Ecosystem* 86-89 and the enclosed map). Since soft hills dominate Hobbiton's relief, the list of potential filming locations can be reduced further: British Columbia's coastal region, for example, is primarily composed of mountainous terrain, which contradicts the lack of mountains in Hobbiton's scenery – unless digitally removed.

The factual landscape in the films is located around New Zealand's North Island's Matamata in the Hinuera Valley. It, too, is characterised by agriculture, more specifically by sheep farming. This form of agriculture has led to a mosaic of smaller parcels of pine forests and larger pastures for the livestock. While settlers have deforested the area in order to create the pastures, it was their sheep which grazed the under-storey vegetation almost entirely bare. For the films, Jackson post-edited the pine trees in a way that they resembled oak trees, thus alluding to Tolkien's idea of the Shire as home, i.e. England and Wales. This allusion was further established by using European field crops and flowers on set; the non-native plants had to be injected with hormones that protected them against predators and kept them in a presentable state. In order to enhance this false authenticity of England/Wales, European clothing from centuries ago and a black-headed breed of sheep, which were primarily common in England, were used (Carl 62-64).[13] This fake material space thus blends authentic New Zealand ecozones with such elements meant to lead the audience to believe that it actually resembles a genuine English/Welsh ecozone. On the one hand, this might be quite difficult for students to grasp; on the other hand, it could help bridging to the concept of constructed space – which I will discuss later on – especially when the students learn to use cinematographic terms in order to describe alterations for the sake of the narrative or the director's intentions. For example, both colour and shading can be discussed when the mis-en-scène is brought into prominence (Aitken and Zonn 16-17).

By contrast, B (Rohan[14]) shows extensive plains of treeless grassland in shades of dominantly brown and green. Similar to Hobbiton and the Shire, there are also

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13 Mind you, there were up to 12,000 sheep on site. Jackson imported sheep although the Shire scenes were filmed on a working sheep farm.
14 The information given here is mainly drawn from scenes in *The Two Towers* (Jackson, disc 1 18:40-19:15, 22:00-23:03, 24:05-24:18; disc 2 00:00-01:45) and *The Return of the King* (Jackson, disc 2 29:07-29:32).

indications of anthropogenic influences: huts, livestock and settlements such as Edoras. Moreover, Rohan is surrounded by snow-capped mountains (Carl 73-74). Aragorn comments on its climate when he says that the Riddermark "'is cold until the sudden spring, and [they] may yet have snow again'" (*FR* 397). This indicates a rather continental climate (Fonstad 182). Its low temperatures are also implied in a scene in *The Return of the King* in which Aragorn meets Legolas on the terrace of Edoras' palace at night-time: Legolas wears the hood of his cloak – possibly against the cold. Furthermore, the film scenes point towards a geographical mosaic within Rohan's landscapes. While the steppe-like appearance is consistent, there is also a varying ratio of grass to shrubs and boulders to be seen now and then. In addition, Edoras sits at a lower height than other parts of Rohan, which is implied by the mountains surrounding the capital being only covered with snow at their very tops. Earlier shots of Rohan in the films show mountains being covered with snow almost down to their feet, too. Snow coverage and lakes here and there also indicate a relatively high amount of precipitation.

According to Bailey all these observations are typical descriptions of a temperate, semi-arid climate in the mid-latitudes, i.e. to only 1.22 % of the global land area, or the humid temperate domain with its semi-humid prairies – 3.02 % of the global land area (*Ecosystem* 86-89). However, since prairies are characterised by taller species of grass than their semi-arid counterparts, Jackson's Rohan suggests the latter. Its cooler air temperatures, especially in winter, might lead to a relatively low level of evapotranspiration. Hence, the vegetation is of small growth and mainly comprised of different species of shortgrass which have adapted to seasonal levels of precipitation (Bailey, *Ecoregions* 63 and 75-76). Yet, Rohan's treelessness might be caused by azonal influences as well: local lee-side aridity or its location in the precipitation shadow of the Misty Mountains (Fonstad 182-184). With these findings, students are able to narrow filming sites down to prairie and steppe ecozones in central North America, East Europe, central East Asia and Central Asia, South-East Australia and New Zealand's South Island east of its Alps (Bailey, *Ecosystem* and the enclosed map).

According to Tolkien himself, C (Mordor[15]) draws inspiration from the Mediterranean volcanic basin and Stromboli being Mount Doom (Fonstad 90). It is visualised as a dark, volcanic landscape without water or vegetation. It is enclosed by mountains on three sides and shows man-made (or rather Orc-made), primarily military structures. The North Island's central Tongariro National Park was chosen for Mordor's shooting location. The setting was digitally enhanced in post-production so to highlight Mordor's bleakness and its – for both story and landscape – pivotal volcano Mount Doom (Carl 70). The near-to-complete lack of vegetation hints at a semi-arid to arid climate. Its black rocks could be composed of intrusive igneous gabbro or the extrusive igneous basalt (Fonstad 90).[16] According to Fonstad (90) basalt's columnar weathering may cause the described "tall piers and jagged pinnacles of stone on either side, between which were great crevices and fissures blacker than the night" (*TT* 319).

Another aspect is that there is no mention of snow or ice in Mordor (Fonstad 90); this suggests either that the air temperatures there must be above zero or that the ground must be heated by volcanic activity. Since Mount Doom towers at ca. 4,500 feet (Fonstadt 91), the overall temperature must be above zero atop the mountains and in the valley for there is no visible deposition of snow or ice in either of these areas. Yet, Sam shudders when he and Frodo take a rest after having rid themselves of the Orc armour; from the context, this seems to be caused by the clouded skies.

Light deprivation due to airborne volcanic aerosols might also be a major factor for the limited plant growth in the Plateau of Gorgoroth. Since it is an active volcanic region, stress from toxic gases, lava streams or eruptions might also shorten the vegetation period to the extent that the plateau remains largely barren. Hence, Sauron's troops must draw their supplies from other regions of his

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15 The information given here is drawn from scenes in *The Fellowship of th Ring* (Jackson, disc 1 02:25-04:40 and 32:40-32:45) and *The Return of the King* (Jackson, disc 2 55:48-56:14, 01:00:50-01:02:29 and 01:04:17-01:06:37).

16 While intrusive igneous rock (e.g. gabbro) consists of crystallised magma that had intruded into otherwise unrelated wall rock, extrusive igneous rock (e.g. basalt) is a result of cooling down lava, i.e. magma which has reached the earth's surface (Vinx 130). Mordor's black landscape suggests the dark grey to black basaltic rocks, basanite or gabbro (Vinx 195 and 228).

kingdom. Volcanic areas often co-occur with fertile soils fertilised by volcanic ashes; thus, the ash plain Lithlad might serve this purpose (Fonstad 91).

Focusing on Mount Doom, its composition of relatively great height and steep slopes indicates a stratovolcano. Its shape is a result of highly viscous lava that is rich in silicon dioxide; this type of lava can usually be found in volcanic effusions at continental edges (Götze et al. 373). Recent volcanic activities like lave flows and the aforementioned igneous aerosols suggest that this volcano is highly active (Fonstad 146). Analogous to mountain ecozones, volcanic areas are azonal with regard to latitude, i.e. they can theoretically occur all around the globe (Bailey, *Ecosystem* 70). However, there are regions of lower and higher volcanic activity; high volcanic activity frequently occurs with close proximity to tectonic plate boundaries (Michael 242-243). Referring back to the task for the students – "Choose a single country which features all the geographical characteristics for you to shoot each of these three scenes." – the selection is already rather limited as the Shire and Rohan require temperate regions as a backdrop for filming. Taking into account that stratovolcanoes are more likely to occur at continental edges (Götze et al. 373), the Pacific Ring of Fire is the most likely for visualising Mordor and thus Middle-earth.[17]

All three examples as well as other regions of Jackson's Middle-earth share some common denominators which might lead a school class to locate a single country that comprises these ecozones and ecotopes. It must be a country featuring flatlands, hills, mountains, coastal areas and volcanic activity. Moreover, it must show a dominance of broadleaf vegetation and very few coniferous forests as visible in Jackson's films. Tolkien's descriptions also suggest prevailing westerly winds and an overall mild climate (Fonstad 180-184). Thus, not only winter-less climates of low latitudes and summerless climates of high latitudes can be excluded (Bailey, *Ecosystem* 54-55), but the country must also be located both in temperate and dry mid-latitudes due to its west wind drift (Bailey, *Ecosystem* 204; Schultz 168). Since there are only two areas in the world which lack high summer temperatures within the dry mid-latitudes – these being Eastern Patagonia and New Zealand (Schultz 169) – potential filming locations were

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17 "The Ring of Fire" is a circum-Pacific highly active volcanic belt that stretches from New Zealand in the south west to the Malay Archipelago, Japan, the Kamchatka Peninsula, the Aleutian Islands, West Canada, West USA, Mexiko and southwards along the west coast of South America.
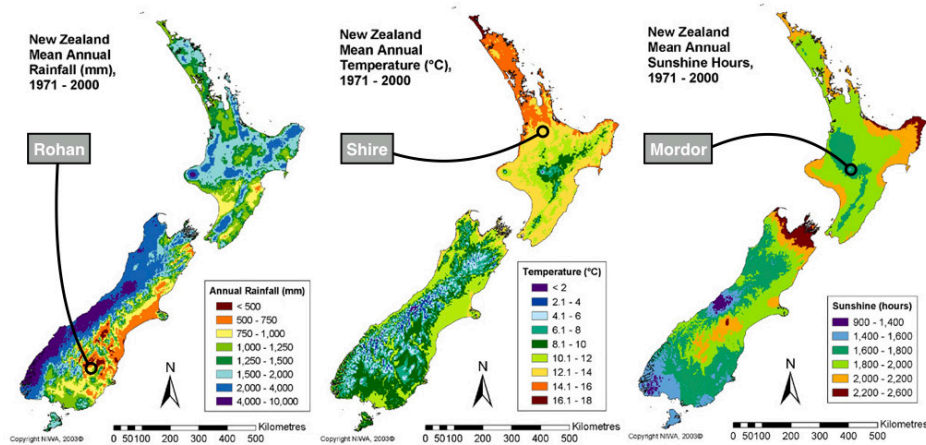
Figure 3: New Zealand climate (annual rainfall, temperature and sunshine hours) and the filming locations of Peter Jackson's Shire, Rohan and Mordor (New Zealand Institute of Water and Atmospheric Research, *Climate; New Zealand as Middle-earth* on the extended editions of Jackson's trilogy)

already reduced to a manageable number that can be thoroughly checked. Rainfall, temperature and sunshine (as illustrated in Figure 3) and climate data from the New Zealand Institute of Water and Atmospheric Research (*Overview; Summaries*) all substantiate the selection of the filming location in the South West Pacific country: New Zealand.

4.2.2 Systematically ordered space

Systematically ordered spaces, different from material ones, cannot be shown in a single screenshot. As the notion already indicates, a systematically ordered space refers to a system of locations; the confinements of the aforementioned container are blurred or have vanished entirely. This category of space now focuses on distances in between two or more spaces as well as their relationship to one another. In doing so, space is captured in its holistic entirety. Still very materialistic, systematically ordered spaces shape societal reality and highlight the dispersion and the integration of these spaces under the influence of the Anglo-American spatial approach of the 1970s (Wardenga, "Räume" 49; Wardenga, "Raumkonzepte" 9-10). *The Lord of the Rings* reveals the
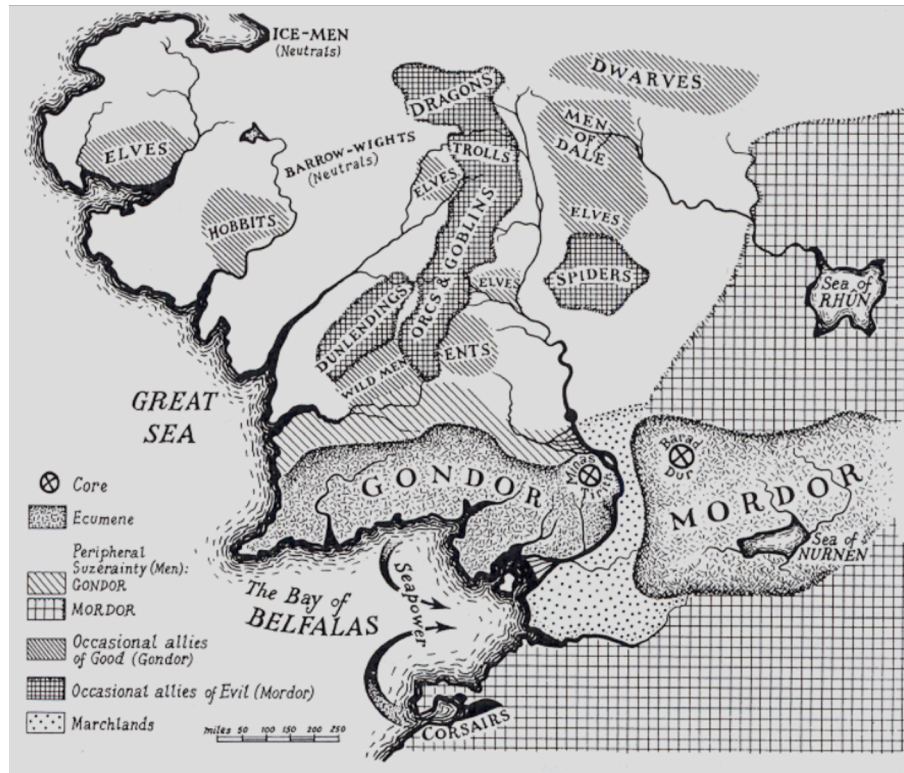
Figure 4: Political geography in Middle-earth (Porteous 35)

connections which are necessary for this spatial concept, for example, through war, history and trade; the focus is on relations between different areas and their people. This is visible in the Porteous map showing the political spaces (see Figure 4). Here, not only the great East-West divide is visualised, but also the interdependencies between the different peoples are charted.

An interesting theory which follows the concept of systematically ordered space is the "Central Place Theory" by German geographer Walter Christaller (1933). His deductive approach endeavours to explain hierarchies within settlement structures on the basis of economic interaction. In his theory Christaller argues that a greater distance between consumer and seller, or product respectively, equally raises transport charges, increases its price and lowers the level of demand for said product. Hence, every product has a maximum threshold with regard

to its range, i.e. the threshold beyond which haulage is too high to find buyers for it. From the point of view of the seller there is another threshold: a product must find enough buyers so that the production is profitable – the minimum threshold. If the maximum threshold exceeds the minimum threshold, the area in-between contains the profitable market for both consumer and producer. Different product types require different thresholds. A loaf of bread, for example, usually is of a very low order or so-called "centrality"; its maximum and minimum threshold is close to the site of production: The number of bakeries is generally high which makes it highly unlikely that consumers travel great distances for bread. Yet, bakeries can survive with a relatively small consumer market due to their low production and transportation costs. Places of high centrality offer not only products of high order but also products of every lower order (Schätzl 72-79).[18] London, for instance, might offer highly specialised financial services as well as top-brand clothes and the regular loaf of bread, whereas Reading might only offer a simple piece of garment and bread, and Silchester only a stale piece of bread.

Like Silchester, Hobbiton does not resemble a central place of a high order. It plays a rather marginal, more isolated role with regard to other regions and settlements in Middle-earth (Carl 62). There is no indication of any outsiders in Hobbiton except for Gandalf, who does in fact not immerse in its atmosphere or make use of its almost non-existent service sector but is visiting Bilbo and Frodo. "The village was so small that it had no inn or public house, and its residents were forced to walk 'a mile or more' to Bywater to visit *The Ivy Bush* and *The Green Dragon*" (Fonstadt 118). Bree, on the other hand, is of a higher order regarding centrality. Its service sector, especially and perceptibly its pub *The Prancing Pony Inn*, draws people in from farther afield. Its role for hobbits is visible in the hobbit-peephole at the town gate or the hobbit-sized beds at the inn (Carl 65). Bree lies at the intersection of two roads which follow in a North-South and West-East direction through Middle-earth, which is indexical for its centrality regarding traffic and trade (Fonstad 124).

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18 See Schätzl (63-96) for a more detailed overview of Christaller's Central Place Theory and also its advancement through Albert Lösch.

When Théoden and his people retreat to Helm's Deep, the fortified strong-hold fulfils a higher order with regard to defence and for the provision of the Rohirrim people in case of emergency in comparison to Edoras, despite its lower order regarding administration and infrastructure (Carl 74). Minas Tirith is probably the one city which possesses an even higher centrality with regard to defence: its setup of seven concentric city walls out of "more than two million tons of stone" (Fonstad 138) surpass even Helm's Deep's fortifications. Gandalf agrees when he tells Pippin that "'there [Minas Tirith] you will be as safe as you can be anywhere in these days'" (*RK* 20). Moreover, Minas Tirith is the king's residence and hence possesses administrative centrality (Fonstad 138). Its high density of products is also acknowledged indirectly by the fact that horses are rarely used within the walls, making it accessible on foot so to reach any products needed (*RK* 23). The films also include respective hints to established shops within Gondor's capital: goods are sold on tables in front of certain houses (Jackson, *RK* disc 1 42:30-43:58). In Helm's Deep, there is no evidence of shops, but only of provisions distributed in the streets (Jackson, *TT* disc 2 16:10-17:50). Another example of the White City's high centrality is visible in the Houses of Healing since they not only provide medical care but offer "the leechcraft of Gondor [which] was still wise, and skilled in the healing of wound and hurt, and all such sickness as east of the Sea mortal men were subject to" (*RK* 136). Pursuant to these examples, I argue that Minas Tirith is Middle-earth's city with the highest centrality – at least for humankind and respective human norms.

In accordance with Christaller's theory, New Zealand's centrality has increased as well since Peter Jackson started filming the *The Lord of the Rings* trilogy there: on the one hand, more potential tourists consider New Zealand an intriguing destination and hence place – to which I will come back later in section 4.2.4; on the other hand, the country has become more visible and attractive for foreign film productions – not least because of the expanded infrastructure for filming (Carl 51). Among the films which were (partly) shot in New Zealand or in cooperation with Kiwi production infrastructure after *The Lord of the Rings* had "pioneered" are *The Last Samurai* (2003), *King Kong* (2005), *Bridge to Terabithia* (2007), *Underworld: Rise of Lycans* (2009), *X-Men Origins: Wolverine* (2009), *Avatar* (2009), and *Dawn of the Planet of the Apes*

(2014) as well as television series like *Power Rangers* (2003-), the *Legend of the Seeker* (2008-2010) or *The Shannara Chronicles* (2016-) (Film New Zealand).

4.2.3 Individually perceived space

When Christaller's theory was published, apparently "[s]patial scientists were not very interested in how people related to the world through experience. Theirs was a world of simple people" (Cresswell, "Space and Place" 54-55), who did not change spaces into places by endowing their environments with individual meaning. This started to change in the 1970s and early 1980s when constructivism had reached spatial science and the notion of "subjectivity" had gradually spread to various disciplines. Space becomes dependent on individual perception. As a consequence, there is no clear-cut, objectively measurable space that could be agreed upon anymore. Instead, it is very much dependent on each person's individual experience with and within it (Wardenga, "Räume" 49-50; Wardenga, "Raumkonzepte" 9-10). It is this experience and knowledge with which Tolkien and Jackson play when they use symbolic, non-real landscapes to provoke specific emotions: Hobbiton's rurality symbolises a harmonic style of life – both amongst its inhabitants and between the latter and nature surrounding them. Although, as shown before, its filming site ironically is deforested farmland. In turn, caves like Moria evoke fear and discomfort. Rivers are associated with life or change. They fight for the good forces and their waters often prevent the progress of evil forces or even lead to their demise, as is shown e.g. at the battle of Isengard, Arwen's invocation of the river Bruinen (in Jackson's adaptation), or the hobbits' escape on a raft (Carl 76-78).

It is also notable that Tolkien implicitly describes the landscapes from the point of view of hobbits; most of them have not had any first-hand knowledge of these landscapes, but experience them for the first time during their quest. Hence, the hobbits arguably perceive them in a more fearful and uncomfortable state than natives of said landscapes who have grown accustomed to their – for hobbits – strange lands (Carl 76). Likewise, different characters in *The Lord of the Rings* react to locations in a different manner. This becomes apparent when the fellowship realises that the mountain pass is blocked and Gandalf proposes the Mines of Moria: "Only Gimli lifted up

his head; a smouldering fire was in his eyes. On all the others, a dread fell at the mention of that name. Even to the hobbits it was a legend of vague fear" (*FR* 308-309). While Gimli eagerly follows Gandalf into "the halls of Durin" (*FR* 310) as the dwarves call them, Aragorn shows much more reluctance to enter them (*FR* 310). Boromir even considers it a "'trap, hardly better than knocking at the gates of the Dark Tower itself'" (*FR* 309). Gandalf, however, disagrees vehemently and maintains Sauron's stronghold to be a far greater peril, based on his past experience with the Dark Lord, which Boromir does not share (*FR* 309). The wizard also sums up the different perceptions of this one space when he says: "'In the ruins of the Dwarves, a dwarf's head will be less easy to bewilder than Elves or Men or Hobbits'" (*FR* 310). Similarly, Lothlórien evokes divergent connotations: Boromir voices his opinion "of that perilous land" (*FR* 352); Aragorn understands that it is perilous but claims that "only evil need fear it" (*FR* 352) and Legolas attributes only pleasant memories to it (*FR* 349).

The idea of individually perceived spaces also becomes visible when Tolkien's books and Jackson's films are juxtaposed with the imagination of the respective reader or viewer. So to "pre-investigate" into this, I presented two friends with the following description of Mordor (taken from snippets of *RK* in their native language) and it was their task to make a pencil drawing from it. The two participants had not read Tolkien's novels, but one of them had seen Jackson's filmic adaptation.

> (1) 'Bless me, Mr. Frodo, but I didn't know as anything grew in Mordor! But if I had a'known, this is just what I'd have looked for. These thorns must be a foot long by the feel of them; they've stuck through everything I've got on. Wish I'd a'put that mail-shirt on!' (*RK* 194)

> (2) Away to their left, southward, against a sky that was turning grey, the peaks and high ridges of the great range began to appear dark and black, visible shapes. (*RK* 196)

> (3) They had trudged for more than an hour when they heard a sound that brought them to a halt. Unbelievable, but unmistakable. Water trickling. Out of a gully on the left so sharp and narrow that it looked as if the black cliff had been cloven by some huge axe, water came dripping down: the last remains, maybe, of some sweet rain gathered from sunlit seas, but ill-fated to fall at last upon the walls of the Black Land and wander fruitless down into the dust. Here it came out of the rock in a little falling streamlet, and flowed

across the path, and turning south ran away swiftly to be lost among the dead stones. (*RK* 197-198)

(4) In the morning a grey light came again, for in the high regions the West Wind still blew, but down on the stones behind the fences of the Black Land the air seemed almost dead, chill and yet stifling. Sam looked up out of the hollow. The land all about was dreary, flat and drab-hued. On the roads nearby nothing was moving now; but Sam feared the watchful eyes on the wall of Isenmouthe, no more than a furlong away northward. South-eastward, far off like a dark standing shadow, loomed the Mountain. Smokes were pouring from it, and while those that rose into the upper air trailed away eastward, great rolling clouds floated down its sides and spread over the land. (*RK* 210)

As expected the depiction of Mordor based on the text excerpts (1) to (4) varied (see Figure 5, A and B). Although they were both presented with the identical text excerpts, were so for the first time and were given the same amount of time, each drew his or her own version of Mordor.[19] While A depicted a rugged landscape with a tangle of thorn bushes, on the one hand, and beautiful elements like a meandering stream and a grove of trees, B, on the other, highlighted the bleakness of Mordor, with the mountain range being steep and jagged; the sun hidden behind a grey curtain of clouds; the thicket of thorns ubiquitous; no gently-flowing rivulet or riverside copse. Yet, the protruding feature probably is Mount Doom, which is much more dominant here than in A's interpretation.

This little experiment illustrates the idea behind the concept of individually perceived and constructed space: Even though there is exactly the same material description of a very specific space, in this case Mordor, it is still very unlikely that individuals will construct this space in exactly the same manner. For one thing, this may be due to different interpretations of the source text. It can also be argued that B, who had seen Jackson's Mordor (C) and with it the focus on Mount Doom and Sauron's tower, may have used her different set of experiences unconsciously when putting the Land of Shadow to paper. Just as much as the two participants, Peter Jackson is but an interpreter of Tolkien's descriptions himself. He not only construed Mordor from the original texts

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19 The participants had to describe their intentions after they had drawn Mordor. Accordingly, the interpretation of each version is based on those verbal descriptions as well as the drawings themselves.
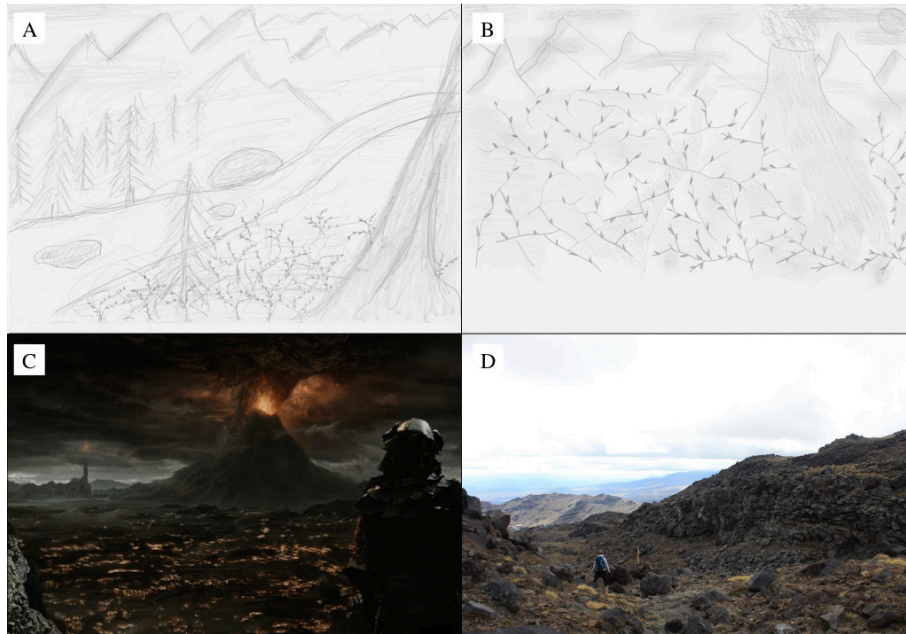
Figure 5: Mordor (A: based on Tolkien's description without knowledge of Jackson's adaptation; B: based on Tolkien's description with knowledge of Jackson's adaptation; C: Peter Jackson's Mordor; D: unedited landscape which Jackson used for his version of Mordor)

and the script but rather used his personal experiences to shape it by changing certain features of an already existing material space: Tongariro National Park (D) on New Zealand's North Island.

4.2.4 Socially constructed space

Lastly, socially constructed space replaces the individuality of the experience within the individually perceived space with a much more collaborative approach. As the name implies spaces are rather constructed by society and not merely perceived and constructed by an individual. According to this concept, spaces are built by communication between and the actions of people. This idea was already established in 1986 by Helmut Klüter,[20] but I will focus on Benno

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20 For more information on socially constructed space see Klüter.

Werlen and his refined proposal of 2000 that individuals not only relate the world to themselves but also shape it by their actions (Wardenga, "Räume" 50-51; Wardenga, "Raumkonzepte" 10-11). Werlen's idea also agrees with Christina Kennedy's and Chris Lukinbeal's recommendation to use a transactionalistic approach, when working with geography in films, i.e. "a holistic approach to human-environment transactions" (36) that takes both the portrayed space, the creator of the image, the medium (i.e. film), and the audience into consideration (36-37). It is particularly the creator's and the audience's capacity to construct spaces and give them meaning "through a series of perceptual filters based on their life experiences and goals" (Kennedy and Lukinbeal 37) that may shape socially constructed spaces.

One of the more prominent examples of socially constructed spaces in the Tolkienian fan world certainly is New Zealand with regard to its touristic impact. Upon accessing the official travel website for New Zealand (see Figure 6) when researching for this essay, I was greeted by a picture of Milford Sound on the South Island. Directly below it, it is Middle-earth that is introduced as a valid association for New Zealand as well. This association is cemented further through expressions like "HOME OF MIDDLE-EARTH", so-called "Middle-earth itineraries" and "Middle-earth experiences" including e.g. a "16 Days Lord of the Rings Self Drive Vacation", the "Elven Magic" tour or "A Halfling's Ramble", which are all advertised on different subsites (Tourism New Zealand). Tour companies have jumped on the bandwagon in offering "the real Middle-earth" (Hobbiton Tours) or "a pilgrimage through Middle-earth" (Red Carpet Tours).[21] The campaign also included – among other things – interviews with high-profile fans like Chinese actress Yao Chen, several actors from the cast of *The Lord of the Rings* and *The Hobbit*, DVD featurettes of New Zealand, branded postage stamps and gold coins, a "Welcome to Middle-earth" stamp in each visitor's passport when you enter the country, an Elvish weather forecast and the marketing of Air New Zealand as the official airline of Middle-earth, together with a highly "Middle-earthian" on-board safety video (Carl 51, 125 and 130; Tudor 49-50). Ultimately, there are the films themselves which act like hours-long infomercials about the landscape of New Zealand (Carl 42 and 50-53).

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21 For more information on film tourism with regard to *The Lord of the Rings* see Carl (80-120).
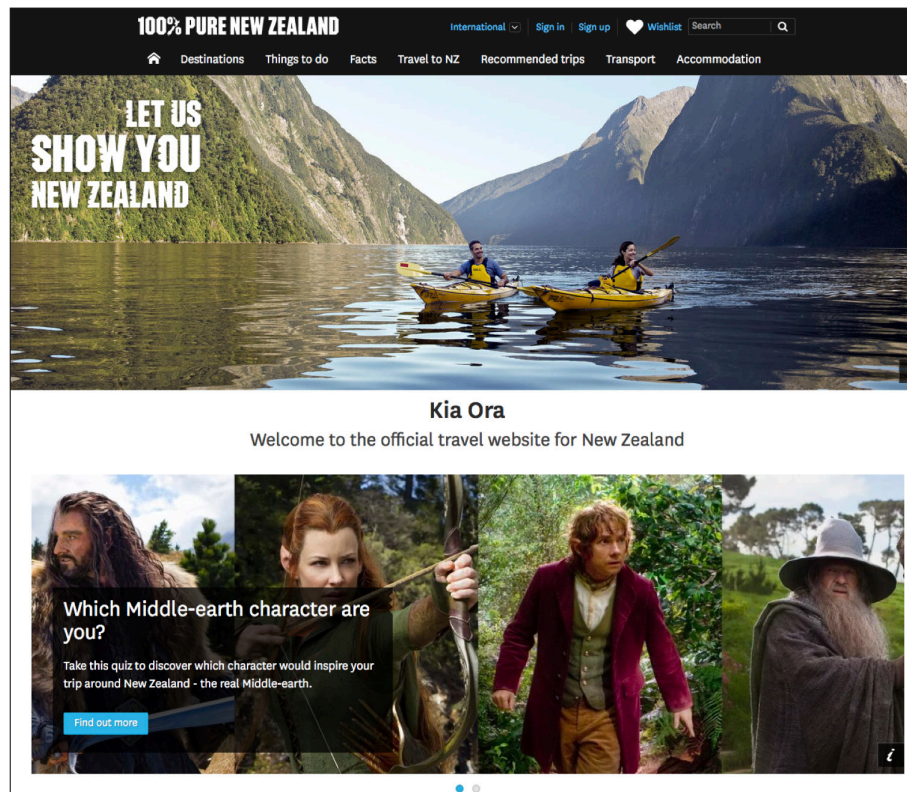
Figure 6: Website of the official travel website of *100 % Pure New Zealand* from 22 Jan 2017 (see Tourism New Zealand)

Even though Tourism New Zealand, Air New Zealand, Peter Jackson, and Sir Ian McKellen (aka Gandalf in the *The Lord of the Rings* films), who comments on New Zealand as "the Middle-earth [he] had always pictured" (Tourism New Zealand) agree, it is evident that Tolkien could not have had this southern-hemisphere country in mind when he developed his Middle-earth. Still, the *The Lord of the Rings* franchise has had a major impact "on both New Zealand's economy and national self-perception. […] LOTR invited New Zealanders to see their country as one that could 'punch above weight'" (Dunleavy and Joyce 258). After all, New Zealand was ranked first in a study carried out by HBO Entertainment in 2015, in which 2,000 interviewees named their top 30 TV and film destinations. One in every four participants also chose their holiday destination with specific regard to filming locations. *The Hobbit* trilogy and

the simultaneously running tourism campaign may have influenced up to 21 % of New Zealand travellers in doing so (Tudor 47-48).[22] A survey by Carl (130-148) showed that 49.2 % of the respondents in fact consider New Zealand to be Middle-earth. According to Barker and Mathijs this is no mere coincidence but a very successful transfer of meaning from film to location and eventually contingent upon "New Zealand's landscapes and views" (110).[23]

These examples also concur with one fundamental idea of socially constructed spaces: such spaces cease to exist when they are not reproduced time and time again (Wardenga, "Räume" 50). New Zealand will probably notice this development when Peter Jackson's films fade from the memory of their audiences' or when they are replaced by one of Hollywood's constant reboots, reshoots or remakes. However, as long as there are people reiterating the concept of New Zealand as Middle-earth, it will be constructed as such.

In addition to extradiegetic spaces, Tolkien's stories also show spaces which have been constructed socially on a diegetic level. The example of Lothlórien, which I have already discussed with regard to individually perceived spaces, is a fitting one here as well. Lore, according to Aragorn and Boromir's dialogue shortly before they enter the Elven forest, shapes the acceptance and perception of Lothlórien. While the Golden Wood is considered perilous by Gondor's people at this stage – although there seems to be no witnesses who attest to any danger or frightening events from personal experience – it had been positively connotated before (*FR* 352-353). Gondorians forgot about Lothlórien and thus lack awareness of its sense. Instead, they have formulated their own version of reality and imposed it on the forest, just as Middle-earth has been imposed on New Zealand.

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22 The New Zealand Institute of Economic Research showed in its report covering the year 2013 *Western market visitor growth* (2014) that 21 % of German, 19 % of US, 12 % of UK, 7 % of Australian, 6 % of Japanese and 4 % of Canadian holidaymakers regard *The Hobbit* as a factor for visiting New Zealand (7).

23 For more insight into how, whether and to what extent New Zealand has become Middle-earth see Anne Buchmann, who interviewed people whose work related to the *The Lord of the Rings* films, in *How We Became Middle-earth. A Collection of Essays on The Lord of the Rings*. Eds. Adam Lam and Nataliya Oryshchuk.

5. Conclusion

As I have sought to demonstrate in this paper, *The Lord of the Rings* facilitates a particularly geographical perspective, which can be efficiently used within a teaching frame. In Tolkien's novel, the world is not only a stage but arguably much more than a mere backdrop for the story: "The greatest entity in the story of Middle-earth was Middle-earth itself. The world, the land is a character that delivered the Ring and accepts the Ring back" (Richard Taylor in Jackson, *FR* disc 1 around 06:25). Geographers (since I am one myself, I dare to claim this) are usually not very talented at analysing characters, but when the character is landscapes, they will know how to approach it. In this paper, I have discussed various spatial geographical concepts by presenting adequate examples from Middle-earth. I have provided evidence for using *The Lord of the Rings* and all that surrounds Tolkien's fiction: Students can learn about modern pop culture, cinematographic techniques, language, literature and film history as well as material space, systematically ordered space, individually perceived space and socially constructed space. Learning about and applying these concepts will, as I have claimed, not only increase the students' consciousness about space and place but also facilitate their understanding and adaptation of, e.g., the Central Place Theory or the concept of ecozones and constructivist percep-tions to a topical frame that is likely to be both entertaining and informative for them. By showing the connections between an entertaining fictional film and different pieces of implicit geographical information, I have been given chapter and verse for my central thesis: it is not only possible but in fact can be beneficial to use non-educational films for educational purposes and – as shown in this case study – providing geographical education on the basis of fantastical worlds as the ones created by e.g. J.R.R. Tolkien. This may not only motivate students to engage with the topic, but in fact facilitate the holistic understanding of space and its relevance.

About the Author

Sebastian Streitberger is a lecturer for the Chair of Geography Education at the University of Augsburg, Germany. He earned his B.Ed. with his monograph titled *The Potential of Internet-based Digital Atlases for Geography Education at School With the Example of the Energy-Atlas of Bavaria* (2014; original title: *Potentiale der Arbeit mit internetbasierten digitalen Atlanten im Geographieunterricht am Beispiel des Energie-Atlas Bayerns*). His teaching and research interests focus on educational media in geography education, e-learning and heterogeneity in the classroom as well as visualising knowledge. Both this and his study and teacher training in English have led to a great interest in using J.R.R. Tolkien's works in an educational environment. Consequently, he has contributed to interdisciplinary projects regarding this topic.

List of Abbreviations

FR   Tolkien, John Ronald Reuel. *The Fellowship of the Ring*. London: George Allen & Unwin, 1966; respectively Peter Jackson, dir. *The Lord of the Rings: The Fellowship of the Ring*. Extended-Edition Blu-Ray. 228 Min. New Line Cinema, 2001.

TT   Tolkien, John Ronald Reuel. *The Two Towers*. London: George Allen & Unwin, 1966; respectively Peter Jackson, dir. *The Lord of the Rings: The Two Towers*. Extended-Edition Blu-Ray. 235 Min. New Line Cinema, 2002.

RK   Tolkien, John Ronald Reuel. *The Return of the King*. London: George Allen & Unwin, 1966; respectively Peter Jackson, dir. *The Lord of the Rings: The Return of the King*. Extended-Edition Blu-Ray. 263 Min. New Line Cinema, 2003.

TL   Tolkien, John Ronald Reuel. *Tree and Leaf*. Boston: Houghton Mifflin, 1965.

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