CHAPTER 10

Interpreting Natural Spatial Language in a Fictional Text: Analysing Natural and Urban Landscapes in Mary Shelley's *Frankenstein*

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This chapter explores how landscape is described in Mary Shelley's *Frankenstein*, a novel which was first published in 1818. The book emerged at a time when English society was transforming from a predominantly rural to an industrial one. While this transition led to technological progress, people simultaneously turned back to nature as a source of inspiration and refuge from the city (Squire, 1988). The natural world was thus often seen as a place of tranquility, tucked away from the daily pressures of industrial society.

Written texts, in the form of blogs, tweets, Facebook posts or other documents can also serve as tool for geographers interested in how individuals (of the past) perceive(d) and respond(ed) to the landscapes around them. As Chesnokova and colleagues note, 'written accounts can provide us with one – admittedly incomplete, yet nevertheless significant – way of understanding what people describe when communicating about both contemporary and

historical landscapes' (Chesnokova et al., 2019, p. 2432). Textual analysis is an important ancillary to understanding how individuals' perception of and reaction to landscapes varies across time and space. Contemporary linguistic research has increasingly seen fictional language as a not 'artificial, deficient or contrived [but] as a rich source of data, albeit one that needs to be investigated on its own terms' (Locher and Jucker, 2017, p. 5). For linguists interested in how individuals of the past viewed the world around them, fictional texts are a gateways to these perceptions. Historical linguists argue that even though fictional language deviates from everyday, spontaneous interactions, 'such material […] is the only possible source for the spoken language of the past' (Jucker and Taavitsainen, 2010, p 8).

In terms of setting, the story *Frankenstein* takes place in central Europe as well as the Arctic region. The story begins with the frame narrative of Captain Robert Walton, who finds himself on journey to the North Pole. On this voyage, the captain encounters Victor Frankenstein who subsequently begins to tell his life story. A few years back, in an attempt to create life from individual body parts, Frankenstein had succeeded in bringing into existence a live 'creature'. As the reader learns, this creature had gone on to destroy Frankenstein's life. In an act of vengeance, the latter chases his creation from Geneva, Switzerland, all the way to the Arctic circle. On their journey, the protagonists travel through different landscapes, from cities to villages, through rugged mountain ranges and across lakes. The natural as well as the urban world plays an important role in the story and is referred to numerous times.

As a first step, this project investigates the ways in which geographical features/toponyms of the 'natural' and the 'urban' landscape are conceptualised in *Frankenstein* and whether, and to what extent, one can find a dichotomy between the two. In a second step, based on the findings, it will be discussed, whether a fictional work like *Frankenstein* is a suitable source to investigate the way in which a landscape was perceived by people in the past.

10.1   Documenting the Perception of a Landscape Using Text

Several studies have used text as a source to generate spatial data of how landscapes (and prominent features within these landscapes) are described and perceived by individuals.

In a study characterising landscape variation, Derungs and Purves (2016) show how local folksonomies can give an insight into how landscapes are described over time and space. Through these folksonomies, for instance, policy makers can get a bottom-up understanding of how landscapes are conceptualised. In their investigation, they work with the Text+Berg and HIKR corpora – two online bodies of text that cover mountaineering activities in Switzerland. Their approach is a novel one in that it takes 'full text corpora as a starting point to generate rich, spatially referenced, landscape descriptions'

(Derungs and Purves, 2016, p. 69). This allows the researchers to identify different descriptions of landscapes across Switzerland at small scale.

In a further study looking into spatial expressiveness of landscape features, Derungs and Samardžić (2018) focus on one prominent feature of Switzerland's landscape. They focus on unique mountain names that are mentioned in a large collection of text on Swiss alpine history. They show that '[s]mall spatial extents, found all over Switzerland, can show considerably strong correlations between text frequency and spatial prominence' (Derungs and Samardžić, 2018, p. 856). While they do not focus on qualitative properties of certain landscape features, they illustrate that the prominence of a certain mountain is reflected in the number of times it is mentioned in a text.

As part of their project on identifying how individuals perceive silence in the landscape around them, Chesnokova et al. (2019) investigate historical and contemporary texts describing the Lake District in England. They do not study fictional texts contained in the historical Corpus of Lake District Writing but work with material that dates from the same decade as the present object of study. In a first step, the authors extract text segments that describe how tranquillity is experienced in the Lake District. In a subsequent step, the study explores how different terms related to silence are interpreted differently over the decades. They find that 'what is meant by quietness has undergone a significant shift in the intervening years […]' (Chesnokova et al., 2019, p. 2443). However, the authors do not only investigate how silence is described but also where it is spoken about. They find that a lot of descriptions refer to the area of Grasmere, an area that was first popularised by the romantic poet Wordsworth.

In a study looking into how different landscapes in Switzerland are described, Wartmann et al. (2018) find that descriptions of a certain place or region vary depending on which source text is used. They find for instance that Flickr tags contain a lot of toponyms whereas entries in hiking blogs offer more information on the sense of a place. This results in 'descriptions from the same data source [being] more similar than between data sources, also for different landscape types' (Wartmann, Acheson, and Purves, 2018, p. 1585). Therefore, different places in Switzerland are often described in a similar fashion by a certain text source. In contrast, the same area in Switzerland is often described differently by texts from different sources. As the scholars emphasise, this does not need to be regarded as a disadvantage. Rather, the varying emphases on what is described provide the researcher with multiple perspectives on how a landscape is viewed.

For the present investigation, which is interested in the landscape described in Frankenstein, the studies outlined above will be taken into consideration. It will be interesting to see whether one is able to come up with a certain characterisation of the landscape, based on the words that appear in conjunction with a seed term. Like Derungs and Samardžić (2018) find, a prominent mountain of the Alps is mentioned quite frequently in the text. Mont Blanc is mentioned eight times and it will be interesting to see, the way it is referred to. While it will

not be possible to do a temporal comparison between *Frankenstein* and a more recent novel (similar to the approach taken by Chesnokova et al. (2019)), this study will investigate how geographic features and toponyms in a certain place are referred to. As Wartmann et al. (2018) emphasise, it needs to be considered that contributors to and authors of different texts resort to different strategies when describing a landscape. It is to be expected that a novel takes a different approach to describing a landscape than a hiking blog or a Facebook post. Nevertheless, a novel such as *Frankenstein* might offer an additional insight to how a certain landscape is perceived and talked about in contemporary culture.

10.2   Methodology

The novel *Frankenstein* is freely accessible online and can be downloaded as a text file. Using AntConc, 'a freeware corpus analysis toolkit for concordancing and text analysis' (http://www.laurenceanthony.net-/software/antconc/), a word list was generated. Using this list, a set of geographical features and toponyms were extracted. This selection was arbitrary and is based on the author's preconceptions. In a next step, similar to the approach taken by Chesnokova et al. (2019), the Historical Thesaurus of English was consulted to search for historical synonyms of the seed words selected. However, this step proved unnecessary as no relevant synonyms could be found. Subsequently, the seed terms were placed into two categories; toponyms / geographical features belonging either to the 'natural' or the 'urban' landscape. The individual seed terms as well as the number of hits retrieved are shown in Table 10.1.

There is a total of 138 occurrences where the seed terms related to natural landscapes are mentioned. For search terms attributed to the urban landscape, a total of 100 hits were retrieved. The term 'mountain' is by far the most prominent geographical natural landscape feature in the text. This can be explained by the setting of the story as well as the journey that the main characters take. 'Geneva'

Natural landscape		Urban landscape	
Seed term	Hits	Seed term	Hits
mountain*	58	Geneva*	36
lake*	32	town*	30
river*	17	village*	15
glacier*	8	cit*	14
Mont Blanc*	8	Chamounix	5
Total	123	Total	100

Table 10.1: Seed terms (note use of wild cards) retrieved in Mary Shelley's *Frankenstein*.

is the most frequently mentioned toponym. While only a small part of the story takes place in the city itself, it is the birthplace of the narrator and plays an important role in his development as a scientist.

In a next step, AntConc's concordance tool was used to investigate the context in which the seed terms appear. Each occurrence was analysed in isolation. Firstly, it was decided whether the respective term was being qualitatively described or not. If the former was the case, the term was characterised as being either positively, neutrally or negatively connotated. Examples for each case are shown below.

1. **No categorisation possible:**
   […] for the birth of that passion which afterwards ruled my destiny I find it arise, like a **mountain** river, from ignoble and almost forgotten sources […](Shelley, 2012, p. 68).
2. **Positive connotation:**
   […] the sublime shapes of the **mountains**, the changes of the seasons, tempest and calm, the silence of winter, and the life and turbulence of our Alpine summers […] (Shelley, 2012, p. 320).
3. **Neutral connotation:**
   […] a peaked **mountain** to the east of the lake (Shelley, 2012, p. 99).
4. **Negative connotation:**
   Immense and rugged mountains of ice often barred up my passage […] (Shelley, 2012, p. 225).

In example (1) the seed term 'mountain' cannot be categorised for two reasons. Firstly, the term forms a part of the compound noun 'mountain river'. The author refers to a flowing body of water rather than the mountain itself. Secondly, 'mountain river' is employed as a simile. What is being described is the protagonist's passion and not the physical object itself. In example (2) the narrator describes the lofty shape of the mountains, which are portrayed in a positive light. In contrast, the term 'mountain' was seen to be neutrally described in example (3). Here the adjective 'peaked' merely describes the form of the mountain and, based on the context, there is no evaluative judgement. In the last example, the mountains are portrayed negatively. They are not shown to be beautiful but rather as an obstruction which hinder the protagonist from moving onward.

In some instances, the categorisation proved quite difficult. It lies within the nature of fictional works that a certain amount of interpretation is required by the reader. While reader A might interpret a text passage in one way, reader B might see that passage in completely different light. Take, for instance, the sentence below:

5. The desert mountains and dreary glaciers are my refuge (Shelley, 2012, p. 119).

According to the Oxford English Dictionary, the meaning of the word 'dreary' has been used in a similar fashion over the past two centuries and can be equated to 'uninteresting', 'repulsively dull' or 'horrid'. Nevertheless, in the instance above, the term 'glacier' was interpreted to be positively described. Following his expulsion from society, Frankenstein's monster views the glaciers as his refuge, and he goes on to state that the caves of ice are a dwelling to him. He sees them as a source of comfort. Nevertheless, other readers might read the sentence above differently.

10.3   Results

What can be seen from the examples above is that even with one seed term, the descriptions regarding that term can vary greatly. When analysing a seed term used in context, it is often not clear whether it is described positively or negatively.

Table 10.2 provides an overview of the way in which the seed terms related to natural landscapes have been categorised in the present study. In total, in around 70% of all mentions of natural landscape features, these features were either described as having positive neutral qualities. Only in 11.4% of all instances were these features described negatively.

From the seed terms related to nature, there was only one which was unanimously described in a positive way. Mont Blanc is alternatively described as 'supreme', 'magnificent' and 'beautiful'. In some cases, the narrator describes parts of the mountain such as its 'bright summit'. In other instances, the emphasis lies on the interaction between the surrounding environment and the mountain, that is, the way in which the lightning plays on the summit 'in the most beautiful figures'. The other seed terms are predominantly described in a positive or neutral fashion except for 'mountain' which forms a small exception. In around 17% of all instances, this natural landscape feature is described negatively. Mountains are described as 'inaccessible', 'immense' and 'rugged', barring the characters from climbing them or passing through them. In other cases, the

Seed term	Positive	Neutral	Negative	Other	Total
mountain*	25 (43.1%)	13 (22.4%)	10 (17.2%)	10 (17.2%)	58 (100%)
lake*	14 (43.7%)	10 (31.3%)	1 (3.1%)	7 (21.9%)	32 (100%)
river*	4 (23.5%)	6 (35.3%)	2 (11.8%)	5 (29.4%)	17 (100%)
glacier*	3 (37.5%)	3 (37.5%)	1 (12.5%)	1 (12.5%)	8 (100%)
Mont Blanc*	8 (100%)	0 (0%)	0 (0%)	0 (0%)	8 (100%)
Total	54 (43.9%)	32 (26.0%)	14 (11.4%)	23 (18.7%)	123 (100%)

Table 10.2: Seed terms related to natural landscapes.

mountains are shown to negatively affect the mood of the protagonists. In one instance, the narrator deems the perpendicularity of the mountain to create 'a scene terrifically desolate'. In another, the summits of the mountains 'hid in uniform clouds' create a 'negative mood'.

Table 10.3 shows the seed terms related to the urban landscapes. In contrast to what was expected at the start of this research project, the features of the urban landscape are described in a predominantly neutral and/or positive fashion. In a further third of all instances, a categorisation of the seed term was not possible. Interestingly, only two instances were noted where an urban landscape feature was described negatively. Possible reasons for this will be analysed in further detail in the discussion section.

The bar charts shown in Figures 10.1 and 10.2 graphically show the distribution of how the individual landscape features of both the natural and the urban world were described.

Seed term	Positive	Neutral	Negative	Other	Total
Geneva*	10 (27.8%)	0 (0.0%)	14 (38.9%)	12 (33.3*%)	36 (100%)
town*	8 (26.7%)	2 (6.7%)	14 (46.7%)	6 (20.0%)	30 (100%)
village*	4 (26.7%)	0 (0.0%)	6 (40.0%)	5 (33.3%)	15 (100%)
cit*	7 (50.0%)	0 (0.0%)	2 (14.3%)	5 (35.7%)	14 (100%)
Chamounix	2 (40.0%)	0 (0.0%)	1 (20.0%)	2 (40.0%)	5 (100%)
	31 (31.0%)	2 (2.0%)	37 (37.0%)	30 (30.0%)	100 (100%)

Table 10.3: Seed terms related to urban landscapes.
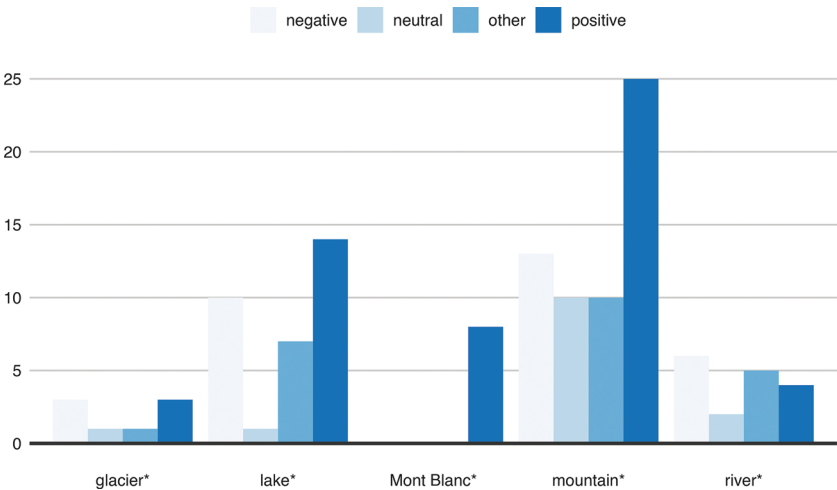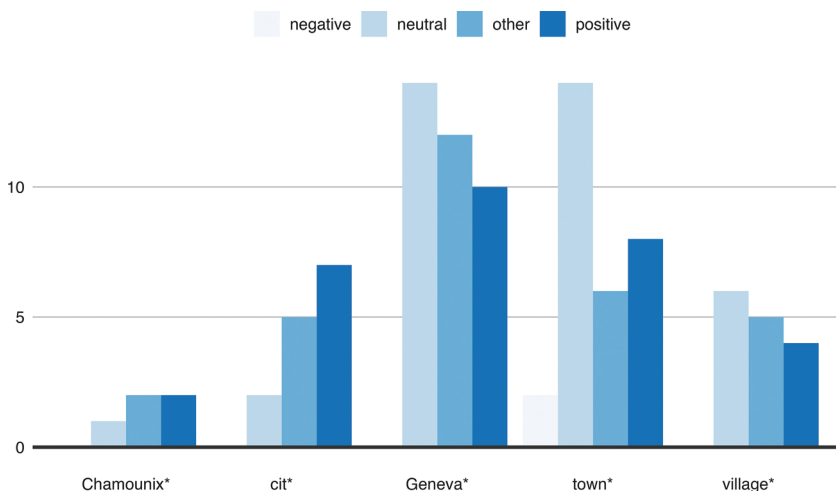

Figure 10.1: Description of natural landscape features in *Frankenstein*.

Figure 10.2: Description of urban landscape features in *Frankenstein*.

As the results show, based on the seed terms that have been chosen for analysis, there does not seem to be a clear dichotomy between the urban and the natural landscape apart from the fact that features of the natural landscape are often described more negatively whereas features of the urban landscape are described more neutrally. Again, it needs to be stressed here that this observation is based on a few arbitrarily selected seed terms. A more substantial investigation with more features might yield different results and distributions. Nevertheless, the next section will look more closely at individual instances to find possible explanations for the phenomena shown above.

10.4   Discussion

10.4.1   *Natural landscape features in* Frankenstein

Although it is very hard to generalise based on the sample that was taken, it appears that more prominent and inhospitable features in the landscape of *Frankenstein's* world are subjected to lengthier and more extreme descriptions, whether these be positive or negative. Consider the examples below.

6. The immense mountains and precipices that overhung me on every side […] and I ceased to fear or to bend before any being less almighty than that which had created and ruled the elements, here displayed in their most terrific guise (Shelley, 2012, p. 107).

7. I remembered the effect that the view of the tremendous and ever-moving glacier had produced upon my mind when I first saw it. It had then filled me with a sublime ecstasy that gave wings to the soul […] (Shelley, 2012, p. 116).

8. […] and at a distance, surmounting all, the beautiful Mont Blanc, and the assemblage of snowy mountains that in vain endeavour to emulate her […] (Shelley, 2012, p. 196).

The examples above illustrate the fact that in some instances, mountains, glaciers and Mont Blanc are described in grand terms by the narrators. It goes without saying that there are numerous cases where these landscape features are merely mentioned or serve as reference points. However, in other cases there is a direct link between the features and the effect they have on the beholder. In example (6), given their immensity, the mountains are shown to be almost other-worldly, created by a being mightier than anyone else in the world. In extract (7), the narrator is left ecstatic at the sight of the immense ice before him. In the next example, Mont Blanc is singled out as the most beautiful of all mountains. However, the latter are also personified and infused with life.

In contrast to the findings of Derungs and Samardžić (2018) the prominent features listed above are not mentioned more frequently than other landscape features in the text. However, the author invests more text to not only describe the features in detail but to also explain the feelings that these features evoke in the characters and eventually the reader.

In the example below, different lakes are described by the narrator. The bodies of water are described as having a calm and soothing effect on the beholder. In example (9), the lake is shown to have charming quality. Its presence does not provoke excitement but rather a quiet admiration. Similarly, in examples (10) and (11) the still waters provide a feeling of calm. Words like 'ecstasy', 'sublime' or 'tremendous' are absent.

9. […] but there is a charm in the banks of this divine river that I never before saw equaled (Shelley, 2012, p. 166).

10. […] the sky and lake are blue and placid (Shelley, 2012, p. 98).

11. I contemplated the lake, the waters were placid; all around was calm (Shelley, 2012, p. 97).

Based on the seed terms chosen one can only speculate. However, it is possible that a lake is seen as a less prominent feature and does not need to be described in as much detail as the more inaccessible landscape features. Alternatively, it is to be expected that the sight of a calm lake does not produce the same excitement in the beholder. It is something that the viewer encounters on a daily basis.

10.4.2   *Urban landscape features in* Frankenstein

As mentioned in the discussion section, the urban seed terms analysed are sel-
dom described in a negative manner. In a third of all instances, towns and cities
are mentioned in passing, serving as a point of reference or as a stopover on the
character's journey. This is shown in extract (12), where the reader does not
learn anything about the qualitative properties of the city other than the fact
that it offers protection to the woman in question. Rather, he/she learns about
the location of the town in relation to a cottage that was previously mentioned.
Similarly, in example (13) the narrator explicitly states that he does not know
where he is passing through and as a result it is difficult to geographically posi-
tion the town within the fictional world.

12. She arrived in safety at a town about twenty leagues from the cottage of
    De Lacey […] (Shelley, 2012, p. 141).
13. I did not know the names of the town that I was to pass through […]
   (Shelley, 2012, p. 152).

In the two extracts below, both Edinburgh and Paris are discussed. The two
cities are alternatively described as having a regularity about them and as being
both luxurious and beautiful. They fill the narrator with delight.

14. But the beauty and regularity of the new town of Edinburgh, its roman-
    tic castle and its environs, the most delightful in the world […] (Shelley,
    2012, p. 171).
15. A few months before my arrival they had lived in a large and luxurious
    city called Paris, surrounded by friends and possessed of every enjoy-
    ment which virtue […] (Shelley, 2012, p. 137).

Although more seed terms related to the urban landscape need to be analysed,
the cities described here are not described negatively. Rather they are shown to
be a place of comfort and refuge. They do not evoke the same strong emotions as
do some of the natural landscape features. In some instances, they merely act as
signposts on the narrator's journey and the qualities are not directly described.

10.4.3   *The natural and the urban – a landscape dichotomy?*

Based on the investigations above, a mapping of the precise physical location
of the landscape features is not always possible. Unlike Derungs and Purves
(2016) who use the Text+Berg and HIKR corpus to allocate natural features to
grid cells which are placed on a map, this study is unable to do that with the
information from the novel. Often, there is no reference to the precise locations
of the features in the landscape. However, as mentioned at the beginning, this
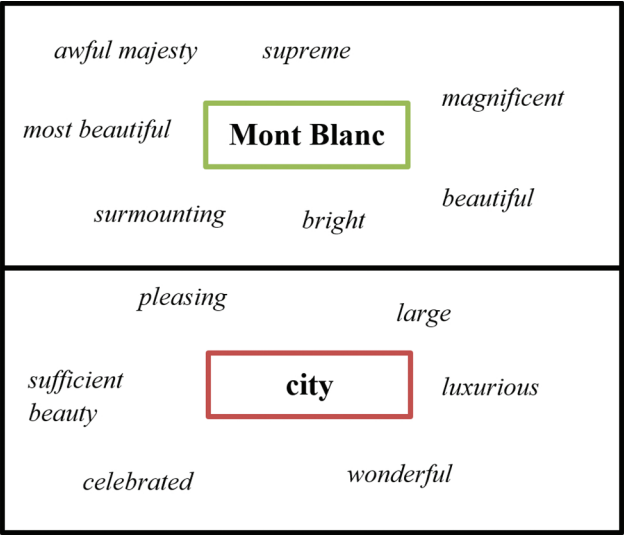
Figure 10.3: Spatial word clouds of two landscape features.

paper is not interested in the precise location of landscape features. Rather, its aim is to analyse the way in which certain places are described.

Similar to Derungs and Purves (2016) who create spatial word clouds that represent the most prominent landscape features in a certain grid cell in Switzerland, one could create a semantic word cloud for individual landscape features in Frankenstein. An example of such a cloud is presented in conjunction with 'Mont Blanc' and 'city'. Here, some of the words in the immediate vicinity (seven words to the right and seven words to the left) of the landscape feature were considered.

It is possible that further seed terms (in combination with words that appear in their vicinity) might show a dichotomy between how the natural and the urban landscape are described in the novel. However, if one looks at Figure 10.3, this dichotomy is not evident.

10.5   Further Studies

As Wartmann et al. (2018) note, the data source can have a significant impact on the way in which a certain landscape is described. Whereas hiking blogs might be more subjective, other sources are more factual. Although the world of *Frankenstein* is entirely fictional, there are different sources in the story from which the reader gets his/her information about the course of events. At the beginning and the end, the story is told from the perspective of Captain Walton. Subsequently, both Victor Frankenstein and the creature share their perspective

on the course of events. The latter two find themselves in ever-changing situations and are shown to pass through states of distress and relative calm.

As a result, the three narrators have different relationships to the people and the landscapes around them. Walton is an avid explorer who wants to reach the North Pole at all costs. Frankenstein is a scientist who appreciates nature but also feels at home in the city. The creature is a social outcast who, as the story progresses, seeks refuge in the wild. When analysing a hiking blog, one can assume that individuals who contribute to the blog have a similar interest. In contrast, a novel like *Frankenstein* offers a blend of different views even though it is written by one and the same author. Whereas a glacier or a mountain might be seen as an obstacle by the explorer, the same landscape feature might be described as a refuge from the perspective of the creature and a sublime sight by Frankenstein.

In a novel it is thus difficult to generalise how a certain landscape (feature) is perceived. Although more novels would need to be analysed, it can be presumed that the author describes the surroundings so that they fit the storyline as well as the characters. Although a novel written in the Romantic era places a lot of emphasis on the natural world, this world is often the reflection of a certain character's mood. As a geographer, one cannot presume that this is the way the author thought of the landscape around him/her – rather he/she evokes a landscape that fits the narrative.

In a future study, it could be interesting to take into account the different narratological levels. In addition, it would be interesting to move beyond the fictional world and investigate how contemporary readers respond to the descriptions in the text and whether they share similar views to those expressed therein.

10.6   Conclusion

This brief study sought to investigate, whether there is a dichotomy between the natural and the urban landscape in Mary Shelley's *Frankenstein*. A small selection of landscape features has shown that these tend to be described more elaborately, the more prominent and/or inhospitable they are. However, there does not seem to be a clear difference in the description of natural and urban landscape features. A description of a lake was seen to be quite similar to that of a city. The body of water and the regularity of city were seen to evoke a sense of calm in the narrators. An investigation of more seed terms and/or novels might help paint a clearer picture.

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