

How architecture expresses character traits in Middle Earth: Analysing the Great Dwarven Cities of Moria & Erebor

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ABSTRACT

Based on analyses of Peter Jackson's movies and J.R.R. Tolkien's books, architecture plays a prevalent role within J.R.R. Tolkien's Middle Earth and Peter Jackson's *The Lord of the Rings* (LOTR) as a form of communication for various races. Architectural expression drives forward the narrative of each race, with some groups being synonymous with a particular style of architecture as part of their identity. An investigation into the expression of character traits through architecture provides a greater understanding of the narrative behind different groups. Such an investigation aids in representation of specific groups beyond limited coverage in movies, books and other media. The investigation was undertaken through a historical lens with further supporting analyses adopted from designer material, as well as additional support through an architectural graphic analysis. This paper argues that numerous interpretations can be understood through architectural elements, offering further reinforcement to existing narrative implications in addition to developing new understandings about characters with limited representation. Furthermore, new historical links were found between characters and particular periods that were otherwise not recognised in detail.

Introduction

J.R.R. Tolkien, as well as the designers behind the movie adaptations for *The Lord of the Rings* (LOTR) and *The Hobbit* depict how races within *Middle Earth* differ greatly from each other through language, cultural norms, clothing, behavioural traits and weapons and armour. The aim of this article is to investigate the question 'how does architecture express character traits in Middle Earth?' by examining the buildings and building parts created by different races in Tolkien's books and the translation of Tolkien's written material into the movie adaptations by Peter Jackson as sets in his *The Lord of the Rings* and *The Hobbit*. The distinctions portrayed by Tolkien and others are utilised in order to emphasise the diverse groups of

people, using these as tools to tell a story about such groups, and architecture is no different as it plays a significant role in coming to learn a great deal about certain characters.

The scope of this investigation will be limited to the Dwarves of Middle Earth as a focal group, with the primary areas of research extending to two case studies. Firstly, the Mines of Moria, a famous Dwarven city located deep within a mountain which is primarily showcased and discussed in *The Lord of the Rings* series. The second major city is Erebor, located in the Misty Mountains and depicted in *The Hobbit* series.

Using the two case studies outlined, several key architectural features contained within the cities

will be selected and analysed in greater detail to develop an understanding of the narrative, and by using such information evaluating how it can tell the viewer more about the Dwarves as characters. This study will take shape through an analysis under a historical lens with additional support provided through understanding author and design intent in support of narratives and an architectural graphic analysis. Furthermore, the investigation aims to extend into understanding how the information about Dwarven architecture from Tolkien's books has been translated into the movie adaptations by Peter Jackson as sets. Finally, the investigation will conclude through a comparative analysis between the Mines of Moria and Erebor, comparing areas of similarities and dissimilarities using the evidence collected regarding character traits derived through the architecture of both case studies.

Literature review

Introduction

Within Tolkien's Middle Earth, various architectural styles are depicted with their own unique attributions, creating immediate distinctions between the different groups of people. However, there is very little information about the architecture, with minimum commentary provided by Tolkien himself. Various authors, such as Akerman (2011), Ryan (1990), Handa and Potter (2011) and Babashkina (2020) have commented on how the architectural styles within Tolkien's Middle Earth can be compared to numerous historical counterparts and famous movements throughout history. With regards to the Dwarves, through understanding Dwarvish character expression and Dwarvish architecture itself several historical groups have been referred to as the Dwarves' counterparts.

Dwarvish architecture

Numerous authors provide input on the distinct races within Tolkien's Middle Earth, authors such as Roseanna Babashkina (2020), Emma Akerman

(2011) and Thomas Honegger (2004), but the level of commentary on the Dwarves is limited. Few authors comment on the nature of the Dwarven characters, authors such as David Salo (2004) and Amy Raduege (2017), with fewer directly commenting on the architecture of the locations depicted in the books and movies. Emma Akerman (2011) pioneered a unique perspective on Dwarven architecture, arguing that the Dwarven style depicted within the Mines of Moria is inspired by the craftsmanship of the Viking period, particularly inspiration derived from runic inscriptions which can be seen tethered across numerous platforms and surfaces inside the mines. On the nature of the mines, Akerman writes, 'The Mines of Moria is portrayed as a fantastic achievement, a wonder of craftsmanship, but where greed took over and darkness was awakened and consumed the place, destroying it and leaving it uninhabitable', (Akerman, 2011, p. 23). Ryan (1990) argued for a historical link between the Mines of Moria and the Mendip Hill Mines in Somerset, a location that would have been familiar to J.R.R. Tolkien growing up in the early 20th century when several excavations into the mine to discover Roman and Romano-Celtic mining materials were underway, (Ryan, 1990, p. 25). Ryan believes that Tolkien's exposure to the mining excavation gave rise to his inspiration for the Mines of Moria, (Ryan, 1990, p. 25). Rumiko Handa and Potter (2011) differ from the previous authors – in that Handa posits the idea that the architecture of Moria embodies Gothic principles, stating that: ... 'In *The Lord of the Rings* series some interior scenes of Moria reflect the heavy masonry construction and the pointed arches of Gothic style' (Handa & Potter, 2011, p. 2).

Dwarvish character

Few authors discuss the architecture of locations like Moria or Erebor, renowned cities for the Dwarves in Middle Earth – however, several authors provide input into the character of the Dwarves as a group. Roseanna Babashkina (2020) argues that the Dwarves are disconnected from their environment as the group have lost their homes, furthering the notion that their group

identity is built on the concept of ‘dislocation’ as the group never truly settles in one location, (Babashkina, 2020, p. 33). She continues to draw a parallel between the Dwarves and the Israelis, stating: ‘As such, the narrative of the Dwarves much resembles the history of the Jewish diaspora’ (Babashkina, 2020, p. 33). Babashkina continues in her analysis of Dwarves by contrasting the Mines of Moria’s feats as an epic, proud achievement that collapsed due to greed, which is referencing the Dwarves as their excessive desire for Mithril led to such calamities, (Babashkina, 2020, p. 40).

On the concept of Dwarven greed, Gina Hewitt shares this sentiment and argues the following: ‘Dwarves themselves are portrayed throughout Tolkien’s works as being supremely greedy and adept at satisfying that greed through their hoarding of gold and other treasures from deep within the Earth’ (Hewitt, 2014, p. 44). Hewitt offers a unique perspective on the nature of Dwarvish greed as she analyses greed through the lens of an industrialised society destroying its environment, which relates back to the topic of her work which understands the damage industries cause to environments, analogous behaviour to that of Dwarves and their home in Moria, (Hewitt, 2014, p. 45).

Thomas Honegger (2004) shares Hewitt’s view: ‘Since dwarves are a secretive, heavily industrialised people (mining and ironworking), their settlements were probably not as attractive to depict as those of other races’ (Honegger, 2004, p.73). Raduege’s (2017) interpretation of the Dwarves is in line with authors like Babashkina (2020) and Hewitt (2014) when they posit interpretations about Dwarven greed, but Raduege’s interpretation differs slightly through her analysis of how the Dwarven mindset is plagued with material obsession, and due to such obsession, the Dwarves become untrustworthy, although she stresses that this does not mean they are evil, (Raduege, 2017, p. 61).

David Salo (2004) differs from the previous authors as he comments on the mind of Dwarves, appealing to the pragmatic nature of their minds as a result of

analysing a particular line stated in the native Dwarvish tongue. Furthermore, he discovers that the Dwarvish language can be linked to Hebrew given Tolkien’s concession that Dwarves are similar to Jewish people, (Salo et al., 2004, p. 32), a connection echoed similarly by Babashkina (2020).

Dwarvish character expressions

Character interpretation has been addressed by a few authors through various lenses within the literature. Raduege (2017) discovered several connections between the Dwarves and their burial practices. She derives concepts of material obsession further through an interpretation of how the Dwarven burial practice differs from the rest of the races in Middle Earth, She writes, ‘Traditionally, though, Dwarves bury their dead in stone tombs, not in the earth, a practice distinct from both Elves and Men. The emphasis on the materiality of the Dwarves, then, extends from their cultural habits and mores in life straight into their physical and spiritual beliefs at death’ (Raduege, 2017, p. 64). Brooke (2017) offers a similar form of analysis through analysing Bilbo Baggins’s home in the Shire, discerning numerous qualities from the windows, furniture, pantry contents and furniture. Using these features, Johanna Brooke argues that the narrative informs the viewer about Bilbo’s character, particularly that he is luxurious, over-indulgent and too cosy (Brooke, 2017, p. 3). Akerman (2011) discovers a distinction between the Elves of Rivendell and Lothlorien through how both groups utilise trees in their architecture. She observes that the Elves of Rivendell apply trees in their art and architecture, whereas the Elves of Lothlorien move into their trees. Akerman thus concludes that the Elves of Rivendell hang onto past glory in Middle Earth whereas the Elves of Lothlorien hang onto memories of Valar in a more ancient setting, (Akerman, 2011, p. 22). These studies provide insight into how specific elements are isolated, and how character meaning can be derived and reinforced. The analysis understands narrative through various lenses, primarily a historical account which has the potential to reveal

a lot more about a character and the underlying narrative that would otherwise be missed.

Literature conclusion

The existing literature provides significant insight into key locations throughout the adventures in *The Lord of the Rings* and *The Hobbit*, however, there is limited information provided on the cities belonging to the Dwarves. The existing material on the Dwarves and Dwarven architecture briefly mentions elements about character, and very few draw links back to history or use architecture to learn more about the Dwarves. Architecture has been employed in order to understand character meaning, methods by authors including Raduege (2017), Johanna Brookes (2017) and Akerman (2011). This article discusses the question of 'how architecture expresses character traits in Middle Earth' in Peter Jackson's films. In particular it will focus upon how the Dwarves became the focal group for investigation. The gap in knowledge provided an opportunity to investigate and contribute to the literature further through developing under-represented locations. Studying the Dwarves necessitates studying their homes – the Mines of Moria and Erebor are essential to the character of the Dwarves, and therefore provides a basis for further analysis in order to learn about and understand the characters.

Research methodology

To analyse the Mines of Moria and Erebor in depth, several architectural elements will be selected for further analysis. With such elements used, an investigation into the elements took shape through several means. The first instance draws a historical link between the elements, apprehending an inspiration behind the design and using the historical basis as grounds to derive further meaning. The historical counterpart can provide great insight about how people of a particular period used an element in question, what it signified in that period into culture and the people themselves. These concepts will be translated back to fiction and compared against the character of the Dwarves in

order to understand how it supports Dwarven character traits.

The second instance of analysis delves into narrative evidence from the books, movies and documentaries, interpreting how the author and designers described these elements and using this to justify the interpretation of narrative with regards to Dwarven characters and architecture.

To conclude, a comparative analysis will be undertaken as a discussion which compares the findings of Moria and Erebor with regards to how the architecture of these cities supports character traits of the Dwarven inhabitants. The comparative analysis will investigate similar architectural features from both cities and understand how they tell a similar or different narrative about their Dwarven inhabitants.

The columns of Moria

Dwarvish columns utilise geometry frequently in order to achieve a harmonious relationship between architectural parts. Such geometrical concerns express the pragmatic nature of the Dwarven mind with regards to balancing beauty with structure. The geometrical formation of the columns in Moria takes precedence within Gothic era architecture. On geometry within Gothic architecture, Robert Scott posits the idea that within a given structural system, its subset members have a relationship to a whole element from which it derives, the whole informs the part as the part derives its measurements from the whole's overall shape – these relationships convey a visual logic (Scott, 2011, p. 89). Robert Scott continues, 'Every part of the building is linked logically, harmoniously, and proportionally to the whole' (Scott, 2011, p. 89). Building on this notion, geometrical functionalism became integral as it balances aesthetic values with structural consideration, locals of the time echoed this desire immensely as they did not perceive the architecture in a purely aesthetical sense (von Simson, 1988, p. 10).

In short, geometrical formations in architectural design showcase consciousness between aesthetic

and structure. The final design does not cater towards one value but instead synthesises them into a harmonious relationship through geometry. Regarding the Dwarves of Moria specifically, the characters sought balance between art and structure, their desire to ingrain geometry to achieve their aim highlights the pragmatic nature of the Dwarven mind as it does not neglect the structural qualities for an entirely artistic result. Furthering the idea of pragmatic thinking in the mind of Dwarves, David Salo posits the idea that Dwarvish minds are concerned with utility and consistency, indicative of pragmatism (Salo et al., 2004, p. 32), further showcasing values consistent with rational thinking above a purely artistic mind like the Elves. Tolkien himself affirms the rationalistic nature of the Dwarves, stating: ‘They are not naturally evil, not necessarily hostile, and not a kind of maggot-folk bred in stone; but a variety of incarnate rational creature’ (Tolkien, 1981, p. 220). With a healthy sense of balance between pragmatism and art, the Dwarves achieved construction feats of epic proportions which have become iconic with the ambitions of their people.

Moria’s scale

Moria’s vast scale showcases the collapse of an ambitious group of people into despair and loneliness, a trait that has become integral to the story of the Dwarves of Moria. Moria’s architectural composition is inspired by Gothic architecture. Scale in medieval times was indicative of great ambition, with a desire to construct giving rise to monumental architectural feats that saw the erection of building scales exceeding lengths of 40m, like Ulm Cathedral at 42m (Charles & Carl, 2008, p. 59). Great ambition follows through scale, and the Dwarves of Moria exemplify this clearly as their desire for Mithril allowed them to dig deep and establish their great cities through accumulated wealth and abundance (Tolkien, 1954, p. 417). Although scale implies great character ambition within Moria, scale also expresses loneliness. In Tolkien’s ‘*The Lord of the Rings: the Fellowship of the Ring*’, Moria’s vast halls come into focus, described by Tolkien as: ‘All about them as they lay hung the

darkness, hollow and immense, and they were oppressed by the loneliness and vastness of the dolven halls and endlessly branching stairs and passages’ (Tolkien, 1954, p. 414). The emptiness of the halls creates a great deal of confusion, seeing the former occupation of the halls compared to its current dormant state as a sign of immense loss and loneliness of a once thriving group of people.

In summary, scale represents success through ambitious architectural feats, as is the case within Moria, but Moria’s scale exemplifies its loneliness and recalls the collapse of a successful ambitious group of people that no longer exist. This speaks to the Dwarvish character, losing everything and becoming lonely, not belonging anywhere. In *The Hobbit*, Bilbo recants this notion when he states, ‘You’re Dwarves. You’re used to this lifestyle. To living on the road, never settling in one place, not belonging anywhere!’ (Jackson, 2012, 1:50:40). Bilbo makes this statement during his journey with the Dwarves to Erebor, one of the great cities of the Dwarves that inspired an incredible image of Dwarvish skill, but so too did it signify their seclusion from others.

Erebor’s façade

The entrance of Erebor conveys an awe-inspiring image of the skill of the Dwarves. As imposing as it may be, it maintains its stance of branching away from the outside world and further promoting the idea of the secrecy of Dwarves. In the medieval period, the Gothic design for cathedral façades primarily incorporated elements for the sole purpose of exploiting light and using it as a channel in order to stay closer to God (Scott, 2011, p. 103), and in Francis Ching’s words ‘the façade s on this new generation of cathedrals served as sacred thresholds to a mystic interior’ (Ching et al., 2017, p. 442). Architecturally, Erebor’s façade appears similar to that of Gothic cathedrals, but the design of the façade entrance limits the level of openings which in turn limits the access of natural light that could pour into the city’s interior. While the façade design of Erebor and its medieval counterpart boast immense skill and craftsmanship, the Dwarven city

differs from the traditional medieval concept of exploiting light which promotes connection (in the context of the medieval period, connection with people and God) and instead the Dwarvish architects sought seclusion from the outside world, privatising their lives unlike other locations in Middle Earth which offer glimpses into their buildings, such as Rivendell, the Shire and Gondor. It could also be said that the medieval cathedral façades seek to connect with the outside world whereas Erebor's façade does the opposite.

In short, Erebor's façade highlights the immense skill of the Dwarves, but it also emphasises their preference for seclusion, adding to their character of secrecy as the Dwarves interact with their own kind and abstain from the business of outsiders. On Dwarven secrecy, Roseanna Babashkina writes: 'Yet even in exile, the Dwarves maintain their separation from the folk among whom they dwell as a misguided way of honoring their past. Their attempt at preserving their culture via isolation is surprisingly similar to the Hobbits' (Babashkina, 2020, p. 41). Although Dwarves prefer to be hidden and secluded from others, they also seek to promote immense openings inside their cities which create numerous connections between places and people.

Erebor's openings

Erebor's expansive openings create enormous visual links from different parts of the city, communicating social cohesion in the Dwarven environment. The role of openings played varying roles throughout history, but for the Romans it signified ideas relating to socialising. An example of this idea pertains to Roman bathhouses. On this Francis Ching writes, 'The baths were secular spaces not associated with altars or divine patronage...', continuing further, 'Baths offered an environment that was both sensual and social' (Ching et al., 2012, p. 214). For the Egyptians, openings off the gated entrances (pylons) into temples had symbolical value, the imposing scale of the structure of the gate expressed the great power of the Egyptians and their vigilance (Ching et al., 2012, p. 66). Alternatively, the design of the

openings within Erebor conveys expressions unique to Dwarven geometry, as Daniel Falconer, a workshop designer and sculptor behind *The Lord of the Rings* movie puts it: 'Dwarves at a basic level, their shapes are square, they're rigid, they're sturdy, very much like the character of the Dwarves' (K9black, 2018, 15:05).

To summarise, from a historical perspective great civilisations that erected enormous structures utilised large openings to convey power while also promoting social connections with inhabitants, whereas from a design point of view specific to Erebor's openings it becomes transparent that the geometrical design signifies the hardness of Dwarves. Gathering all the evidence, it can be interpreted that the numerous expansive openings and opening designs within Erebor reflect the incredibly sociable nature of the Dwarves who are presumed to be cold, hardy, secretive individuals towards others. The findings build on the idea of the Dwarven preference to interact with their own kin, their in-group preference strengthened further through their attempts to connect with each other in many different ways inside the city of Erebor.

Graphic design & iconography

Designers behind the creation of Peter Jackson's famous *The Lord of the Rings* (LOTR) trilogy aimed to communicate Tolkien's characters and architecture through distinct traits, translating Dwarves into a geometric-based society that clearly distinguishes them from the rest of the races in Middle Earth. Immediate perception became integral in the design process; On impressions a designer behind the LOTR movies states, 'We wanted to make it look like that you can look at a piece of architecture and tell if it was Dwarven or Elven immediately just by looking at it' (Jackson, Part 2, 2001, 14:50), to which they continue further and state, 'If you looked at a weapon and you looked at the architecture, you can tell which cultures were the same and which were different' (Jackson, Part 2, 2001, 15:05). The designers placed great emphasis on iconic traits associated with each group, a thought process that, at its core, is graphic design

(Jackson, Part 2, 2001, 15:05), and interpretations on the numerous groups and races can be founded on concrete ideas that will be unique to each given group based on designer creation. With their intention made clear, concept designers set the Dwarves apart by representing their culture in an entirely geometric manner. Alan Lee, one of the primary concept designers, comments on representing the Dwarves: ‘The Dwarvish architecture we decided was going to be entirely geometric, there wouldn’t be any curves or any rounded forms or any rounded arches so that it would all feel very kind of crystalline...’ (Jackson, Part 2, 2001, 33:08). The rigidity of Dwarvish forms came to define their character in the movies. On this notion a designer comments, ‘Dwarves at a basic level, their shapes are square, they’re rigid, they’re sturdy, very much like the character of the Dwarves’ (Jackson, Part 2, 2001, 15:05).

In summary, the designers behind the LOTR trilogy deployed principles of graphic design to portray icons using the various races of Middle Earth. The Dwarves, at their core, are geometric, and these principles translate into their architectural design as each facet of design is absent of curvatures, Dwarven shapes are rigid. Geometric principles underpin the architecture of Moria. Alan Lee compares the geometric thinking behind Dwarven design to that of crystalline, which are hard rigid elements (Jackson, Part 2, 2001, 33:08).

Graphic design behind openings & scale

Entrance can become articulated through two key methods: firstly size, and secondly, through decorative elements (Ching et al., 2015, p. 263). The Dwarvish entrance of Erebor utilises both methods, with the first in the form of size as the entrance has been reduced tremendously, and the second through decoration with the façade’s detail being scaled enormously to show off the Dwarves’ craftsmanship skills. The reduced door size to decoration may imply the Dwarves’ aversion to allow entry to others while promoting their awe-inspiring image more heavily. Door scales and opening types convey different meanings, two variants that are utilised

within the Dwarven design are ‘flushed opening’ and ‘recessed opening’.

A ‘flushed opening’ is of a type that involves creating a small opening that does not cut too deeply into a solid wall; The lack of deep incision ensures that the wall’s continuity persists unlike other openings which cut through and break the solid continuity of the wall as a whole (Ching et al., 2015, p. 263). The lack of articulation for the opening can be intentional, and within the Dwarven façade opening leading into Erebor the lack of articulation seems consistent with the Dwarvish desire to obscure entrance to the city, effectively keeping others out.

An additional type of opening is referred to as ‘recessed’, and it incorporates the idea of building an opening that pushes back into the internal environment and creates an overhead shelter (Ching et al., 2015, p. 263). This technique is utilised within the larger façade carving, potentially conveying the idea of sheltering visitors that do gain access into the city.



Figure 1: Entrance scale graphic (Author’s own image)

To conclude, the entrance design into Erebor captures Dwarven hierarchy through placing design and craftsmanship of Dwarves above creating entry to outsiders. This is articulated through the design motifs receiving greater emphasis to the world while the entry is scaled tremendously lower. Graphic design principles behind such elements aid in enhancing understanding behind design decisions of scale and opening designs. Opening styles and formation within the interior of Erebor

reveal Dwarvish geometry and organisation preferences.

Opening graphic styles

Dwarven opening styles present a strong preference for rigid geometric formations organised within a balanced system. On the graphic design basis, the relationship between the solid wall (plane) and its opening convey character through the shape that the opening takes, it brings forward individuality (Ching et al., 2015, p. 176). Within Erebor, the massive walls possess numerous openings, and the design pattern communicates the character of Dwarvish geometric preference through their use of rigid shapes and no curvatures. The organisation method that the Dwarves gravitate towards is 'clustering'.

Multiple openings organised in a 'clustered' formation communicate ideas of unification, balance and harmony (Ching et al., 2015, p. 176). Dwarvish halls organise the openings in a unified clustered manner following a given axis. They place great emphasis on the individuality of the opening design, but their organisation is unified which relates to their character of balancing rationality with aesthetics.

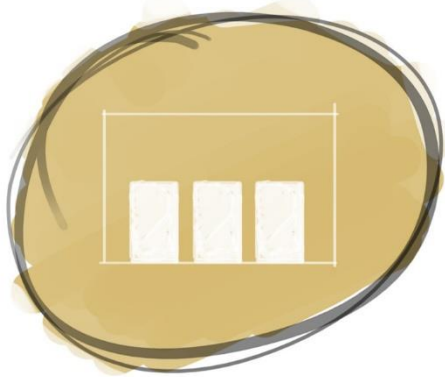


Figure 2: Clustered opening (Author's own image)

In short, through graphic design principles in relation to understanding a plane, its opening and organisation, the way Dwarves execute their style of opening design showcases a strong preference for rigid geometry and logical organisation.

Discussion

The Dwarves of Moria and Erebor are alike in many respects, such as being a rigid geometric-based society that seeks seclusion from outsiders while being incredibly sociable with their kin. However, one of the key differences elucidated through architecture of great cities is the greed which is more prevalent within the nature of Dwarves from Moria in contrast to the Dwarves of Erebor. One of the primary expressive traits between Moria and Erebor is the façade and the entrances. On entrances, it was established that the façade of Erebor implies the great skill of the Dwarves, but also, primarily, their preference to be secluded from the outside world. This preference is shared by the Dwarves of Moria, their entrances are entirely hidden in the mountain and invisible once sealed. On the secrecy of Moria's entrance, Tolkien writes in *The Fellowship of the Ring*, 'Dwarf doors are not made to be seen when shut' (Tolkien, 1954, p. 399). With their secrecy established externally, the architectural style of the cities runs parallel within the internal environment. Previously it was outlined that Erebor possessed an abundance of openings throughout the city, interpreting the numerous openings to express the sociable nature of Dwarves as various connections were established from different points within the city. Moria is similar in this regard; the internal environment is expansive and promotes social interaction and gatherings. In *The Fellowship of the Ring*, Sam notices and comments while inside Moria on the following: 'There must have been a mighty crowd of dwarves here at one time, and every one of them busier than badgers for five hundred years to make all this, and most in hard rock too!' (Tolkien, 1954, p. 414). Openings within Erebor didn't merely express the social nature of Dwarves, but also revealed the hardness of their character, which was interpreted through the geometric design. Moria's geometric principles are similar. The geometric nature of the Dwarves of Moria is expressed through their design of columns, which represents a harmonious relationship between rational values and aesthetical values. The geometrical similarities

between the architecture of Moria and Erebor can be interpreted as communicating a similar nature, one that regards a sturdy, practical mind that balances the rational and aesthetical, and many of these traits translate to the nature of the Dwarves from Erebor.

In short, the architecture of Moria and Erebor cross over in many respects, their features express traits true of their inhabitants in almost identical manners, but one of the key areas where the Dwarves diverge is through the collapse of their cities. It was established in the study of Moria that through the immense scale, one can interpret the ambitious nature of the Dwarves, but so too can the collapse of their people be interpreted. The collapse of Moria is ultimately tied to the greed of the Dwarves, on which Gandalf comments, 'The Dwarves tell no tale; but even as mithril was the foundation of their wealth, so also it was their destruction: they delved too greedily and too deep, and disturbed that from which they fled, Durin's Bane' (Tolkien, 1954, p. 417). Erebor's architecture presents immense scale consumed by darkness, but it does not share the interpretation of collapse through greed, the collapse of the city came as a result of a dragon attack perpetuated by Smaug (Jackson, 2012, 0:5:00). Therefore, the architectural scale of Moria and Erebor diverge, and their expressions point towards the Dwarves of Moria possessing a greater sense of greed than that of the Dwarves of Erebor, the Dwarves from Moria growing ever so hungry for wealth until they dug their way to their doom.

Conclusion

The primary aim of the research was to investigate how architecture expresses character traits in Tolkien's Middle Earth. Two primary case studies were investigated to address the question – the Mines of Moria and The City of Erebor. Exploration of four key architectural elements in detail from both case studies yielded several inferences which successfully link back to the core of the research question.

One of the first key findings came through investigating the columns within the Mines of Moria. Through comprehending the geometric design under a historical lens tying back to the Gothic period, in addition to supporting evidence from the books and movies, as well as existing literature on the topic, it was inferred that the Dwarvish mind possessed a harmonious balance between rational values and aesthetical values in their column designs. The columns of Moria expressed the pragmatic nature of the Dwarven mind.

Analysis of Erebor's façade developed the second key character expression of Dwarves. It was established that the façade design created an imposing feeling that inspired the skill of the Dwarves, but so too did it illustrate the Dwarvish preference for seclusion. The façade of Erebor highlights Dwarvish in-group preference as they prefer to meddle with their own kin and cast away outsiders.

Moria's scale expressed traits that are core to the Dwarven identity within Middle Earth – the loss of their home and a burning desire to reclaim what is lost. Examination of Moria's scale revealed the ambitious nature of the Dwarves to construct monumental structures of epic proportions, but with such great ambition combined with greed it led to their downfall. The scale of Moria expresses the collapse of an ambitious group of people into loneliness and despair.

The final element analysed was the opening designs within Erebor. It was inferred that the numerous expansive openings throughout the city communicate a more sociable nature to the Dwarves, contrasting this to their hidden qualities to outsiders of the city who cannot perceive many openings into Erebor which further supports the Dwarven in-group preference to interact with other Dwarves and abstain from outsiders. It was also revealed that the geometric intensive nature of the openings reflected the sturdy, hard nature of the Dwarves as people.

The culmination of traits and expressions developed around the Dwarves provided fulfilment of the research aim regarding understanding how architecture expresses character traits. Upon satisfying the research aim, further investigations were undertaken into producing a comparison between the architecture of Moria and Erebor, and what it reveals about the Dwarves of the respective cities. It was discovered that they align in many respects, but a key difference was present in the Dwarves of Moria as they possessed greater greed than their Erebor counterparts. Lastly, designer intent behind architecture and character of the Dwarves was explored, and it revealed that rigid geometric shapes are the icons of Dwarven identity.

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Figure list

Figure 1. Author's own image.

Figure 2. Author's own image.