

5 The Alps: Appropriating Liminal Places

Sollte jemals ein Auge dem innersten m³ der Alpen begegnen, so würde dieser zu einem entblösten Feldkubus oder eher zu einer ihm entsprechenden Staubwolke und seine Bezeichnung wäre verdampft und verloren. Oder sie wäre rechtzeitig abgehauen an den neuen innersten Ort des Massivs.¹

Our imaginary journey takes us to the Alps, a mountain range with a great diversity of cultures. In alpine regions, many and various religious practices, beliefs, and traditions can be found, owing to transformations that occurred in these regions over time, resulting in the presence of a variety of languages and a range of cultural settings. In this chapter we will explore spatial practices in a liminal territory, considering alpine regions that are not always permanently inhabited, but more often are visited or crossed.

Religious practices are very visible in the mountains: symbols of various religious traditions and of individual beliefs are scattered across the landscape. They reveal different facets of the contemporary appropriation of the alpine wilderness, evidencing ways in which people have sought to negotiate diverse orientations and interests. In exploring mountains in the Alps

1 »Should an eye ever encounter the innermost cubic metre of the Alps, it would turn into a naked rock cube or rather into a corresponding cloud of dust, its demarcation evaporated or lost. Or it would flee in time to the new innermost place of the massif.« The passage is taken from the essay *Dem innersten m³ der Alpen. Das Massive und die Einsicht* (The Innermost Cubic Meter of the Alps. The Massive and the Insight) by Sandra Boeschstein (2026, 370), a Swiss artist, author, and alpinist (<https://www.sandraboeschenstein.ch>, accessed on 6 August 2025). Translation into English by the author.

as shared places, a striking, complex, interaction emerges between bodily practices, scientific and technological approaches and diverse worldviews.

5.1 Visible traces of religious exchanges in the Alps

Figure 22 depicts a cabin in Val Cadlimo, a valley in the Gotthard region in the southern part of the Swiss Alps. The cabin is accessible only on foot following a trail that connects the Lukmanier Pass with the Piora region. The tiny hut is located on a wide pasture at an altitude of 2300 m.a.s.l. It serves as a shelter for Nicola Toscano, a shepherd who has lived on this site, every summer, for decades. From April to October, he cares for a large herd of Tibetan yaks, all of them descendants of a small family group of yaks brought here years ago from Tibet. Nicola Toscano is a Tibetan Buddhist. Every year, when he returns to this cabin, he sets-up small shrines in it (fig. 23). Outside his home, he displays prayer flags in different sizes at strategic points all over the pasture. The colourful Tibetan-Buddhist flags can be spotted from far away; they signal to the yaks and the passersby that the cabin is inhabited and, at the same time, they reveal the religious affiliation of its inhabitant.² In such a remote place, the material religious symbols attribute a specific meaning to the cabin and its surroundings. Hikers and alpinists immediately grasp the reference to Tibet and Nepal which is evocative of the religious and mountaineering traditions of these Himalayan countries (fig. 23). This alpine pasture in a remote valley in southern Switzerland is a shared place: visual symbols reveal the encounter between local subsistence practices and Tibetan-Buddhist traditions.

2 The documentary *Il mio piccolo Tibet* (Mario Casella, CH 2016) traces Nicola Toscano's life. He grew up in the region, became a shepherd as a young adult, and, for many years, he spent the wintertime in Nepal dedicating himself to increasing his understanding of Tibetan-Buddhist texts and practices.



Fig. 22: The cabin inhabited by the shepherd Nicola Toscano during the summer in Val Cadlimo, Switzerland.



Fig. 23: A Mani stone is placed on the windowsill of the cabin. On it the mantra *Om mani padme hūm* is carved, an epithet of Manipadma, the Bodhisattva Avalokiteshvara. The five traditional Buddhist colours – white, yellow, green, red and blue – add a further layer to the multiple symbolic meanings of this mantra. In Tibetan Buddhism, Mani stones with this text are very popular.³ Val Cadlimo, Switzerland.

3 Many thanks to Dolores Zoé Bertschinger for translating and explaining the inscription. See e.g. Buswell / Lopez 2014, 529.

A Tibetan-Buddhist hut introduces the topic of this chapter, which explores selected alpine places where diverse religious practices and worldviews are shared and negotiated. After a short overview of the Alps as a territory characterised by ambivalent interpretations, we will explore the contemporary display of religious symbols on mountain summits. Then we will consider the rituals performed in the construction sites of tunnels. The two case studies illustrate practices of appropriation of liminal places, in which diverse religious practices, scientific-technological innovation and the human body are entangled.

5.2 The Alps as an ambivalent territory

The alpine range creates a natural barrier extending from France, through Italy, Switzerland, Germany, Lichtenstein, and Austria to Slovenia. Before comfortable railways and roads made it easier to cross the Alps, this territory was quite inaccessible due to its topography, the harsh weather, particularly in winter, and the exposure to natural dangers such as avalanches, rockfalls, or landslides. Nonetheless, the history of the Alps, from antiquity until today, is characterised by movements and explorations, and, consequently, by intense cultural and religious exchanges.⁴

The Alps and their valleys are a territory characterised by a broad variety of cultures, languages, religious beliefs and practices. Significantly, the Alps are a place linked to multiple imaginaries: the imaginaries of their inhabitants, as well as the imaginaries of urban dwellers who visit them and travellers who cross them. The history of the imaginaries linked to the Alps is shaped by diverse encounters and interpretations.⁵

Until the Enlightenment, the mountains were often perceived as an impassable barrier, a border dividing people, and a dangerous, gloomy place inhabited by dangerous beings. In modern times, in line with the development of travel across the Alps, by road and other means of transportation, as well as scientific discovery and mountaineering exploration, a fascination for the

4 Höpflinger / Pezzoli-Olgiate / Previšić / Volken 2024; see also Egli / Tomkowiak 2011 and Bergier 1997.

5 For a general introduction to the history and culture of the Alps see Mathieu 2009 and 2015; Bätzing 2005; Bergier 1997.

alpine mountains arose.⁶ With the formation of nation states and the development of tourism and alpinism in the 19th and 20th centuries, the Alps became a symbol of human connection to nature and of unity between diverse cultures and states in Europe.⁷

Over the centuries, the Alps have become a territory of scientific, technological, touristic, sporting, and religious exploration.⁸ Their representations in the arts and sciences have stimulated a broad variety of symbolic interpretations ranging from a vision of the Alps as dangerous, inaccessible domains inhabited by wild beings and uncontrollable forces to a glorification of these elevated territories as places of human fulfilment and transcendent experiences.⁹ Even today, the alpine regions are subject to processes of appropriation in which contrasting perceptions of them may be articulated, often with reference to transcendent benevolent and/or demonic beings.¹⁰ In many religious narratives and practices in the past and the present, the tension between the constant exposure to danger and the precariousness of living in a hazardous environment contrasts with a sense of wonder and a desire to conquer the mountains.

The votive painting, reproduced as figure 24, depicts a woman who has fallen from a narrow ledge where she was cutting vegetation, which was needed to feed the cattle in winter. Her companion tries to save her with a rope. In this dangerous situation, the women entrust their lives to the local representation of Mary who intervenes on their behalf. The miraculous rescue was depicted by a professional painter, Giovanni Antonio Vanoni (1810–1886) and donated to the local church, where this particular representation of Mary is venerated. GR stands for *grazia ricevuta* (»grace received«). The painting is an offering that remembers the deadly danger of that situation. It vividly illustrates the challenges the inhabitants of an alpine valley are exposed to in their everyday lives.

An illustration taken from the book *Die Alpen in Natur- und Lebensbildern* written by Hermann Alexander von Berlepsch, published in 1861, pres-

6 Nicolson 1997; Günther 1998; Giacomoni 2005; Scharfe 2007 and 2021; Mathieu 2006 and 2015.

7 Mathieu 2015, particularly 93–110 and Bätzing / Perlik 1995.

8 See Mathieu 2006; Kuhn 2001; Atwood 2020.

9 For a contemporary example of this ambivalence in media representation see Pitches 2018.

10 Kuhn 2001; Höpflinger / Pezzoli-Ogliati / Previšić / Volken 2024.



Fig. 24: Giovanni Antonio Vanoni, oil on canvas, 64 × 54 cm, undated, Oratorio di Santa Maria delle Grazie, Maggia, Switzerland.



Fig. 25: *Die Alpen in Natur- und Lebensbildern* written by Hermann Alexander von Berlepsch, published in 1861, contains 16 illustrations based on original drawings by the Swiss painter Emil Rittmeyer. This reproduction is taken from a softcover edition of the popular book (von Berlepsch 1862), unnumbered page.

ents a contrasting image of the relationship between humans and the Alps (fig. 25). Addressing audiences in German speaking countries and in Great Britain (the work was translated into English in the same year), this image depicts a man leading an expedition as it reaches a peak, while his fellows (or helpers?) are still climbing. The man is represented as a conqueror, in a victory pose raising the Swiss national flag.

From a religious-historical point of view, the alpine regions are a territory characterised by a broad diversity of beliefs, practices, and traditions, shaped by the dynamics and cultural exchanges that took and take place.¹¹ To address religious practices in the Alps it is crucial to keep in mind the perspectives of both local communities and urban dwellers, the latter of whom have greatly influenced the representation of the mountain wilderness.¹²

As anticipated at the beginning of this chapter, in the following pages we shall focus on the role of religion in alpine spatial practices by looking at two extremities: the display of religious symbols on summits and the performance of religious rituals in tunnel constructions. Both case studies are centred on the central Alps, focusing particularly on Switzerland.

5.3 The appearance of religious symbols on mountains

In September 2016 a glowing crescent suddenly irradiated the mountain peak named Freiheit (Freedom), 2139 m.a.s.l., in the Swiss Canton of Appenzell (figs. 26 and 27). The crescent installation, powered with photovoltaic solar panels, had a diameter of 3 m and was made of acrylic glass. The installation had been flown in by helicopter and assembled on the mountain top by Christian Meier, an artist born in 1978 who lives in Appenzell and Shanghai. Disregarding the legal process, Meier did not ask the owner of the land for permission to install his crescent on Freedom. The symbol of Islam stood prominently and illegally on the peak, with the result that after a week, it had to be removed.

¹¹ Mathieu 2006.

¹² Mocarrelli 2005; Mathieu 2006.



Fig. 26: Christian Meier's crescent was installed on the mountain Freedom in the Swiss Canton of Appenzell in September 2016. In this photograph, a cross on top of another mountain can be glimpsed in the background.

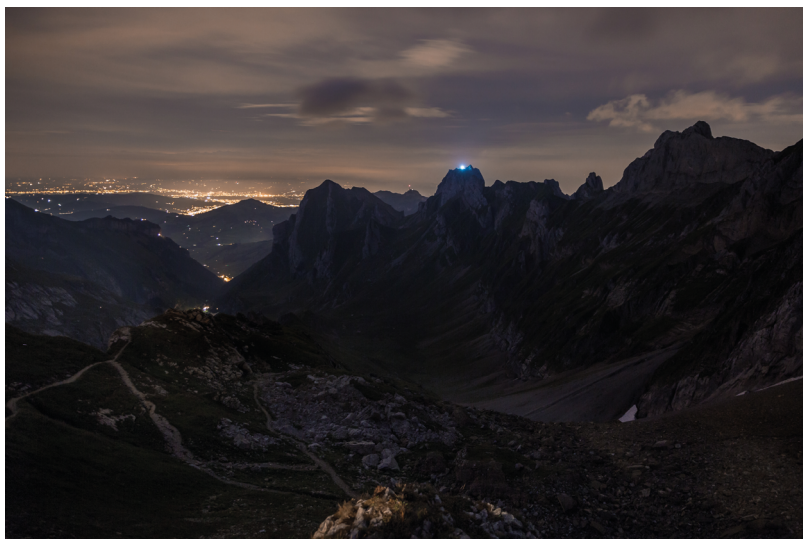


Fig. 27: Christian Maier's installation was lit up at night, powered by solar panels. With a diameter of 3 m, the crescent could be seen from far away.

Notwithstanding the short duration of its exhibition, the crescent on the mountain initiated a heated dispute in the media and beyond. According to the artist, who defines himself as an atheist, putting an Islamic symbol on a mountain was an artistic performance aimed at stimulating a debate about the widespread practice of displaying religious symbols, in fact primarily crosses, in the Alpine landscape. The mountain's name also added a further layer of meaning to the action.

In this instance, the very name of the mountain, »Freedom«, could suggest that the alpine wilderness had to be freed from human control, specifically from religious communities and traditions. Since the visibility of Islam is a sensitive topic within Swiss politics and the public sphere, not least after the prohibition of building minarets was added to the federal constitution in 2009,¹³ putting a crescent on a mountain is an intentionally provocative act. According to his many interviews in the media, Christian Meier also opted for a crescent for aesthetic reasons. He considers this shape as particularly harmonious and the reference to the light and the planet particularly powerful when displayed on a summit. His plan was that the huge, illuminated moon on Freedom would provide a unique spectacle which could be seen from far away.¹⁴

This short-term action can be interpreted as a contemporary, polemical adaptation of the historic practice of human appropriation of uninhabited alpine landscapes. Demarcating a peak with a symbol is a praxis rooted in religious traditions that was transformed and reinterpreted at the beginning of alpine mountaineering. The crescent on Freedom generated a controversy in just a few days because it tackled an established but already controversial practice. In the context of the long-term ambivalent reception of the Alps as a place of imagination and desire, the crescent on the mountain crystallises an urban debate about questions of contemporary mobility, religious plurality, and conflicts. The remote site of Freedom became a (transitory) mirror of contemporary national identity processes.

13 The prohibition was introduced on 29.11.2009 into Article 72 of the Federal Constitution of the Swiss Confederation, which regulates the relationship between church and state (Paragraph 3): »The construction of minarets is prohibited« (<https://www.fedlex.admin.ch/eli/cc/1999/404/en>). For introduction to the controversy linked to this political debate see Tanner / Müller / Mathwig / Lienemann 2009 and Mayer 2009. See also page 29 in this book.

14 For a selection of media coverage in the German speaking area see Hehli 2016; Ramezani 2016; Ritter 2016; Theile 2016. See also Pezzoli-Olgati 2020a, 15–16.



Fig. 28: A small chapel along a path in Centovalli, Switzerland. It is not possible to date this construction. The frescoes inside are damaged, yet the unsophisticated, popular style is clearly recognisable. The chapel contains a collection of items from different times and religious traditions; the flowers and the arrangement of objects suggest that it is still used as a religious construction.

The installation of symbols, and specifically crosses, on mountain tops in the Alps is a practice whose religious significance is not self-evident. Rooted in the beginning of alpine mountaineering expeditions, the significance of religious symbols on summits has been ambivalent from the very beginning and has undergone significant transformations since its first appearance at the end of the 18th century. Throughout its history, the cross on a mountain top has been a materialisation of competing claims for control of these unoccupied domains. To understand this new practice at the beginning of mountaineering, it needs to be contextualised against the backdrop of the traditional occurrence of religious symbols in the alpine regions.

Along the paths that link villages on the valley floors to remote pastures at altitude, crosses, small chapels (fig. 28), or larger constructions were built to protect and bring together the scattered communities (fig. 29).¹⁵ Predominantly present in Catholic regions, these Christian symbols and constructions had different purposes, depending on their location and size. In general, they were used to locate rituals and prayer practices.¹⁶ Chapels offered an occasion for rest during an ascent. By means of their architecture and image programmes, they made the presence of God, Mary, and the saints visible. The small shrines marked a specific location where divine figures could be addressed: they had a protecting function, keeping dangers away and preserving humans and cattle. Crosses were placed in specific spots, for example in exposed passages on dangerous tracks, on pastures, or in proximity to glaciers (fig. 30).¹⁷

Depending on the region, the religious constructions and symbols differ in shape, material, and style, although they share common meanings. Religious buildings and crosses in alpine altitudes articulate the tension between the mountains as a living place and the constant exposure of the fragile human being and cattle to natural dangers. In the alpine regions, the tension between what can be controlled and what eludes human capacity for control and foresight profoundly imprints religious beliefs and practices. Often, natural phenomena were interpreted as caused by evil forces that needed to be dominated or, at least, domesticated.¹⁸ Therefore, if we take Catholicism as the broader traditional frame in which to place religious material symbols in the Alps, it is crucial to consider popular beliefs as an integral part of this. This is the case even if such popular piety was not always accepted by theologically informed, institutional representatives of the church.¹⁹

15 Pezzoli-Olgiati 2011. The historian of the Alps Jon Mathieu (2006) suggests that the habit of placing Christian symbols in the alpine landscape developed after the Tridentine Reform and was originally linked to Catholicism. On the specific use of crosses in the Italian speaking part of Switzerland see Petrini 2016, 52.

16 Mathieu 2006 and 2023, 87–97.

17 See e.g. Loose 2004. For the particular case of the crosses in the Aletsch region see Holzhauser 2009, 61 and Volken 2016, 78–81.

18 Pezzoli-Olgiati / Höpflinger 2024.

19 For an ethnographic overview see Petrini 2016.

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Fig. 29: An undated cross along the path that leads to the large plateau in Quarnéi (2046 m.a.s.l.), Val Malvaglia. Made of two small wooden beams fixed with iron wire it suggests the transience of human life on this alpine settlement.



Fig. 30: A cross in the region of the Aletsch glacier, Switzerland, which is the largest glacier in the Alps. The crucifix from 1968 is mounted on a bigger, weather-beaten cross dated to 1818 in a spot called Baselflie in the Üsser Aletschji. In the background, the Oberaletsch glacier is visible as are the traces of substantial reduction of the ice mass due to climate change. Crosses were placed as boundary markers, to stop the dangerous enlargement of the ice that jeopardised settlements.²⁰

20 In the Canton of Valais votive processions to protect settlements against the glacier have

Even though the shape and the religious reference are similar, crosses on summits appeared later and resulted from a very different attitude towards mountains and religion. They were a symptom of a profound transformation in how the Alps were perceived and related to. In the modern era, mountains became a terrain of exploration and conquest, hand in hand with the exploration of other continents and world regions, so similarly attracted the attention of scholars, adventurers, and travellers. Since the second half of the 18th century, travel to the Alps and mountaineering became a European fashion.²¹

In the pre-modern era, mountain peaks were not places human beings were expected to go. In many cases, access to mountains was expressly forbidden, as the widely cited case of an early expedition to the Pilatus, a summit of 2119 m.a.s.l. that towers over the town of Lucerne, illustrates. In the 15th century, a monk from Zurich and his companions disregarded the prohibition to climb the mountain and they were legally convicted and put in prison by the city authorities. At this time, the Pilatus was considered responsible for the weather, particularly for severe storms. Legends linked to Pontius Pilatus provided explanations for these events: the bad spirit of Pilatus that inhabited the mountain had to rest undisturbed, otherwise he would damage Lucerne by means of terrible weather.²²

The (re)discovery of the Alps begins in the 18th century and is intertwined with scholarly approaches in the natural sciences, philosophy, theology and the arts. The fashion of aristocrats and the bourgeoisie travelling across Europe, the grand tour, largely contributed to this new approach to the remote alpine regions. Furthermore, this transformation affected the relationship between religion and the Alps not only through theological approaches, but also through new forms of experiencing the Alps as a place of human fulfilment and conquest, described as having religious qualities.²³

In this early age of alpinism (this neologism became current in the 1870s),²⁴ different objects were installed on mountain tops, such as measuring instru-

been regularly performed. In 2010, the parish of Fiesch in the Gomsertal valley obtained the permission of Pope Benedict XVI to reverse a ritual dating back to the 17th century for protecting houses from the dangerous glacier. During the procession, that takes place on 31st July, God and the Saints are now invoked to permit the Aletsch glacier to regrow.

21 Scharfe 2007 and 2021, Mathieu 2015.

22 For more details and bibliography see Kuhn 2001 and Matt 2012.

23 Scharfe 2007 and 2021. See also Atwood 2024.

24 Mathieu 2015, 203–205.

ments for studying the climate and the properties of the Alps tied to pillars or pyramids, flags of different kinds (see as an example fig. 25), or empty bottles containing a message. Even if they assumed different functions and meanings, all of them were material traces of the appropriation of the Alps by humans. The German anthropologist Martin Scharfe emphasises that they were anonymous objects: they documented the ascent of individuals that stood for the collective community of the courageous explorers of the Alps.²⁵ According to Scharfe, there are different explanations of the practice of putting objects as tangible signs of the new appropriations of the hostile mountains in the 19th century. First of all, the material objects demonstrated that the alpinists had really reached the summit, since, in some cases, the signs could be spotted from far away. They proved that an expedition had been successful. Second, they documented the new approach to places that had been considered, for a long time, as outside human culture. By climbing mountains, humans intruded into domains belonging to transcendent beings and divine forces. Placing a visible sign made the (transitory) human presence more enduring.

Furthermore, the constructions on mountain tops were provided with instruments to analyse the Alps as an object of natural-scientific investigation: from this perspective, summit signs were also a symbol for a new approach to the Alps as an object of research.²⁶

The Kleinglockner (3770 m.a.s.l.) in Austria is the first well documented case of a cross mounted on a peak (1799), followed a year later by the Grossglockner, which at 3798 m.a.s.l. is the highest mountain in the country. The massive iron construction standing today on Austria's highest peak, weighs 300 kg and results from the assemblage of 60 pieces. This was erected in 1880 as a substitute for the original wooden cross. The massive iron construction on the Grossglockner has been under national heritage protection since 2024 – the first instance of such status for a summit cross – after having been briefly removed to allow for a substantial restoration.²⁷

To protect them from storms, the crosses were often equipped with a lightning conductor, at the time of their introduction a new technological

25 Scharfe 2007, 253–254.

26 Scharfe 2007, 253–275; Cuaz 2009.

27 See <https://www.alpenklub.info/2024/06/07/gipfelkreuz-auf-dem-grossglockner-unterdenkmalschutz/> (accessed on 6 August 2024).

invention.²⁸ Despite the explicit reference to Christianity, the crosses were a symptom of a new approach to both the Alps and to religion. The monumental iron construction on the Grossglockner was celebrated and dedicated to the emperor Franz Joseph I and his wife Elizabeth for their 25th wedding anniversary in a ceremony on 2 October 1880, which reveals the entanglement between political and institutional-religious power. The cross represented a Catholic empire, but also the beginning of a new approach to the mountain, involving courage and bodily fitness, new emotions and curiosity for nature and its mechanisms.²⁹

National and religious identities became entangled in the appropriation of the alpine domains, which were still perceived in an ambivalent way. Summits were hostile and dangerous, and, at the same time, they could be conquered and subdued thanks to human resilience. Moreover, the crosses themselves carried an approach to the alpine wilderness based on scientific curiosity, providing an ideal location for new measuring instruments. In fact, the crosses could only stand by means of technological innovation because they needed to be preserved by lightning rods. Precisely as a religious symbol, as a reference to Christian belief, principally Catholicism, they were moulded from the profound transformations and ambiguities of the time in which they were introduced.³⁰ Over time, crosses on summits were also used in Protestant regions.³¹

Nonetheless, crosses on top of mountains were not very common in the 19th century. This practice became more widespread in the 20th century, particularly after World War II. Martin Scharfe interprets the increase of crosses in the post-war period as a way of processing the trauma through an *imitatio Christi* practice: as Christ carried his cross on mount Calvary to expiate human sins, so alpinists did something similar to atone for the war.³² Eventually, access to helicopters from the 1960s onwards, made the practice of installing crosses on the top of mountains very popular. For different reasons, individuals and groups practicing alpinism as a sport kept this tradition alive.

28 Mathieu 2006 and 2015, 135–140; Scharfe 2007, 253–275 and 2021, 33–43 and 198–235.

29 Mathieu 2023, 92–93; Rech 2023.

30 Mathieu 2006 and 2015, 135–140.

31 Mathieu 2023, 94.

32 Scharfe 2007, 269.

In the past and present, the cross on mountain peaks marks the human presence in the Alps, reflecting a variety of local traditions and historical transformations of the practice.

Despite all the differences, some recurring aspects can be discerned. As a planned, material construction it transforms the mountain into a designed place. The cross towers over the summit and articulates, by means of its shape and symbolic references, the relationship between the ground where mountaineers stand and the sky or heaven (according to one's cosmological worldview). The cross is placed on an endpoint, on the spot at which the ascent is completed and the human view of the earth seems infinite.³³

Often the cross results from a collective effort of a group and is not directly linked to a church or a religious organisation. From the beginning in the late 18th century, crosses were planned, carried and installed by climbers, which does not exclude the participation of a religious community or a regional institution, but nonetheless distinguishes this construction from other sacred buildings. As is typical for votive offerings, crosses on summits mirror the practice of laypeople rather than of religious representatives or specialists. There are no formal rituals or liturgies linked to crosses: their interpretations are not regulated and depend on the subjective perspective of their receivers. They negotiate the meaning-making processes according to personal views, beliefs and ideas, which mirror social and cultural transformations, as the example of Meier's crescent on Freedom clearly illustrates.

From this perspective, the religious references and the function of summit crosses are not defined within an institution but rather by a wider cultural setting. The reference to Christ's passion, death and resurrection may be associated with different ideas of Christianity, depending on the denomination and the subjective religious socialisation, or, as a *pars pro toto*, with religion as a general attitude, or the history of mountaineering and the human appropriation of a remote territory since the modern era. Alpinism was from the beginning framed in a religious language and in an ambivalent way. On the one hand, as we have already mentioned, it broke with a feeling of fear towards the mountains and their transcendent inhabitants, and, on the other

33 In the history of culture, the gaze from the mountain top has a relationship to religious feelings and narratives. See della Dora 2018.

hand, this new outdoor activity offered a new scientific, human, emotional, and corporeal challenge. Yet, throughout the history of alpinism, these new experiences have been described using typical religious language: awe and fear, desire and fulfilment, revelation and rapture.³⁴ In this way, crosses transformed summits into shared places in which different ideas of religious practices and experiences were negotiated according to the actors involved in the interpretation of the symbols at this specific place, entangling exploration, scientific knowledge, and religious worldviews and practices.

5.4 Summit crosses as a negotiation of diverse worldviews

This overview of the different phases and characteristics of mountain crosses shows that various actors at different times promoted these symbols for different reasons. The crosses are not principally an institutional Christian expression, but rather a symbol encapsulating an ambivalence towards the mountains: awe and curiosity, corporeal exploits and bodily performance, appropriation of a wild territory intertwined with individual ideas of the divine, and of the liminal experience of immanence and transcendence that characterises mountaineering from the beginning.

Crosses on summits were always quite robust constructions, since they were planned to resist the hostile weather conditions, which explains why they have persisted. Over time, diverse interpretations have been applied to these prominently located symbols, mirroring comparable transformations in people's relationship to the Alps, mountaineering, religion and culture.

As already mentioned, crosses became popular in the second half of the 20th century. Within the range of constructions on summits, the cross remains constant and predominant over time, even though the size, shape and material it is made of and the iconographic features may vary. Sometimes the construction is a simple, abstract cross (fig. 31), sometimes the body of Christ is represented in a typical crucifix, sometimes a statue of Mary is added. Since the end of the 20th century, crosses are very often combined with Tibetan-Buddhist prayer flags (fig. 22) and other objects, which high-

34 Günther 1998; Atwood 2020. See also Berner 2020 and Nicolson 1997.



Fig. 31: A cross on the top of Gradiccioli, 1936 m.a.s.l. The construction is made of granite and placed on a massive foundation stone. Around the cross the soil is sealed with stone slabs and fixed with concrete.

lights the links between Alpine and Himalayan mountaineering, and the widespread mobility of people practicing this sport between the European and Asian mountain ranges.

As the case of Meier's crescent well illustrates, in recent decades crosses on summits have become a contested topic. A few were dismantled in protest actions aimed at liberating the natural landscape from religious, and more specifically, Christian dominance.³⁵ According to these perspectives, the mountains must be religiously neutral places and the alpine landscape freed from religious interpretations. In 2010, a mountaineering guide damaged two summit crosses in the Prealps in the Canton of Freiburg in Switzerland. Two years later, he was sentenced in court: his action had been considered a violation against the freedom of belief and religion.³⁶

Crosses are still being installed on mountain tops. Figure 31 depicts a newly placed cross on the Gradiccioli, a prealpine mountain in southern Switzerland.

³⁵ Rech 2023.

³⁶ See e.g. Swiss News Agency 2010 and 2012.

The cross is made of granite and stands on a massive foundation stone that carries a small inscription in silver-grey letters on a green background. Translated into English, it reads:³⁷

The intensity of life is not measured by the number of breaths, but on the basis of places and moments that take the breath away.
Anonymous 2006

The cross is less than 2 m tall but the massive shape carved from a stone block strongly marks this location.

The text on the green plaque is attributed to an »anonymous« author. It is an aphorism circulating on the Internet and on social media, tentatively attributed to diverse authors, without a precise identification. It states that what matters in life is not longevity but the capacity to enjoy the wonder one can experience. Indeed, reaching the top of the Gradiccioli is breathtaking. Even if it is not particularly high, it offers a 360-degree view of the Alpine range as well as the Po plain. At this very location, »breathtaking« may refer to the feeling of being overwhelmed by the spectacle of such a wide landscape that includes peaks over 4000 m.a.s.l. Or it may also allude to the physical effort needed to reach the top.

The inscription influences the interpretation of the granite symbol. The cross may allude to Christianity, or, more precisely, to the passion of Christ, or simply to the action of placing crosses on mountain tops as a votive or a mountaineer's practice. The text addresses the readers in a direct way, offering them an interpretation of what they have just achieved and maybe of the emotions and feelings they are experiencing. It imbues the outdoor activity with an existential meaning: better a short and intense life overwhelmed by the beauty of the Alps than a long life without such emotions. Both, the cross and the inscription, offer interpretations of a sporting activity involving bodily effort. The cross and the inscription endorse diverse meaning-making processes of being on a mountain top, they invite the viewer to think of the corporeal performance as a meaningful activity which is worth doing and rewarding in terms of quality of life.

37 »L'intensità della vita non si misura con il numero dei respiri, ma in base ai luoghi e ai momenti che ci hanno fatto mancare il fiato. Anonimo 2006« Translation by the author.

Not only is the text anonymous, but also the people who installed the cross and its plaque are similarly unknown. While the cross re-enacts the tradition of this specific symbol we have recapitulated above, the inscription actualises the traditional practice in its own way. The text frames the symbol, it suggests that it does not matter if the reader is religious or not: the point is rather that once the top is reached, the mountain can be experienced as an intense, enriching, and existentially meaningful place.

Today, alpinism is practiced as a sport focused on corporeal and psychological challenge with a broad range of techniques and interpretations involved. From extreme performances by professional mountaineers to gentler forms of hiking as a leisure activity; the Alps are explored by diverse groups with different practices and goals. Crosses and other religious symbols persist in alpinism, despite being questioned and being interpreted in various ways. They transform the wild peaks into a cultural domain, materialising the human presence in the mountains. The meaning-making processes linked to the religious symbols are variegated and contested. In this negotiation of the relationship between human beings and the natural territory, the contemporary plurality of worldviews and signifying practices are mirrored. In this sense, mountain summits become shared places where contemporary religious and political debates, collective and individual orientation are negotiated and challenged.

5.5 Crossing the Alps in the era of mobility

Religious practices and meaning-making processes in the Alps can be observed not only on the summits but also in the depths of the mountains. The second case study in this chapter deals with contemporary religious practices in the construction site of the railway tunnel crossing the Gotthard massif, completed in 2016. Measuring 57 km, it is currently the longest railway tunnel worldwide (the Brenner base tunnel, currently under construction, will reach 64 km).³⁸

38 The results of the research on this case study have previously been published as an essay for a broader audience in Pezzoli-Olgiati 2024b.

The St. Gotthard Pass, 2106 m.a.s.l, is a place that played a significant role, on a social, economic, political, and symbolic level in the formation of Switzerland as a modern state and continues to shape national identity today.³⁹ The Gotthard massif, located between the cantons of Valais, Uri, Ticino and Graubünden, and bounded on the western side by the Nufenen Pass and, on the eastern side, by the Lukmanier Pass, encompasses a range of peaks, the highest being the Pizzo Pesciora (3192 m.a.s.l.). Until 1716, when it was correctly measured by Johann Jakob Scheuchzer, the Gotthard massif had been considered the highest mountain in the Alps.⁴⁰ The history of the extensive use of the pass, that links the Reuss Valley with the Leventina Valley on a north-south axis, is well documented from medieval times onwards, although this passage across the alpine range was known already in the Roman era. Its development over the centuries is a prominent example of the entanglement of technological development in transportation with transformations in the symbolic interpretation of the Alps.⁴¹

While access to the pass from the southern slope is smooth, the northern part is arduous because of the pronounced gorges on the river Reuss. The first descriptions of the crossing of the pass are dated to the 13th century. At that time bridges were built to facilitate the crossing of the gorges, particularly over the Schöllenen canyon, probably adapting alpine construction techniques for water ducts. In this era the Gotthard pass was used on a local scale for pasture and for the transport of goods with mules, an activity organised by specific guilds. In 1653 a weekly transit from Lucerne to Milan was introduced by Pietro Maderni from Lugano, the journey taking four days. In 1696, Caspar Muralt from Zurich and Beat Fischer from Bern instituted a mail transport between Zurich and Milan twice a week with horses. The first road tunnel to facilitate the transit through the pass was dug in 1707 at a place called Urner Loch. It measured 60 m. In 1803 the Canton of Ticino joined the Swiss Confederation and, in 1826, deals with other cantons were concluded to complete the road link from Basel to Chiasso, which allowed the country to be crossed from the borders with Germany and France to that with Italy. From 1831 a regular transport of mail and people by stage-coach was established. In wintertime, sledges were used on the pass road.

39 Schueler 2008; Bergier 1997.

40 Bruns 2012, 125; HLS / DHS / DSS 2016.

41 For a history of the pass see e.g. Bruns 2012.

In the 19th century, the significance of the Gotthard Pass increased. After lengthy political negotiations and evaluations of diverse alternatives to build a railway crossing the Alps, in 1871, Switzerland, the Kingdom of Italy and the German Empire agreed to share the costs for a railway tunnel linking Göschenen with Airolo. The tunnel of 15 km was opened in 1882. In the early 1920s, the railway lines from Basel and Zürich to Chiasso were electrified. In the late 1930s the pass road was adapted to carry vehicles. Even today, this road is still closed during the winter. The further development of road connections and of the Swiss and European motorway network led to the construction of a road tunnel of 17 km that runs parallel to the first railway tunnel in 1980.⁴²

Although there have been different railways and roads crossing the Alps since the end of the 19th century, traffic over and under the Gotthard Pass increased significantly in recent decades because the tunnel allowed for regular passage throughout the year. In the 1990s, a new – and contested – debate arose over shifting transportation, especially of goods, through the Swiss Alps from road to rail. It led to the planning of two base tunnels under the Lötschberg and the Gotthard, along with other major constructions in Switzerland and the neighbouring countries. The whole project had been conceived as a joint programme to rearrange European railway connections on the north-south axis. On 27 September 1992, Swiss citizens voted in favour of it. The Gotthard base tunnel was opened on 10 December 2016. Today, it links Biasca to Erstfeld in 20 minutes, which contributes to shortening the journey time from Zürich to Milan substantially, reducing it from approximately four to three hours. On 29 September 2021 a construction site for a second tube tunnel for the motorised traffic between Airolo to Göschenen was opened.⁴³

This short recap of the history of crossing the Alps over and under the Gotthard highlights the close interrelation between increasing demand for mobility of goods and people, the development of new alpine construction technologies, politics, and economics.⁴⁴ The irregular topography and the weather conditions of this territory have been overcome by complicated, challenging constructions of rails, roads, bridges, and tunnels. Along with

42 For a detailed reconstruction of the process see Bergier 1997, Ratti 2016, 19–35.

43 Bruns 2012, HLS / DHS / DSS 2016. For a summary of the political and economic debates relating to the base tunnel see Ratti 2016, 123–143 and Schueler 2008.

44 For an overview of the interrelation between industrial revolution and the development of alpine passes see e.g. Mathieu 2015, 165–179.

this transformation, the interpretation of the Gotthard has changed. Particularly after the consolidation of the modern national state with the introduction of a new federal constitution in 1848,⁴⁵ the Gotthard became a strong symbol of national identity and cohesion between the diverse Swiss cultures. This narrative of the Gotthard massif at the centre of Europe that divides and reunites Switzerland and Europe remains influential to this day.⁴⁶

5.6 A broadcast ceremony from the depths of the mountain

In the trains crossing the Gotthard, the travellers are often informed that the tunnel they are passing through in 20 minutes is a remarkable engineering achievement. It consists of two single track tunnel tubes of 57 km, each uni-directional, embedded in a complex system of additional subterranean constructions ensuring the laborious maintenance and the security of the tunnel. Overall, the infrastructure consists of 151.8 km of tunnels.⁴⁷ The construction took 17 years to complete, with an estimated workforce of 2,600 people, working in three eight-hour shifts, 24 hours a day. The tube tunnels are almost flat, the entrance on the south being at 216 m.a.s.l., on the north at 460 m.a.s.l., which is suitable for high-speed trains. The costs amounted to 12.2 billion Swiss francs and were entirely provided by public funding. The tunnel, planned for a capacity of 260 goods trains and 65 passenger trains a day, was opened in December 2016.⁴⁸

The construction has transformed travelling and living habits in Switzerland, since the trip from the principal cities in the north of the country to the southern regions has substantially shortened, making daily commuting possible. The connections from Germany to Italy have been substantially accelerated, as the railway is more efficient for passing the Alps. From 2023

45 For an overview of the complicated process leading to the constitution of 1848 see Kley 2023.

46 Bergier 1997.

47 <https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-35644.html> (accessed on 6 August 2025).

48 For more details on the tunnel infrastructure see <https://www.news.admin.ch/newsd/message/attachments/39641.pdf> (accessed on 6 August 2025).

to 2024 the tunnel was closed to passenger trains for almost a year because of a major accident, which has shown that, despite the advanced security procedures, the high-tech construction remains vulnerable.⁴⁹

The ambivalent interpretation of mountains, particularly of the Gotthard, played a major role in the political debates that led to the realisation of the project and continued to be very significant during the construction and afterwards. The Gotthard is described as the symbolic centre of Europe with a political, economic, and cultural significance. For example, the sources of the rivers Rhein, Reuss, Ticino, and Rhône, that originate on the massif, were interpreted as a symbolic link between the North Sea and the Mediterranean, connecting European nations, cultures and languages. Natural elements of the landscape were also interpreted as an expression of political conformity.

Besides serving as an element of cohesion between the diverse Swiss cultures, the Gotthard assumed the quality of being a centre for a whole continent. Such politically and economically motivated narratives of the mountain as a symbolic place of Swiss and European unity contrasts with the reading of the Gotthard as an impassable barrier that had to be overcome by means of scientific research and engineering innovation.⁵⁰ In fact, questions about the geological structure and formation of the massif were still open in the planning phase, which required complicated strategies in organising the excavation and consolidation of the construction. A great amount of the excavation was made with two boring machines produced for this specific task and mounted within the tunnel tubes, measuring approximately 400 m in length and with a boring head of ca. 8.90 m in diameter. They were called by the nicknames Heidi and Sissi.

The achievement of the tunnel as a technological contribution to the unity of Switzerland and Europe and as a challenge to the mountain that divides countries and cultures, was the leitmotif for the first ceremony in this construction site, which was broadcast on state television and internationally received. It took place on 15 October 2010 to celebrate the breakthrough of the east tunnel tube. Representatives of political, economic, and religious institutions, national and international media, as well as miners and workers were invited to celebrate the new connection between south and north.

49 Gotthard Rail Tunnel, World's Longest, Closes for Months after Swiss Derailment 2023.

50 Bergier 1997.

The ceremony was performed in front of the last wall of rocks, in the middle of the Gotthard massif, a quite inhospitable dark place with very hot temperatures that needs artificial cooling and illumination to be bearable for human beings. Furthermore, a live stream made the event accessible to all the workers on the construction site and other invited guests in diverse locations in the Canton of Uri and Ticino as well as to the 27 ministers of transportation of the EU countries that were meeting in Luxembourg. The event took place in the northern sector of the tunnel, whereas Sissi, the boring machine, would be digging from the south.

In the following section, a close reading of selected parts of the celebration focuses on the role religion assumed in providing meaning to the mountain and the human achievement in opening a new connection through the Gotthard. The analysis is based on the live stream on the Swiss-Italian state television (Radiotelevisione svizzera di lingua italiana, RSI) that combines broadcasts from the north and the south side commented upon in a voice over.⁵¹

The formal part of the breakthrough ceremony began with a vocal performance composed by the German theatre director Volker Hesse, followed by addresses from representatives of the construction site and political leaders, and by a religious ritual. Art performances, speeches and a liturgy highlighted the significance of the construction and of this place. Afterwards, Sissi, the boring machine, dug the last metre of rock and, finally, the miners and all the people involved celebrated this important milestone in the project. A common meal outside the tunnel concluded the celebration.⁵²

51 The analysis is based on my recording of the live stream on 15 September 2010. A commemoration of the day is published as a DVD (*Il cantiere del secolo*, Versione italiana, Gieri Venzin / Mario Casella / Paul Nicol / Gigi Neri, RSI 2011).

52 The »Final Breakthrough« was announced as a »dramatisation« deep under the Alps, along with the programme, as follow: »On behalf of DETEC [Federal Department of the Environment, Transport, Energy and Communication], theatre director Volker Hesse will herald the historic moment of the Final Breakthrough under the Gotthard with dramatic visual and sound effects. The human battle against the rocks of the Gotthard will be transformed into a poetic experience. Visual and acoustic performances will be presented inside the tunnel with contributions from various artists including Rolf Derrer (lighting concept), Angel Sanchez (photographs of miners: »Heroes of Work«), Christian Zehnder (overtone singing, tuning horn), Töbi Tobler (hammered dulcimer and voice), Norbert Möslang (sounds), Arthur Schneiter (musical stones) and Roman Signer (blasting artist).« <http://www.57km.ch/en/final-breakthrough/programme/> (accessed on 6 August 2025).

There was no formal stage, only a few elements were used, like a podium for the speakers, and a demarcation of the area for the audience. The thin wall dividing north from south was decorated with a stencil depicting the logo and the name of the company »Alp Transit. Gotthard/San Gottardo«. On the wall of the tunnel there was a small shrine, illuminated with a light chain, containing the photographs of the people that died accidentally on the construction site (fig. 32).

All those present were required to wear a protective helmet and a work vest, both in orange, with very few exceptions. On that Wednesday many people in Switzerland and abroad followed the live stream on TV. Speeches by Luzi Gruber, representing the principal construction company, Renzo Simoni, the CEO of Alp Transit, the company responsible for the construction site, and Moritz Leuenberger, at the time Swiss minister of transportation, explained the significance of the base tunnel as a political, economic, technological and symbolic achievement.

Simoni welcomed the audience in the official Swiss languages German, French, Italian and Rumantsch as well as English, emphasising the local and international significance of the base tunnel, gave thanks to all the specialists working in such a demanding place, and remembered the men who died on the construction site, paying his respects by taking off his helmet.

Despite the stringent safety procedures to avoid accidents, death lurks in the depths of the mountain. The uncontrollable character of the massif was also addressed by the next speaker, Leuenberger, the minister representing his department and the Swiss government:

Dear Swiss electors, dear miners, builders, surveyors and engineers, dear Transport Ministers of the EU, in live stream from Luxemburg, dear Sissi, dear St. Barbara, the mountain is tall, we are small. Yesterday we wanted to move the mountain. Today we pierce it and realise the longest tunnel in the world, on time, as we had planned, at the costs, as we had calculated.⁵³

53 »Liebe Schweizer Stimmbürgerinnen und Stimmbürger, liebe Mineure, Bauarbeiter, Vermesser und Ingenieure, liebe Verkehrsminister aus der EU, live zugeschaltet aus Luxemburg, liebe Sissi, liebe heilige Barbara, der Berg ist gross, wir sind klein. Gestern wollten wir den Berg versetzen. Heute durchbohren wir ihn und schaffen den längsten Tunnel



Fig. 32: The small temporary shrine containing the photographs of the victims of accidents during the construction. At this time, eight people had died. Screenshot of the live stream by Radiotelevisione Svizzera di lingua italiana. By the end of the tunnel construction nine people had lost their lives: Andreas Reichhardt (Germany), Jacques Du Plooy (South Africa), Heiko Bujack (Germany), Albert Ginzinger (Austria), Salvatore di Benedetto (Switzerland), Andrea Astorino (Italy), Thorsten Eisenmann (Germany), Hans Gammel (Germany), and Giuseppe Luizzo (Italy).



Fig. 33: Transportation minister Moritz Leuenberger takes the floor during the ceremony.

der Welt, zum Zeitpunkt, wie wir ihn planten, zu den Kosten, wie wir sie rechneten.«
Translation by the author.

The minister was very proud of such a huge performance by a small, diverse country in the middle of Europe. In his speech, he interpreted the breakthrough as a clear expression of a functioning direct democracy, a sign of recognition of the nation's minorities, and a contribution for sustainability. He stressed the significance of this technological achievement for Europe's train infrastructure and its contribution to strengthening solidarity within the continent (fig. 33).

The list of the people addressed at the beginning of his speech anticipated the values he elaborated on later: direct democracy, advanced knowledge and professional skills, a good political and strategic network within Europe were the conditions for the success. The mention of Sissi and St. Barbara echoes the tension between technology and religion: while the former is a sophisticated machine that enables the appropriation of the mountains for the sake of the economy and mobility, the latter refers to religious practices that help negotiate the contingency of a dangerous working environment. In the context of the broadcast ceremony, the contrast between machine and the saint is noteworthy. Invoking the presence of a holy figure, the minister referred to the mountain as an uncontrollable, transcendent force. Even in a time of safety protocols and sophisticated engineering, divine protection is very important to face contingency and danger. The memory of the dead colleagues underlined this existential aspect.

5.7 Diverse religious rituals in the Gotthard base tunnel

After the speeches by the authorities, two Roman-Catholic priests in traditional liturgical clothing and the compulsory orange security helmet took the stage and transformed the ceremony into a religious ritual (fig. 34). Pater Vigeli Monn from the Benedictine cloister in Disentis and the priest Reto Nay, a member of the parish of Sedrun, situated 800 m.a.s.l directly above this transitory sacred place, represented the local communities. They alternated meditations and prayers in German, Italian and Rumantsch, before performing a blessing of the wall and the people gathered in the tunnel.

In this liturgical part, the mountain was praised as being part of God's wonderful creation. Selected biblical passages from the Psalms and Jesus Ben Sirach, combined with prayers, emphasised the ambiguity of the rela-

tionship between human beings and the divine creator. The harmony of creation and the human capacity to discern such harmony was described in a certain tension to each other. Human beings are part of God's creation and, at the same time, they are responsible for protecting it. However, they need God's guidance to prevent them from ruining creation. The risk of blurring the thin line between caring for creation and just transforming nature as an object was often evoked, for instance in this prayer:

Allmighty God, you have empowered the human being to subdue the earth and for that you have endowed him with spirit and strength. We thank you for this work, which was created through the planning and the labour of the many people working here. May your holy spirit rule in their hearts, so they not only act, but also understand, that you are the great breakthrough in their life. We ask this through Jesus Christ, our Lord. Amen.⁵⁴

In front of a political, economic, scientific, and technological success such as the base tunnel, the prayer suggests that the *homo faber* should not forget who the true creator of the universe is. Accompanied by a female worker in an orange overall, holding a metal bucket, the priests sprinkled the wall and the audience with holy water (fig. 35). Intercessory prayers reiterating creation-theological motifs and the ambiguity of human action concluded the liturgy. The priests prayed to God to illuminate the use of science and technology, whose astonishing achievements were visible on the tunnel, for the sake of humanity, and to preserve the workers and the future travellers. The liturgy ended with a last prayer for the deceased workers.

By means of words and songs, the blessing ritual added a theological meaning to the breakthrough celebration. The ambivalent mountain that is a barrier and a link between countries is hence interpreted as being a part of God's creation. The human beings are reminded of their double role within a Christian worldview, being themselves created and responsible for preserving God's work. The tunnel is read as a metaphor for the relationship between God and humanity.

54 This prayer was spoken in German. Translation from the audiovisual source by the author.



Fig. 34: The priests begin a religious ritual in front of the stone wall.



Fig. 35: The priests bless the mountain and sprinkle the stone wall with holy water. Screenshot, live stream.

It is not clear why a Roman-Catholic liturgy was chosen for this celebration, possibly because of the location of the wall beneath the upper part of the valley Surselva where Catholicism is predominant. In a culturally and religiously diverse nation, considering that the community of the workers encompassed people from many countries, and the live broadcast was addressing audiences in various places, an interreligious ritual might have been expected.



Fig. 36: The tunnel boring machine called Sissi, on the south side of the tunnel tube, is tackling the last wall. On the control panel photographs of the people who died in working accidents are visible.



Fig. 37: Over the stencil on the last stone wall, first cracks appear.

Overall, the religious ritual takes up a significant amount of time within the formal celebration, which is surprising in a ceremony about a world record in subterranean engineering in contemporary society. Furthermore, the relationship between religion and technology plays an even more important role in the following events of the celebration.



Fig. 38: The wall collapses under the pressure of Sissi. The boring head is visible behind the stone dust.



Fig. 39: St. Barbara and Hubert Bär after having crossed the new passage through the Gotthard.

The Roman-Catholic liturgy concluded the formal part of the ceremony. At this stage, Sissi was already at work, tackling the rock dividing the two parts of the tunnel tube (fig. 36). As the first cracks on the wall appeared (fig. 37), the tension within the audience increased. The noise of the boring machine became very loud, rocks fell down and, at 2:18 p.m., the entire wall collapsed. Behind the thick dust layer, the boring shield of Sissi appeared (fig. 38).



Fig. 40: St. Barbara joins the deceased miners.



Fig. 41: Flags of the different countries of the workers are waved.

The sound of trumpets from the southern part reached the participants in the northern part. The oldest miner, Hubert Bär, was going to pass first, but only after the statue of Barbara, the patron saint of miners, he held in his hands, had crossed the new threshold (fig. 39). Once he joined the enthusiastic audience on the other side, he placed the statue inside the small shrine for the dead (fig. 40). Meanwhile, other miners and tunnel workers passed across the fallen rocks and reached the northern side.



Fig. 42: The minister of transportation Moritz Leuenberger receives a statue of St. Barbara from his predecessor Adolf Ogi.



Fig. 43: The shrine of St. Barbara in the access-tunnel in Amsteg.

The saint is holding a tower with three windows. On the left side of the door, made of wrought iron and glass, a hammer and a pick with wooden handles are integrated in the design. They are a common symbol of miners, which also recurs in heraldry.⁵⁵ On the right side, there is the blossoming branch of a cherry tree, which refers to a tradition linked to the feast day of St. Barbara on 4 December.⁵⁶

⁵⁵ See Kirnbauer 1975.

⁵⁶ Eberhart 1988, 70–73.

Everybody was happy and proud. In fact, the drilling from the two sides matched perfectly, the difference was less than one centimetre, the timing perfect. The miners waved the flags of the bordering cantons – Ticino and Graubünden – first, then of the Swiss confederation, followed by the flags of the diverse countries they came from (fig. 41). The spontaneous gestures, the emotions of the people who worked strenuously for so many years, and under such hard conditions engaged the audience present on site and in front of their TV-screens. Another St. Barbara statue appeared in the arms of ministers (fig. 42).

There is no construction site within the Alps without statues of this saint. Usually, a small shrine with St. Barbara is placed at the entrance of the tunnel construction site. Once it is completed, the saint follows the workers on to other places. In the Gotthard base tunnel, an installation that needs a pains-taking maintenance, there are still three statues in the corresponding access points to the tunnel in Faido, Amsteg and Sedrun (fig. 43).

St. Barbara is considered the protectress of miners and all who work in subterranean digging. According to her legend, she lived in antiquity. The wealthy nobleman, Dioscurus of Nicomedia, (a city in Asia Minor, today Izmir in Turkey), imprisons his beautiful and brilliant daughter in a tower, before leaving on a journey, to protect her from the danger of malicious men. Barbara devotes herself to study and becomes a Christian. She represents her new faith by adding a further window to the two already existing, as a reference to the trinity. On his return, the pagan father understands immediately the disgrace that has happened to his own daughter and tries to kill his Christian child. Miraculously, a cleft appears in a rock, and Barbara finds a refuge there. Unfortunately, a shepherd betrays her whereabouts but is immediately turned into a rock himself, whilst his sheep become locusts. Barbara is imprisoned and tortured, but Christ heals her wounds during the night. In different variants of the legend, the list of the suffering she has to endure, vary: her breasts are cut off, she is burned with torches, or dragged naked through the street. Eventually, her father beheads her and, immediately, a fire from heaven kills him.⁵⁷

Barbara appears in lists of saints from the late medieval period. She is depicted with various attributes: a peacock, a symbol of resurrection, a tow-

57 Sigrist 2008, Eberhart 1988 and Schmid 1951, 202–204.

er with three windows, a chalice with a host, the crown of the martyrs. Over the centuries traditions surrounding St. Barbara emphasise her role as a protectress of people in distress. In particular, she is associated with the danger of a sudden death, for example by lightning. In alpine regions, St. Barbara became the protectress of artilleryists and miners since the 17th or the 18th century. Until today, her feast day is celebrated on 4 December.⁵⁸

In the Alps, the devotion to the saint was clearly located in a Roman-Catholic context. In the contemporary subterranean working practices, however, the institutional frame seems to be blurred. The worship is embedded in the multicultural teams of specialised workers. In the liturgy we have analysed, St. Barbara is only briefly mentioned, but never directly addressed, while she is very much the focus in the performance after the breakthrough. The statue of the saint is held in the arms of the miners, she is carried to the portraits of the workers who died, and handed over to the political representatives.

While the priests perform a ritual based on biblical texts, traditional prayers forms and theological interpretation of nature, the miner's worship of St. Barbara is performed by material practices, beyond an institutional frame. There are no formal mentions of the saint beside the – significant – address by the minister of transportation.

The relationship with St. Barbara is mirrored in the bodily connection with the statues. Her function as a protectress of the subterranean workers in a high-tech construction site is performed by means of gaze and touch. There is a link between Sissi, the boring machine, and St. Barbara. Both are part of the equipment to overcome the mountain as a barrier. The former stands for the most advanced developments of civil engineering, the latter for a form of protection that goes beyond practical safety procedures. For people working in shifts in a dangerous, subterranean environment without daylight, exposed to high temperature in the middle of an alpine massif, the statue of St. Barbara materialises a transcendent form of protection. Inherited from tradition and adapted to modern working conditions, the devotion to the Saint is a way of transforming the workers into a community exposed to the force of the mountain. The community not only include Barbara as a transcendent saint. The dead colleagues are also part of the group. Their

58 Eberhart 1988, 11–25.

portraits are not only in the temporary shrine for the ceremony, but also in the cockpit of the boring machine.

The devotion to St. Barbara and the memory of the dead in this construction site refer to a fundamental human experience in the face of the uncontrollable. The saint does not avoid death but helps others to deal with danger and accidents. This religion of the base tunnel is a collective practice which is part of working routines. It materialises the experience of contingency in a domain of scientific innovation and technological record performances. In the ceremony for the tunnel tube breakthrough, it becomes visible as an integral part of the subterranean community of miners.

5.8 Religious practices in liminal places

The exploration of mountains as liminal places where religious worldviews, practices, and traditions are negotiated and adapted has been introduced with a Tibetan-Buddhist cabin in the Gotthard massif. The seasonally inhabited hut is a visible trace of contemporary cultural and religious exchanges between Europe and the Himalayan religion. Taking up this introductory example, the following case studies on alpine peaks and a tunnel construction site probe the question of the role of religion in alpine spatial practices more deeply. In both cases, diverse orientations and a plurality of worldviews and practices contribute to shaping these remote places.

Peaks and tunnels in the Alps are liminal places where the human presence has a transitory character: hikers and mountaineers, miners, workers, and, finally, travellers do not dwell permanently in the mountains, but come from other places, and visit them for diverse purposes. In both spatial practices the body plays a crucial role. Climbing is a physical activity. The perception of the mountain is strongly mediated by the body: the immediate exposure to the weather conditions, the specific terrain of the territory, and the altitude are a corporeal challenge. Working within the tunnel also demands specific bodily adaptations to hostile conditions such as the lack of natural light, high temperatures, and noise. Both activities expose the human body to potentially lethal dangers.

The mountains are also liminal places because they are perceived and interpreted as geomorphological and metaphorical borders, separating riv-

ers, regions, valleys, languages, and cultures. While the top of a mountain marks the limit between earth and sky, or, in a religious key, heaven; the rock, which in a religious interpretation is part of creation, is a material barrier that has to be removed with a huge technological effort. Putting crosses on peaks and constructing passages beneath the Gotthard massif are contemporary appropriations of liminal places embedded in a historical development characterised by the interrelation between spatial practices and the negotiation of diverse religious orientations.

From a religious-historical perspective, the mountains are also liminal places in the articulation between diverse transcendent beings. The exploration and later exploitation of those remote territories became a trend in the modern era and is based on a diverse approach to the wilderness, which has become attractive as a place of human fulfilment by means of bodily and technological endeavour. This uncontrollable part of creation is transformed into a natural environment that has to be discovered, scientifically studied and appropriated. The alpine territories are transformed by new spatial approaches encompassing new forms of planning and design. Material things and technologies appear as markers of the human appropriation of the remote. Still, as spaces of representation, mountains remain ambivalent places, liminal zones in which the human body is challenged in a specific way.

The different appropriations of the alpine mountains we have considered here do not at all correlate to a linear transformation from a religious interpretation to a scientific and technological domestication. As the case studies show, religious meaning-making processes are still ongoing and result from complicated negotiations of diverse attitudes, ideas, expectations and the adaption of specific traditions.

The crosses on the peaks articulate continuity and a rupture with traditional forms of marking the pastures and paths with Christian symbols. Down the centuries, this bold symbol has been interpreted in a variety of ways, ranging from its use as a material support for scientific instruments to a political-imperial sign, to an expiatory practice or an open reference to the individual, existential impact of reaching the top. The destruction of crosses or the reference to Islam belong to this broad range of spatial appropriation of the mountain as a liminal zone in which political, religious and scientific meaning-making processes are blurred. Religious symbols on mountain peaks transform the perception of those places by means of their very visible,

often massive materiality. They shape identities of anonymous groups that share similar physical activities, sports techniques and material equipment.

Similarly, in the construction of the longest tunnel in the world, a place of extraordinary engineering innovation, religious interpretations and practices are merged with advanced technological and safety procedures. The reference to the mountain as creation attributes to the rock a certain agency: it challenges humans, it exposes them to danger and hostile conditions. Scientific knowledge is paramount to achieve the goal and improving railway connections in Switzerland and Europe. Still St. Barbara is part of this process of appropriation of a liminal place in the depths of the earth; technological procedures and religious worldviews, political processes and economic strategies are intertwined. The religious practices we have reconstructed by means of a significant celebration shape the identity of miners and workers and build the transitory community of professionals that gathers, as long as the construction site is in progress. To this community also belong the deceased that are part of the religious practice in the ceremony and in everyday working life. Although the devotion to St. Barbara is historically embedded in Christianity, the community practicing the »religion of the tunnel« is an internationally diverse group of specialists spanning many countries and cultures.

