

Chapter 1: Introduction

Alphorn-playing and yodeling are celebrated together at alpine festivals and have become an integral part of national cultural events in Switzerland. Both music practices are experiencing an increase in interest and are inspiring a wide audience. It is not surprising that questions arise about music-historical contexts. Is alphorn-playing to be understood as “blown-yodeling?” Did the alphorn, with its characteristic natural tone series and sound, influence yodeling? Are both rooted in the centuries-old Kuhreihen?

This publication discusses whether there are similarities between yodeling and alphorn music, and whether evidence points to a common past of the two musical practices. The research is intended to clarify where and when in the course of history a one-sided or mutual influence occurred, and whether this persisted or periodically re-appeared. The study area originates from Switzerland and extends to the south of Germany and Austria, where alphorn music and yodeling coexist or coexisted. The research results are intended to contribute to the current discussion on the connection between alphorn music and yodeling, as well as to the global debate on the instrumental hypothesis.

Research motivated by the popularity of the alphorn and yodeling

The growing interest in alphorn music and yodeling can be seen in the extremely well-attended yodeling festivals as well as in the large and fully-booked range of various courses for learning to play alphorn and to yodel, or for the production of one’s own alphorn. In addition to a majority of about 18,000 active yodelers, the Federal Yodeling Association counts more than 2,100 alphorn players (EJV [ed.] 2018: 21). This rising interest in the instrument and yodeling is even greater in reality, as not all people who have found their way to the alphorn or yodeling in the last 20 years belong to the Yodeling Association.

An increasing interest in the alphorn and yodeling can also be seen in other Alpine countries. In 2000, there were over a thousand active alphorn players living in Germany (Schüssele 2000: 63) and the number has grown since then. No figures are available for Austria and Liechtenstein, but here, too, the range of yodeling workshops suggests a rise in the number of active yodelers (Steirisches Volksliedwerk [ed.] 2009: 59).

Yodeling and alphorn groups are also found in England, the Netherlands, the USA, Canada, Japan and Korea (Vignau 2013: 157). The number of people involved in alphorn music and yodeling – both in the Alpine region and worldwide – has never been as large as it is today.

Hand in hand with this growing interest and a correspondingly rapid dissemination, alphorn-playing and yodeling have been incorporated into different music genres. Pepe Lienhard took the alphorn into pop music in the 1970s (Lienhard 1977). The composer Jean Daetwyler wrote works for alphorn and orchestra (Daetwyler 2002), and Eliana Burki uses the alphorn in her “funky” music (Burki 2008). The horn player Arkady Shilkloper and the trumpeter Hans Kennel expand the instruments of unconventional jazz compositions with the alphorn (Shilkloper 2000, Kennel 2017), and the Swiss composer Daniel Schnyder composed a *Concerto for Alphorn and Orchestra*, which was premiered by Shilkloper in 2004. Alphorn player Lisa Stoll has become known internationally through her popular recordings, concerts and live-stream events,¹ and Balthasar Streiff shows with his quartet Hornroh (Hornroh 2015) that the alphorn can be employed in experimental music. In vocal music, the formations La vache qui crie,² the Duo Stimmhorn (Stimmhorn 2001) and the yodeler Nadja Räss, in her project *stimmreise.ch* (Räss 2006), experiment with yodeling. Furthermore, the yodeling club Wiesenberg celebrated success in cooperation with prominent pop stars (Weber/Schilt 2012).

These growing numbers, along with the stylistic expansion of the repertoire, provide additional motivation for investigating the research question of a relationship between alphorn and yodeling music. The present work is aimed at active alphornists and yodelers who would like to become more informed about the historical, sociological and musical backgrounds of their music, as well as all persons interested in musicology. The research results should be understood as exclusively descriptive and documentary, and in no way be regarded as prescriptive. The way in which the alphorn is played, or which technique is used in yodeling, is determined solely by the musicians.

There are already a number of detailed studies on the alphorn and yodeling. Brigitte Bachmann-Geiser published her book *Das Alphorn* in 1999, with different points of emphasis written by specialists. Bachmann-Geiser (1999: 82) mentions the “alphorn-fa,”³ which is so important for the present research, but she does not compare this natural tone with those that are partly used in natural yodeling,⁴ as she focuses on other aspects. Another work of comparable importance, which appeared one year after Bachmann-Geiser’s book, was published by the German alphorn soloist and multi-instrumentalist Franz Schüssele. Schüssele presents wooden horn instruments with their musical characteristics from all over Europe and points to common harmonic foundations of alphorn melodies and yodeling songs (Schüssele 2000: 215), but he does not deal with them in greater

1 www.lisastoll.ch, 11 February 2022.

2 www.lavachequicrie.de, 23 March 2018.

3 The natural tone series of the alphorn and the alphorn-fa are discussed from p. 21.

4 In Switzerland today, “natural yodeling” is understood to mean yodeling without words. For a detailed consideration of the concept of natural yodeling and its historical meanings, cf. Wey/Kammermann/Ammann 2017.

detail. In her dissertation on the alphorn, published in book form, Charlotte Vignau presents alphorn groups from Switzerland, the Allgäu, the Netherlands and Japan, linking ethnomusicological aspects of the present with media field research techniques, but she mentions yodeling only peripherally (Vignau 2013). In 2010, the alphorn composer Hans-Jürg Sommer published an *Evaluation and Interpretation of Historical Sources on Alphorn Melody*⁵ and sums up that alphorn music has an ancestor in Kuhreihen (Sommer 2013). In his book on the alphorn, journalist Pierre Grandjean refers to musical parallels between yodeling melodies and Kuhreihen (Grandjean 2012: 56), but he quotes only Sommer (2013) on this issue. The English horn player and musicologist Frances Jones wrote her dissertation, also now in book form, on the role of the alphorn in classical music (2020)⁶ and refers to sung Kuhreihen, which can also be understood as alphorn melodies. In his monograph on the alphorn, Eckhard Böhringer (2015) provides a detailed study of the herdsman's horn. The author has dedicated himself to the reproduction of historical herdsmen's horns and treats the alphorn as a subcategory of the herdsman's horn. Böhringer discusses the musical characteristics of long natural trumpets, but not the musical relationship to yodeling.

Max Peter Baumann published his dissertation *Music Folklore and Music Folkloristics*⁷ in 1976, in which he describes seven theories of the origin of yodeling, including the possible emergence of yodeling as an imitation of the alphorn sound (Baumann 1976: 101). Heinrich Leuthold published his research on natural yodeling in Switzerland in 1981 and mentions the relevance of the natural tone series for yodeling; however, he does not see this as conditioned by a relationship with the alphorn (Leuthold 1981: 27). Bruno Mock refers to the transmission of Appenzeller yodeling styles in his dissertation entitled *Rugguusseli* (Mock 2007). Mock mentions the use of the 'alphorn-fa' (cf. p. 21) in Appenzeller yodeling (Mock 2007: 57), but he provides no music-analytical discussion. Eugen Hänggi presented his dissertation at the St. Petersburg Conservatory on the history of yodeling in the musical culture of Switzerland, in which he provides a detailed discussion of Kuhreihen from the 19th century (Hänggi 2011, in Russian).

In 2017, Helen Hahmann presented a music-sociological study on yodeling in the Harz Mountains without making any references to the alphorn. In musicological and folklore literature, the history of the alphorn and yodeling is thus well documented, whereas a consideration of the musical relationships between the two musical practices is a research gap.

5 Original title, *Auswertung und Interpretation historischer Quellen zur Alphornmelodik*. In 2013, a slightly revised version was published, which is quoted here.

6 Frances Jones (2020), *The Alphorn through the Eyes of the Classical Composer*.

7 Original title, *Musikfolklore und Musikfolklorismus*.

Methods

In developing an argument for musical similarities between yodeling and alphorn music, one must take into consideration more than the 11th natural tone typical of the alphorn, which also occurs in natural yodeling (the “alphorn-fa”). Further musical points of contact should be investigated, such as harmony, polyphony, timbre, agogics and interpretation, as well as functional and symbolic similarities. On the one hand, such complex questions require an interdisciplinary approach and a number of targeted investigative methods; on the other hand, in order to preserve objectivity of comparative research, verifiable similarities must be presented and explained in the same way as unverifiable but expected similarities. In order to ensure the completeness of source evaluation, different media, such as historical alphorns, relevant texts, illustrations, notated music, and recordings are evaluated analytically.

A meaningful number of historical alphorns are documented and played in order to capture their fundamental tone, intonation and sound. An overview of the relevant documented instruments can be found in Appendices 2 and 3. The surviving historical instruments represent the most conclusive contemporary witnesses of this research.⁸

The evaluation of relevant writings from libraries and archives as well as from private collections forms the basis of the historical approach. These texts are contextually and hermeneutically analyzed, taking into account both the historical circumstances and the intentions of the authors.⁹ In addition, general terms must be understood in their epoch-specific meaning.

Early illustrations represent important sources as evidence for the morphological development of the alphorn. Bearing in mind the fact that the length of the instruments depicted can only be estimated in comparison with other objects or with persons, that artistic freedom must be considered in paintings or drawings, and that respective epoch-dominating idealization must not be ignored in pictorial representations, this iconographic approach remains a useful method to determine musical characteristics of instruments on the basis of their relative proportions.

For the music-analytical part of the research, intervals, tone series, melodic structures and the form of polyphony are compared on the basis of relevant notations. These comparisons serve to reveal similarities and differences between yodeling melodies and alphorn melodies. Research-relevant music recordings are transcribed, and existing transcriptions are compared with corresponding music recordings. Bar lines are omitted if no metric pattern prevails in the sound recordings. This takes into account the concerns of many researchers who regard metric division of yodeling as a degradation of its free melody. If bar lines are set, they are primarily to be understood as an emphasis on the following note. The melodic tones characteristic of the alphorn are marked with special signs. In order

⁸ For the definition of historical alphorns, cf. p. 155.

⁹ Historical texts are respected in their spelling and orthography, and the annotation “[sic]” is only put in conspicuous places.

to improve the readability of certain transcriptions, they are sometimes transposed, which is indicated in the appropriate places. Despite this simplified presentation, these are exclusively descriptive transcriptions in the sense of Seeger (1958: 184).

Recordings of yodeling and alphorn music are among the most valuable witnesses of our research. As historical documents, they are more reliable than transcriptions, but go back less far into the past. The earliest yodeling recordings from the Alpine region date from the years around the turn of the 20th century; the earliest alphorn recordings are from the 1920s. Relevant early as well as current recordings are evaluated and compared using computer-aided sound analyses with precise frequency information. The LARA program developed at the Lucerne University of Applied Sciences and Arts is used for the analysis.¹⁰ Sound images (spectrograms and TCIF spectrograms)¹¹ can be used to identify accurate pitches and calculate intervals.

Positioning of the alphorn in the classification of musical instruments

The texts on the alphorn quoted in this work show that the term alphorn is not always defined by the same criteria. Depending on the region and time period, the instrument is called differently, and vice versa, comparable instruments with different shapes and lengths can bear this name.

In the 1914 *Classification of Musical Instruments*¹² by musicologists Erich Moritz von Hornbostel (1877–1935) and Curt Sachs (1881–1959), still in use today, the alphorn is classified as shown in Table 1 (in a condensed version). We observe that after 423.121 “End-blown trumpets,” the alphorns investigated in our study cannot be confined to any one of the subcategories: “End-blown straight trumpets” (with or without mouthpiece) or “End-blown horns” (with or without mouthpieces). In order to circumvent this problem, the term “natural trumpet” is used as a generic term for alphorns. This term is used by Hornbostel and Sachs for end-blown trumpets of any length and shape, excluding modern developments, such as chromatic instruments with valves or finger holes. A subdivision in trumpets for instruments with a cylindrical tube, or horns for instruments with a conical tube, is found in Hornbostel and Sachs only for the valve trumpets (HS-BW 1961: 28).¹³

10 Lucerne Audio Recording Analyzer, www.hslu.ch/lara, 23 February 2018.

11 TCIF: time corrected instantaneous frequency (Fulop/Fitz 2006).

12 Original title, *Systematik der Musikinstrumente*. English translations of terms used in Hornbostel-Sachs are from: “Classification of Musical Instruments: Translated from the Original German by Anthony Baines and Klaus P. Wachsmann” in *The Galpin Society Journal*, Vol. 14 (March, 1961), pp. 3–29, cited here as: HS-BW.

13 The classification remains the same in the updated version of the system of Hornbostel and Sachs (MIMO Consortium 2011: 20), whereby the term “Trumpets” has been replaced by

Table 1: Selected entries from HS-BW, pp. 24–27

4	AEROPHONES The air itself is the vibrator in the primary sense
42	Wind instruments proper The vibrating air is confined within the instrument itself
423	Trumpets The air-stream passes through the players lips ...
423.1	Natural trumpets Without extra devices to alter the pitch
423.12	Tubular trumpets
423.121	End-blown trumpets ^{*1} The mouth-hole faces the axis of the trumpet
423.121.1	End-blown straight trumpets The tube is neither curved nor folded
423.121.11	Without mouthpiece <i>Some alphorns</i>
423.121.12	With mouthpiece <i>Almost world-wide</i>
423.121.2	End-blown horns The tube is curved or folded
423.121.21	Without mouthpiece
423.121.22	With mouthpiece

1 The original has the (in)famous misprint: “End-blown grumpets” about which Jeremy Montagu remarks, “We also have among the trumpets my favourite misprint, 423.121, the end-blown grumpet – how many instruments can be described in this way I am not sure, but in my time as an orchestral player I have met a number of end-blown grumpeters.” (8) Montagu retains the misprint in “Additions and Emendations” and notes, “ I could not bear to correct my favourite misprint.” (23). Undated manuscript: “It’s time to look at Hornbostel-Sachs again: Hornbostel-Sachs Reconsidered.” Paper at: www.academia.edu/33125887/Hornbostel_Sachs_Reconsidered, 7 February 2022.

Source: HS-BW: 24–27.

In order to clearly position the alphorn within the group of natural trumpets, organological, musical and functional criteria are taken into account. Based on the organological theory of musicologists Oskár Elsček and Erich Stockmann, this strategy, in contrast to systematic classification, represents a typological approach (Elsček/Stockmann 1968: 231). Today, the term alphorn refers to a “long” (generally over 2 meters) conical tube made of wood, without valves and finger holes, with an opening that turns upward and widens into the shape of a bell. Within this organological interpretation, authors apply different criteria for

“Labrosones” (lit. “lip-sounders” = “lip-vibrated instruments”; German “Lippenklinger” [Steiger 2001: 9]).

specific terms. For Sommer (2013: 14), a natural trumpet of this form is an alphorn only if the length is two meters or more, because typical alphorn music cannot be played on shorter instruments. For Vignau, the name alphorn refers to the modern, standardized form of the instrument (Vignau 2013: 5). Böhlinger calls all natural trumpets in southern Germany “Hirtenhorn” (herdsman’s horn); for him, the alphorn is a regional representative of the herdsman’s horn (Böhlinger 2015: 15).

The present study subsumes under the term alphorn wooden natural trumpets without valves or slides, whose cultural background lies in the Alpine region. The Büchel, a curved and shorter form of the alphorn in its overall length, is examined in this study and designated accordingly. In parts of Austria and South Tyrol, locally specific terms (Wurzhorn, Strebtuter, Waldhorn or Flatsche) are used for wooden natural horns, and these are adopted here. Natural trumpets of urban or courtly origin are not included. Different notes are produced on the alphorn by overblowing (for example, by changes in airflow and lip tension), and correspond to the natural tone series.



Fig. 1: Natural tone series of the alphorn. Alphorn music is generally notated in C independent of the tuning of the instrument. Accidentals with arrows up or down designate ekmelic notes.

Typical ekmelic (unequally-tempered) pitches of the alphorn are the 7th, 11th, 13th and 14th natural tones. These four tones deviate so audibly from equally-tempered intonation that they are perceived as “wrong” compared to our listening habits and can be clearly distinguished from other tonal levels despite fluctuations in intonation. Measured in cents,¹⁴ the distances to the next equally-tempered half-tone amount to about one sixth (31 cents) for the 7th natural tone and one fifth (40 cents) for the 13th natural tone. The 11th natural tone is colloquially referred to as “alphorn-fa” and is considered one of the most important characteristics of the instrument. On an equally-tempered scale with the fundamental tone C, the ‘alphorn-fa’ lies in the middle between the tones F^2 and F^\sharp , 551 cents above the tone C^2 and 51 or 49 cents away from the neighboring tone levels.

The number of natural tones that can be played on the alphorn is mainly determined by its length. Modern alphorns in F Sharp (about 3.4 meters) or F (about 3.6 meters) are the most common nowadays, and their repertoire usually moves between the second and the 12th natural tone. The higher range up to the 16th natural tone is largely reserved for virtuosos.

¹⁴ 100 cents correspond to an equally-tempered half-tone, 1200 cents to an octave.

Historical alphorns are in many cases shorter with a correspondingly higher fundamental and playable natural tone series; technically-demanding higher frequency notes are reached earlier in shorter alphorns. The characteristic ‘alphorn-fa,’ the 11th natural tone, which is also found in some Swiss natural yodels, does not belong to the range of short instruments. On the other hand, yodel-like sequences and triad combinations can also be played on short horns.

Yodeling terms

In regional dialects the same terms can denote different song and music genres; on the other hand the same musical genres can have regionally different names, and the meaning of the names can change over time. Names of musical instruments or song genres may have a different meaning today than they did in the same region in earlier eras. With regard to specific sources, original regionally typical spellings are used and explained in the corresponding passages. Initially, the main commonly used expressions are presented.

The change of vocal register between head and chest voice is considered a typical feature of most yodel songs. Register-changing songs are practiced in various musical cultures worldwide (cf. p. 23). For register-changing singing in non-alpine areas, the term “yodeling” is avoided. As is usual in modern ethnology, the self-designations of the corresponding ethnic groups are used in their place. Register-changing singing can be understood as a global umbrella term under which yodeling is the Alpine manifestation. Correspondingly, the term “yodeling” is used only for the Alpine region.

The term “jodlen” (yodeling) was used by the librettist Emanuel Schickaneder (1751–1812) in the 1796 comic opera *Der Tyroler Wastel* (published in Schickaneder 1798: 43, Wascher 2016: 138), and in the same year the philosopher and publicist Lorenz Hübner (1751–1807) used yodeling in his description of bringing cattle to alpine pastures near Salzburg (Hübner 1796: 287). Although the verb yodeling can be traced back to the end of the 17th century (Wascher 2016: 139), its musical connotation remains difficult to interpret for this early period because it was also associated with noise-making and bad behavior in public (Wascher 2016: 140).

In Austria and Germany today, the term “yodeler” (Jodler) can refer both to a musical yodeling performance as well as to the performing male person. In Switzerland, however, “yodeler” (Jodler) refers exclusively to the male person performing the yodel; the piece of music itself is called “yodel” (Jodel). These terms are used here according to respective regional norms.

“Kuhreihen” and “Ranz des Vaches” refer to vocal or instrumental pieces of the Alpine population that were “discovered” by traveling intellectuals in the Romantic era (cf. p. 44). Depending on the source, various alternative spellings occur, such as “rans des vaches” or “Kühreyen.” In the research presented here,

with the exception of direct quotations, only the spellings “Kuhreihen” or “Ranz des Vaches” are used.

The regional terms “Juchzer,” “Juiz,” “Juhezer” and “Jüüzli” derive from the same word stem and stand for similar musical practices in different regions. Names such as “Kuhreieli,” “Chüädreckeler” or “Löckler” refer to the same or very similar musical genres. All these terms are employed in our text according to regional affiliation.

Research area

Comprehensive studies of customs must be conducted across national boundaries since transfers of intangible and tangible cultural property take place across borders. Both the alphorn and yodeling were and are known in a transnational Alpine area, and accordingly this research area was selected for the present study.

Alphorn-like natural trumpets can be found on many continents: in South America (Lehmann-Nitsche 1908: 936), Australia (Montagu 2014: 4), North America (Appalachian Mountains), Oceania (New Guinea), Asia (Himalayas) and Africa (Montagu 2014: 71). Only in Europe is there a wide variety of different forms of natural trumpets. In his detailed book on the distribution of natural trumpets in Europe, Schüssele mentions the following areas outside Switzerland: for Germany – the Allgäu and other parts of Bavaria (Schüssele 2000: 63–93), for Austria – Vorarlberg, Tyrol, Carinthia, Styria, the Salzburger Land, Lower Austria and Upper Austria (Schüssele 2000: 94–105) and for Italy – South Tyrol (Schüssele 2000: 113). For France, he mentions three regions (the Vosges, the Pyrenees and Corsica [Schüssele 2000: 107–112]); additional areas mentioned are Croatia, Slovenia and Serbia (Schüssele 2000: 130–133). Not all of these areas are included in this investigation; the distribution area of the natural trumpets relevant for this study is limited to the Alpine region. The contiguous Alpine region, in which the natural trumpet in alphorn-like form is known and has been played for a number of generations as part of the local musical tradition, includes the south of Germany, Austria and Switzerland.¹⁵

Like the alphorn, register-changing songs also occur in various parts of the world, from Africa and Asia to Oceania and America, and accordingly it has been noted that “yodeling takes place all over the world.” Whether among the oft-quoted “yodeling” ethnicities (Hornbostel 1925: 209, Wiora 1958: 75, Leuthold 1981: 5), such as the Dani in New Guinea, the Sami in Scandinavia, the Inuit in Canada and many others, register-changing songs are in fact involved (Baumann 1996: 1499). This is a topic that would have to be examined in more detail and

15 In Switzerland, these are mainly the mountain regions of eastern Switzerland, central Switzerland and the Bernese Ober- and Mittelland as well as some French-speaking Alpine areas. In Graubünden alphorn-playing is now cultivated; in the past the metallic Tiba was widespread, which can be associated with the South Tyrolean “Strebütter” (cf. p. 127).

goes beyond the scope of the present research. Our research includes only the yodeling areas of the Alps and excludes other European yodeling regions, such as the Harz (Germany).

While within our research-relevant areas all references relating to alphorn and yodeling are investigated, this study is concentrated on those regions where both yodeling and alphorn-playing occur. The focus on these regions in particular makes it possible to pursue the question of mutual influences of two concrete music practices within an identifiable and clearly defined space. Nevertheless, the idea of reciprocal relationships between vocal and instrumental music concerns ethnomusicological research worldwide.