

THE SOUND OF CONTACT: HISTORIC INUIT MUSIC-MAKING IN NORTHERN LABRADOR

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ABSTRACT

The ethnohistoric literature suggests that musical instruments figured in diverse ways in early Inuit-European contacts, but to date there has been little archaeological attention to Inuit music. The present paper reviews indigenous musical practices in the North American Arctic, and the changes that contact precipitated, with particular attention to Labrador, where the promotion of European performance genres was a key component of Moravian missionaries' conversion efforts. The unusual case of the jaw harp or trump, which is rarely mentioned in the documentary record but appears widely on historic Inuit sites in Labrador, is then explored. Jaw harp performance parallels traditional throat singing (katajjaq) in interesting ways, and hints at the alternative musical practices that were enjoyed in the intimate recesses of Inuit house life.

One of the most striking episodes in early Inuit-European contact history transpired close to modern Nuuk, on the southwest coast of Greenland, near the end of July 1585. A party in John Davis's expedition, having gone ashore to fetch water and search for signs of inhabitants, encountered a group of Inuit whose intentions were uncertain. Perceiving the delicacy of the unfolding situation, the crew back on one of the vessels sent a boat with armed men and - shrewdly - musicians, "purposing either by force to rescue us, if neede should so require, or with curtesie to allure the people", as John James Marchant wrote at the time (Markham 1880:7). In the event, the sailors' dancing and music-making broke the ice, and the next morning the Inuit responded in kind: "one of them went up to the top of the rocke, and lept and daunced as they had done the day before, shewing us a seales skinne, and another thing made like a timbrel, which he did beate upon with a sticke, making a noyse like a small drumme." (Markham 1880:7).

This elegant illustration of the capacity of music to mediate cultural exchanges was reproduced numerous times, in different forms, throughout the North American Arctic. Whether introduced by Moravian missionaries in Labrador, Orkneymen in the employ of the Hudson's Bay Company or New England whalers in Alaska, Inuit responded to European musical instruments and forms with interest and enthusiasm, although the reverse, unfortunately, was rarely true. Fiddles, ac-

cordions or concertinas, harmonicas and jaw harps were probably the most widely adopted European instruments during the early decades of interaction, but Inuit who settled at Moravian missions in Greenland and Labrador rapidly learned to play a wide variety of instruments, from pipe organs to trombones (Lutz 1982), as well as becoming expert in the performance of sacred choral music (Gordon 2007). Inuit musicians progressively transformed European compositions and performance styles over the subsequent centuries (Artiss 2014; Gordon 2007).

Archaeologically, what might we expect to encounter of this vibrant historical tradition? What are its precontact antecedents? Most importantly, for present purposes, how did Inuit experience and understand European musical introductions, and how did they respond in turn? This paper presents a brief survey of Inuit music-making and its somewhat elusive material expression, focusing on the Labrador evidence. Interestingly, what turns out to be the most frequently recovered variety of introduced instrument, the jaw harp, is virtually absent from the documentary record, while the most frequently mentioned instruments in historical sources, especially the fiddle and accordion, are archaeologically invisible. While some degree of differential curation is undoubtedly at work, it may also be the case that historical documents record forms of musical practice that predominated in the inter-cultural settings of the mission station and trading post, and neglect other, perhaps more common, forms that were enjoyed in the intimate recesses of Inuit house life. Music was an important field of social, and not only artistic and religious, performance, and is implicated in the contact-era transformations of the political, economic, social, spiritual and material spheres. It demands a closer archaeological listen.

AUDITORY AND MUSIC ARCHAEOLOGIES

Archaeology has only recently begun to attend seriously to sensory experience (Houston and Taube 2000; Skeates 2008; Hamilakis 2014), in part as an outgrowth of an earlier postprocessual interest in the phenomenological experience of place and landscape (Ingold 1993; Tilley 1994; Hamilton and Whitehouse 2006), and more recently under the influence of an archaeology of embodiment (Hamilakis et al. 2002; Joyce 2005). Although early work tended to emphasize visual structures and experiences, sound has emerged as an important part of this research program (e.g. Jahn et al. 1996; Mills 2014; Scarre and Lawson 2006; Schofield 2014; Watson and Keating 1999; Witmore 2006). Auditory experiences and practices have been characterized with respect to wider natural (Bruchez 2007; Díaz-Andreu and Benito 2012; Poole and Lacey 2014) and cultural landscapes (May 2014), and both exterior (Rick 2004) and interior (Carvalho et al. 2002) architectural spaces. Archaeologists have also occasionally explored the acoustic properties of materials.

Hosler (1995) has suggested that precontact West Mexican metallurgy aimed at the production of pleasing, and spiritually meaningful, metallic sounds and colors, and Loren (2008) argued that southeastern First Nations sought out trade bells, tinkling cones, keys and beads in part for the sounds they elicited when attached to clothing.

Another avenue for an archaeology of sound is the exploration of past musical forms, contexts and instruments (Both 2009). Unfortunately, like other performance arts, and in contrast with visual ones, musical performance leaves an attenuated archaeological trace. Musical instruments, in particular, have exceptionally low archaeological visibility. The stone, ceramic and osseous materials so ubiquitous in archaeological assemblages are relatively rare components of musical devices (but see, e.g., Caldwell 2013; King and Santiago 2011; Conard et al. 2009; on stone, ceramic and bone instruments, respectively; Brandfonbrener [2003] implies the possibility of an osteoarchaeological approach to repetitive performance), which instead tend to rely on the resonant possibilities of materials such as leather, gut, wood, and metal, all of which survive poorly under common taphonomic conditions (although Turff and Carr [2005] provide an outstanding analysis of the social and symbolic context of metal “panpipes” from Hopewellian contexts). Musical instruments are also frequently delicate in construction, hence prone to mechanical destruction. They are perhaps best represented by depictions of musical performance, for example in petroglyphs (Magne and Klassen 2001), murals and ceramic decoration (Inomata 2006). While images are invaluable documents of the context of performance (and discourses on these performances in other settings), an archaeology of actual instruments would raise other interesting possibilities, not least because it would afford the accurate reconstruction of the instruments themselves and hence the recreation of their sounds. The physical instruments are also amenable to cultural and archaeometric sourcing (e.g. Turf and Carr 2005) that enable exploration of the sorts of cross-cultural musical borrowings which must have been as important in the remote past as they have been throughout recorded history. The landscapes opened up by social theories of sound and performance are archaeologically inviting (Smith 2000), and an emerging music archaeology (Both 2009) is now mapping out the potential of this field.

INUIT MUSIC AT CONTACT

Although the possibility of an archaeology of Inuit music-making might seem implausible, normally perishable materials survive so well in northern contexts that at least three varieties of ethnographically-documented soundmaking device occur reasonably often in precontact Inuit assemblages. Two of these – the bullroarer and the buzz – are typically identified as toys rather than musical instruments (e.g.

Park 1998). The Inuit bullroarer was a lozenge-shaped plate of bone or wood about 15-20 cm long, pierced at one end and suspended on a sinew cord which might in turn be attached to a wooden handle (Jenness 1946:143; Mathiassen 1927b:120; Murdoch 1988[1892]:378-379). When spun rapidly it made a loud whirring sound. The buzz was a rectanguloid or ovoid plate of wood, bone or baleen with numerous shallow teeth cut into its perimeter (Jenness 1922:220; Murdoch 1988[1892]:378; van Beek 1989). It was about 6-9 cm in diameter and pierced in the centre with two holes through which sinew cords were threaded. Holding the ends of the cords, the buzz was made to spin by alternately pulling the cords taut and relaxing them, likewise producing a whirring sound. While both of these are conventionally considered “noisemakers” in the Inuit anthropological literature, one person’s noise is another one’s music, or perhaps ritual sonority. The sound of bullroarers has certainly been ritually important for many groups worldwide (Dundes 1976), and a distinct category of manufactured resonance, even one manufactured by children, might be considered a local, subcultural musical (or music-like) genre.

The other universal sound-making device is the skin drum or *qilaut*, which is often considered to be the only indigenous Inuit musical instrument. It typically consisted of a slender circular or ovoid grooved wood, bone or baleen frame from 25 to 70 cm in diameter over which a thin sheet of gut or hide was stretched (Holtved 1944:286; Jenness 1922:142-144; Murdoch 1892:385-389; Schledermann 1975:224; and especially Hauser 2010 for the variety of materials used to construct precontact and early historic drums in Greenland and a detailed ethnomusicological analysis of Inuit drumming). The drum was held by a short bone or wood handle attached to the frame, and the underside of the frame - not the taut skin - beaten with a bone or wood baton to produce the tone. Drum rims have been identified on Arctic Small Tool tradition sites as much as 4500 years old (Cavanagh [Diamond] 1987; Grønnow 2012), and rims, handles and drumsticks on ancestral Inuit sites likely stretching back to the Old Bering Sea (OBS) culture of the middle of the first millennium A.D. (e.g. Collins 1937:174). Rudenko (1961:155) is skeptical of Collins’s identification of OBS drum parts, preferring to see the first conclusive evidence of drums in the spectacular decorated ivory drum handles that appear in later first millennium Punuk strata in Chukotka, but given Grønnow’s secure identification of Saqqaq drums in Greenland there is no reason not to expect them to occur at the very base of the Inuit cultural tradition as well. The drum was still central to Inuit religious practice and artistic performance in the early contact era, and was sometimes used in the latter context in a somewhat non-obvious way as a vocal resonator, by the drummer singing into the membrane (Women of Povungnituk 1980, liner notes; this usage echoes the practice of throat singing and the use of

feathers as resonators; see below).

In addition to these widespread sound-producing devices there were a number of others with more limited distributions. Puffin bill rattles and whistles, ivory clappers, and a drum suspended from the ceiling are reported for Alaskan groups (Gumà 2014; Lantis 1947:102-103) and an eider feather held in the mouth was played as a resonator, “like a Jew’s Harp” (Oakes 1991:72), by the Inuit of the Belcher Islands and northern Quebec. An instrument that appears in various guises in northern Quebec and Labrador (Arima and Einarsson 1976; Hawkes 1916; Kaplan 1983:843-846; Lutz 1982; Peacock 1977; Turner 2001 [1894]), Baffin Island (Arima and Einarsson 1976; Bennett 1985), Hudson Bay (Arima and Einarsson 1976) and Alaska (Johnston 1976) resembles a home-made fiddle but typically had only one to three strings. Called a *tautirut* in northern Quebec, it was usually played on the lap with a sinew-strung bow. Herman Onalik was still making them out of cigar boxes and local spruce in northern Labrador in the mid-twentieth century (Peacock 1977:57). Arima and Einarsson (1976) suspected they might be descendants of a simple stringed instrument akin to the Norse *fidla*, introduced by Orkneymen and Shetland Islanders who served on the crews of British whaling and trading ships in the eighteenth and nineteenth centuries. Given their broad North Pacific/North Atlantic distribution, however, such an explanation would have to be expanded to include American whaling crews and derivations from instruments other than the *fidla*. In fact, folk varieties of stringed instrument that could be produced improvisationally as necessary appear to have been widespread in the past (e.g. Evans 1970). A boxy, homemade violin called a *skřipky*, translated as “squeaking fiddle”, was even in use by ethnic Moravians in Central Europe by the early nineteenth century, although given the musical proclivities of their missionary cousins this seems like an unlikely vector. An even closer prototype is the kit violin or pochette that was widely employed by European dancing masters from the sixteenth through nineteenth centuries (Boyden et al. 1989; Pendlebury 2015). This portable version of the violin occurred in various forms, but sometimes had a narrow, nearly rectangular body not much wider than the fingerboard, similar in plan to the *tautirut*. Since the kit was less fragile than a fiddle it was carried by sailors on extended sea voyages (Tom Gordon, personal communication), and so may have provided the proximate model for Inuit luthiers. Perhaps, again, the various incarnations of the *tautirut* are independent reflections of the historical Inuit practice of creatively emulating interesting European devices with whatever was at hand.

There are also frequent ethnographic references to various genres of Inuit singing, often self-accompanied by drumming and dancing, and including formal song “duels”, *angagok* (shaman) ceremonial, personal performances at festivals and other social gatherings, and a distinctive genre of vocal play and performance called

katajjaq or throat singing (Hauser 2010; Roberts and Jenness 1925; on *katajjaq* and allied forms of vocal play see Cavanagh [Diamond] 1976; Charron 1978; Hauser 2010; Nattiez 1983). These genres are so widespread in the Eastern Arctic (with the possible exception of *katajjaq*) that they undoubtedly date at least to the late twelfth century expansion of Inuit out of the western Canadian Arctic (Whitridge *in press*). Archaeologically, these sorts of community events are implied by the frequent occurrence of the structure, referred to historically as a *qargi*, *qashigi* or *qaggiq* (ethnographers' festival or dance house), that often housed them (Whitridge 2004). *Qariyit* (pl.) had large paved floors for performers, sometimes with a central lampstand, and an encircling bench for the audience; occasional precontact depictions of such structures occur on drill bows and knife handles (e.g. Maxwell 1983). Many observers also reported that Inuit hummed or sang to children and to themselves (Hauser 2010), the latter of which may be related to the traditional practice of purchasing magical songs (as well as amulets) from *angagoks* as protective charms, or to enhance one's personal power (Spencer 1959). The related amulet-based magic is implied by the occurrence of dolls with amulet straps crisscrossing the chest (e.g. Mathiassen 1927a:186-187), and frequent finds of unusual materials (e.g. fossils, quartz crystals, unusual pebbles) consistent with historical amulets, suggesting that magical songs, too, likely figured in precontact belief systems. Finally, quasi-musical effects like those noted by Loren (2008) can be inferred for the pendants that ornamented women's clothing, brow bands and hair pieces, though this does not appear to have been true of men's clothing and ornament, perhaps a nod to the necessity of hunting in absolute silence.

HISTORIC LABRADOR INUIT MUSIC

There has been moderate ethnographic and ethnohistoric interest in traditional Inuit music-making over the years, including most of these precontact objects, places and practices, but focusing especially on the skin drum and its role in community festivals, and to a lesser extent vocal performance. Drumming is well described for Inūpiat Alaska and much of the Eastern Arctic (e.g. Cavanagh [Diamond] 1982; Johnston 1976; Hauser 1986, 2010; Vascotto 2001), though Hauser (1986:359) notes that it received cursory and often derisive treatment in the ethnohistoric literature and was largely neglected, even by researchers, into the late twentieth century. Songs were transcribed or recorded by a number of early ethnographers (e.g. Roberts and Jenness 1925), and lyrics even more widely collected (e.g. Rasmussen 1931). *Katajjaq* have been musicologically deconstructed by Cavanagh [Diamond] (1976), Charron (1978) and Nattiez (1983, 1999), and Lutz (1978) explored the transformation of Inuit music around Cumberland Sound from the early historic period to the present. The Labrador literature, however, is mostly silent about tra-

ditional music, beyond vague and invariably dismissive references by missionaries and other early twentieth century reporters (e.g. Davey 1905; Hutton 1912; and see Lutz 1982 for a review of the ethnohistoric literature; a similar situation obtained with Anglican missionaries in Cumberland Sound [Lutz 1978; Bennett 1985]). The genres that have been most productively explored are varieties of instrumental and vocal performance introduced by Moravian missionaries beginning in the late eighteenth century (Gordon 2007; Lutz 1982). Moravians believed strongly that there was an important role for European music in religious instruction and liturgical practice. New scores were regularly imported from Europe, their texts sometimes already translated into Inuktitut, so that anthems entered the Labrador canon soon after their European publication. Thousands of such scores still survive in Labrador churches, and many have recently been archived (Gordon 2007; Markham 2012). There was a decided Moravian emphasis on choral music, but missionaries introduced pipe organs, harmoniums and an assortment of European orchestral instruments, training Inuit to perform and teach them from at least the early nineteenth century (Lutz 1982; Peacock 1977). The Moravian-Inuit musical legacy represents a complex synthesis of mainstream European (mainly ecclesiastical) musical traditions, Moravian interpretations of the latter in light of their missionary program in Labrador and elsewhere, and Inuit readings of the filtered results. Gordon (2007) nicely illustrates the additional transformations that European scores underwent as they were creatively transmitted by Inuit musicians over the past two hundred years.

The flip side of Moravian tutoring in this rich body of European sacred music was the rejection and suppression of indigenous forms, especially the drumming and drum song that were regarded as appendages of threateningly non-Christian shamanic practice (Anonymous 1931). Adherents of traditional beliefs - indeed, any Inuit who distanced themselves from contact with the missions - were labeled "heathens", like the occupants of Nachvak Fiord and regions further north who refused to relocate to a Moravian station (Whitridge 2008). Moravians made deliberate moves both to insulate their flock from these cultural holdouts and to expand the conversion effort into their territory by attempting (largely successfully) to establish a string of missions along the northern Labrador coast. One of their few failures was due to the Hudson's Bay Company successfully establishing a trading post at Nachvak Fiord at the beginning of the 1869 sailing season, after Moravians had initiated mission construction there late in 1868 with the intention of continuing the project the following summer (Weiz 1869). Nachvak was one of the sites of celebratory *qaggiq* construction in successful whaling years documented in late eighteenth century Moravian Periodical Accounts from Okak (Taylor 1990:59), and in fact a *qaggiq*-like structure with paved floor and bench that appeared to

have been deliberately infilled with boulders and large faunal refuse occurred at the early historic site of Kongu (IgCv-7) on Nachvak Fiord (probably identical with the Moravians' "Naghvak" [Whitridge 2006]; see Kaplan 1983 and Davies 2015 for a warm weather example of a *qaggiq* from Skull Island, near Nain, that may have been roofless like festival houses mentioned historically, e.g. Rasmussen 1932:243). Associated as it was with non-Christian and, in the Moravian view, licentious ritual and social practices (Taylor 1990), suppression of the *qaggiq* was central to the early Moravian conversion program.

Not surprisingly, Moravian texts are also critical of the activities of non-Moravian Europeans, such as Hudson's Bay Company traders, Euro-American whalers, and "Settlers" from the British Isles who married Inuit women and stayed permanently in Labrador. The syncretic musical styles that emerged from Inuit-white interaction in these contexts often centred on instruments that were absent from the Moravian repertoire, such as accordion, harmonica, jaw harp and, eventually, guitar (Anonymous 1992 [1889]; Artis 2014; Hiscott 2000; Onalik 1982). The fiddle/violin was shared by both, but utilized in different settings (private homes and disapproved fishermen's camps, versus churches and public community spaces) and for radically different purposes (typically, dancing, as opposed to liturgical accompaniment) by each. The Moravian censure of both *qaggiq*-related ceremonial and non-religious musical practices, and promotion of Christian sacred ones, resulted in a compartmentalization of Labrador Inuit musicality that has persisted to the present.

JAW HARPS IN THE EASTERN ARCTIC

The jaw harp (Figure 1), also known as jew's harp or trump, was a pocket-sized instrument that was not only portable but could be played to impressive musical effect by an individual in the relatively cramped quarters of a ship's cabin or sod house. It was inimical to missionary musical tastes. It originated in Central, East or Southeast Asia, and its earliest form was probably a single piece wood or bamboo device (Morgan 2008). The oldest surviving archaeological examples, however, are more durable bone specimens from Mongolia, Inner Mongolia and Hebei province (China) dating as early as 3200-2600 BP (Honeychurch 2015:20). Versions of this ancient jaw harp have continued to figure in shamanic practices across a wide swath of central and eastern Asia. A metal jaw harp similar to the modern western version, with separate tongue and frame, appears in East Asia by the early tenth century AD (Tadagawa 2007) and had spread to Europe by 1200 (Kolltveit 2009). Although it figured in ecclesiastical art alongside instruments like violins and trumpets when it was first introduced (e.g. played by angels, as on the fourteenth century crozier of William of Wykeham [Montagu 2002]), it seems to have devolved into a

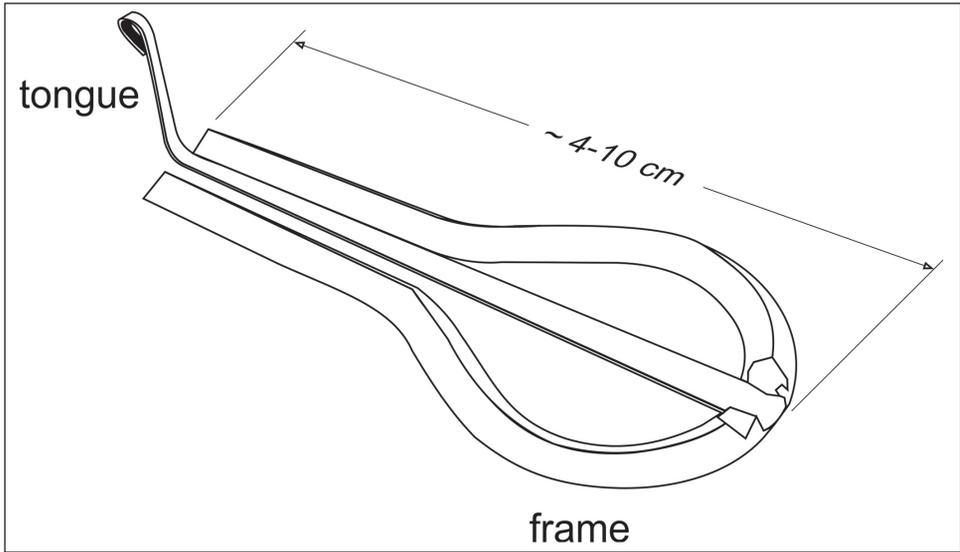


Figure 1. *Jaw harp (jew's harp, trump)*

popular, and even somewhat shady, amusement by the sixteenth century (Wright 2008; a basket of them lies scattered next to the sleeping peddler in Pieter van der Heyden's comical 1562 engraving *The Merchant Robbed by Monkeys* [Kolltveit 2009]). Production of this "despised contrivance" (Engel 1977[1883]:10) peaked in the early nineteenth century. One of the major manufacturing centres, Molln in Austria, produced about 2.5 million of them in 1818 (Kolltveit 2009).

Perhaps because the jaw harp had become marginalized, even, it seems, as a folk instrument, it has remained almost invisible in Inuit ethnomusicological research. Cavanagh [Diamond] (1982:53) mentions that jaw harps (along with ukuleles, button accordions, and harmonicas) were present in several Netsilingmiut homes at the time of her fieldwork in the 1970s, but they do not seem to have figured very prominently in later twentieth century musical practice. Ironically, next to the skin drum the jaw harp probably has greater archaeological visibility than any other instrument in the Eastern Arctic, followed by harmonica (Gullason 1999) and *tautirut* (Kaplan 1983). The European stringed, brass and wind instruments at the heart of Moravian practice, on the other hand, have not been encountered archaeologically. This is partly, no doubt, an artifact of site formation processes. Orchestral equipment was expensive and often delicate, and would have been carefully conserved. Indigenous instruments such as the *tautirut* and skin drum were also delicate and time-consuming to manufacture, but at least were made of local materials using skills that were in daily use for maintaining household and harvesting equipment, and so may have been more liable to enter the archaeological record

than the more expensive imported instruments. Jaw harps, on the other hand, were both rugged and cheap. An ironmonger in Shropshire sold them for sixpence in 1736 (Wright 2008:351), which was the equivalent of about US\$4.50 in late 2012 – coincidentally, precisely what the cheapest jaw harps sold for on eBay at this time. Although they rarely survive intact (the thin metal tongue is usually missing), the simple bent iron or brass frame is quite durable and highly recognizable, even if fragmented.

Jaw harps were part of Euro-American sailors' musical culture and, along with other portable instruments like the harmonica, accompanied them to the whaling grounds (Carr 2006:234, 317, 325). However, despite the fact that large numbers of jaw harps appear to have been in circulation in the Eastern Arctic (Barr [1994:240] documents 391 jaw harps imported to Hudson Strait by Hudson's Bay Company ships for trade with Inuit between 1738 and 1757 alone), they are rarely mentioned in historical documents and are uncommon in Labrador Inuit assemblages. One occurs in the late eighteenth/early nineteenth century assemblage from the Inuit site of Seal Islands in the Strait of Belle Isle (Auger 1991:46), three in the late eighteenth century house occupied by Mikak at Black Island, near Nain in central Labrador (Amy Fay, personal communication), and one in a late eighteenth century house at Uivak in northern Labrador (Woollett 2003). All five are made of iron or steel, and most have lost their tongues; only one of these specimens retains a fragment of it. One complete and three fragmentary frames made of copper alloy, perhaps brass, were recovered at Kongu in early nineteenth century midden deposits adjacent to communal winter houses (Figure 2; Whitridge 2006). Nachvak was occupied at the time by families who, at least initially, rejected the Moravian's entreaties to settle at or near the missions. This slim dataset could undoubtedly be expanded, but it is noteworthy that the sampling of dozens of historic sites in northern Labrador by the Torngat Archaeological Project in the late 1970s did not produce a single example (Kaplan 1983). Jaw harps, like other varieties of musical instrument, appear to be scarce on Labrador Inuit sites of the past few hundred years.

MUSICAL QUALITIES OF THE JAW HARP

In the northern Quebec dialect of Inuktitut the jaw harp is *qanirvalauti* or *qanirvaluuti* and *qanirvalauqpuq* is to play the jaw harp (Schneider 1985). The semantic association is with *qaniq*, mouth, and other words built from this stem tend to emphasize distortions of the mouth, such as those associated with anger (*qaniritsatuq*, yell at someone) and disease (*qanirluktuq*, have a sore mouth). A kind of sculpin that looks like an oversized mouth with a tail is *qanirqutuuq*. The connotation is that jaw harp playing is not a pretty sight. The rigid arms of the instrument are held



Figure 2. Jaw harps from late 18th to mid 19th century Inuit winter village of Kongu (IgCv-7), Nachvak Fiord, northern Labrador.

against the teeth and the upturned “trigger” at the end of the flexible tongue or reed is plucked to produce a vibratory twang. Different pitches and tones are realized by altering the size and shape of the mouth cavity, which has an essential function as a resonator (Ledang 1972). Given the near invisibility of the jaw harp ethnographically and even ethnomusicologically one might conclude that the music produced with it was somehow unaccomplished, but this is decidedly not the case. An LP recorded at Povungituk, northern Quebec, in 1979 (*Inuit Throat and Harp Songs: Eskimo Women’s Music of Povungnituk*) includes eleven jaw harp performances by Alasi Alasuak (Women of Povungnituk 1980; available online at http://ccca.concordia.ca/inuit/english/inuit_audio.html). The pieces are short - usually about a minute - and each is associated with a suitably compact sentiment. They are given evocative, often funny, titles (“Song About a Thumb”, “She Thinks She’s the Only Daughter”, etc.) and the liner notes provide pithy and amusing commentaries by the artist (“The person was making fun of another’s thumb.”, “The mother was telling her daughter that she was not the only daughter in the settlement, because she thought she was the only daughter for a long time.”). Despite the joking tone Alasuak is a gifted performer, and each piece is complex and hypnotic. The jaw

harp was clearly not a mere novelty.

An intriguing characteristic of jaw harp play is its acoustic resemblance to the *katajjaq* performed by a number of Inuit groups (as well as to the use of a feather resonator, which seems to have been less widespread, e.g. Oakes 1991; a photograph of a woman playing a feather is found in the liner notes of *Inuit Throat and Harp Songs*). Throat singing typically involved two individuals (it could also be produced alone or in groups of four) facing each other and producing a rhythmic, guttural chant with both inhalations and exhalations that resonated in the other performer's mouth (again, e.g., Women of Povungnituk 1980; see Cavanagh [Diamond] 1976; Charron 1979; Nattiez 1983, 1999). Interestingly, the bodily orchestration of *katajjaq* performance closely resembles that of the string game *ajarorpoq*, or cat's cradle, another complex performative art form practiced mostly by pairs of women. The *katajjaq* performance style, which is shared in some respects by Ainu, Chukchi, Tuva and other East and Central Asian groups (Nattiez 1999), produces an interestingly disembodied musical effect, and indeed one performance goal was to disguise the authorship of particular sounds. Although throat singing is often performed in a joking way, with the piece dissolving in laughter after a minute or two, it is an acoustically distinctive and texturally intricate vocal form, and can certainly be considered an accomplished and singular variety of performed Inuit art. In January 2014 it was recognized as "intangible cultural heritage", according to UNESCO guidelines, by the Government of Québec (<http://www.patrimoine-culturel.gouv.qc.ca/>). At least one contemporary throat singer, Tanya Tagaq from Cambridge Bay, Nunavut, has achieved substantial national and global renown. She won the Polar Music Prize for best Canadian album in 2014, has recorded with Björk, and follows a busy international performance schedule (<http://tanyatagaq.com/>).

Although the two are distinct in many important ways, it is inescapable that throat singing sounds something like jaw harp play. Both produce a drone, a musical taste for which is believed to be one of the reasons the jaw harp became so popular in medieval Europe (Kolltveit 2009:51-52), and are more rhythmic than melodic. Sound production in each case depends on the mouth cavity acting as a resonant chamber. Indeed, the musicologist Émile Leipp was informed by Tuvan throat singers "that their vocal diphony sounds very much like their jew's harp music, and that often the same songs serve the two musical media" (John-

¹I am grateful to Tom Gordon for supplying the following additional observations:

There are very few monophonic instruments (instruments that normally only produce one pitch at a time, like the flute or the human voice, as compared with instruments that can produce many like the organ or even the violin) that have developed traditional and extensive diphonic repertoires. Tuvan singing and *katajjaq* are among the only vocal traditions where this is normative. Both cases

ston 1976:143, citing Claude Charron).¹ While *katajjaq* and jaw harp might have sometimes been performed by different categories of individuals in different social settings, this acoustic resemblance must have been obvious to past practitioners, as their juxtaposition on the recording from Povungnituk (and joint mastery by Alasuak) suggests. Furthermore, both throat singing and jaw harp play - which is no louder than a spoken voice - were amenable to performance in the relatively confined spaces of Inuit sod dwellings and dance houses, like the *tautirrut*, harmonica,



Figure 3. Brass band on roof of Moravian church in Nain (early 20th century). Photograph by Paul Hettasch, Memorial University of Newfoundland Digital Archives Initiative and Moravian Archives, Herrnhut (Paul Hettasch, *Choralblasen vom Dach der Kirche in Nain*, FS.LBS.07513).

and concertina, but unlike, say, brass instruments, which seem much too loud for small spaces. Even in historic Nain the brass band was only allowed to play inside the church on New Year's Eve, and so played outdoors (Figure 3) to the point that iced up instruments and frozen lips were not uncommon (Lutz 1982). Most modern

produce dipphony through the same means as the jaw harp, by foregrounding overtones. Thus there is not only a similar sound, but a similar means of production. Diphonic singing (as replicated in contemporary art music, where most woodwind and brass instruments now employ multiphonics in a range of experimental performances) is an exceptional practice and one which creates the illusion of two voices sounding simultaneously from the same source, or, perhaps, a body and a spirit sounding together. Despite their association with play, many of the songs in the *katajjaq* repertoire represent animal spirits, the diphonic texture possibly signifying human and animal spirits coming together.

instruments are best suited to the acoustic properties of modern architectural spaces (Cavanagh [Diamond] 1982:64) that are less intimate than traditional sod houses or early historic cabins. And finally both jaw harp and *katajjaq* are completely portable, more so even than the traditional drum: throat singing required only one or two performers, and the jaw harp, like a harmonica (Bennett 1985), could be slipped in a pocket.

The respective suitability of jaw harp and violin (which is reasonably portable, if fragile) for play in enclosed spaces is demonstrated by a simple experiment. A fiddler, Jess Munkittrick, was recorded playing a traditional Maritimes jig, and then a fifteen second sample of the piece rebroadcast at the same volume from a small speaker mounted on a tripod at shoulder height. The local volume of this broadcast was then measured at the same height at each vertex of a 5 by 5 metre grid marked on the floor of a large, high-ceilinged space (the Great Hall, in Queen's College, Memorial University), using SPLnFFT Sound Meter v5.4 running on an iPad 2. The

jaw harp										
49	50	50	50	50	51	50	50	50	49	49
50	50	51	50	51	51	51	50	50	49	49
50	49	50	50	52	53	53	51	51	49	50
48	49	49	52	53	54	53	52	50	49	49
48	48	51	52	55	58	56	51	50	49	49
49	50	49	50	54	89	55	51	50	49	49
fiddle										
74	75	75	76	75	75	75	76	75	75	74
74	75	74	75	76	77	76	76	75	76	76
75	75	75	78	77	78	78	78	76	75	75
74	75	76	78	79	79	79	78	77	76	75
73	75	76	77	81	83	81	78	77	75	74
74	75	74	77	80	109	81	77	75	75	74

same was done for a fifteen second sample of jaw harp music extracted from Inuit Throat and Harp Songs. The results are displayed in Figure 4. These plots suggest that jaw harp play produces gentle volumes of 49 to 58 dB (normal speech is about 60 dB) at distances between player and audience (~ one to four metres) that would have been commonly encountered in eighteenth and nineteenth century domestic settings. The fiddle, on the other hand is somewhat loud at these distances (74 to 83 dB; equivalent to a noisy appliance like a vacuum cleaner or garbage disposal); on average it is 25.5 dB louder than the jaw harp across the surveyed space. Even without considering such attri-

Figure 4. Volume level in decibels of 15 second long recorded music samples at vertices of one metre grid.

butes as ruggedness, expense, portability, and ease of mastery the jaw harp seems better-adjusted to Inuit living spaces than the instruments promoted by missionaries for use in ecclesiastical performance contexts.

CONCLUSION

For the Central Arctic communities in which she was working in the late 1970s Diamond noted how frequently Inuit performed music “in the private context of the family or when one is alone” (Cavanagh [Diamond] 1982:62), and she cites Rasmussen’s report of an early twentieth century Pelly Bay *angagok* who called songs “his comrades in solitude” (Rasmussen 1931:15). Similarly the jaw harp, so diminutive and inconspicuous an object, may have been important precisely because of its aptness as an accompaniment to the domestic “soundscape of the everyday” (King and Santiago 2011). Unlike the fiddle, accordion and, latterly, guitar, but like the harmonica, it could be carried anywhere and played at any time. It also resonated with the Inuit sensory world. The twang of the jaw harp, and even its shape, recall the recurved bow that was central to terrestrial harvesting before the advent of firearms. Inuit-European contact had momentous economic, demographic and social consequences, but equally profound implications for the everyday sensory world. The appearance and feel of metals, glass and textiles, and the smell and taste of flour, tobacco and tea, became increasingly routine. Hearing, too, was affected, as the report of a musket and clink of spoon and teacup melded into the ambient auditory backdrop. The most remarkable auditory changes followed the adoption of tools designed specifically for sound production, whether in the formal context of ecclesiastical gatherings or in casual domestic settings. Although at present a culturally marginal instrument, the jaw harp appears to have been a meaningful part of Labrador Inuit house life in the eighteenth and nineteenth centuries. The paucity of documentary evidence relative to the clear archaeological trace is the inverse of the situation that obtains with most other musical instruments, a situation Kolltveit (2009:43) observed in the European record as well. By their informality and near invisibility, jaw harps point to the simple social and sensory pleasures of tent and house.

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