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The drum march was one of the main features of military discipline and every country had its own particular rhythms, or "tunes" to give instructions in camp, movement of troops or on the battle field. Gordon of Rothiemay records in 1637-1638 how the Scottish drummers were teaching their soldiers to distinguish between the marches of England, Ireland and Scotland. During the 30 year war the Germans once used the Scots March to decieve the enemy. At Oudenarde the Allied drummers beat the French"Retraite". The first appearance of the fife and drums we know today was in Switzerland. The Swiss won their independance in 1291 and had a reputation for bravery and military excellence. The fife, at its initial adoption, did not command universal respect. Its "ear piercing" shrillness had offended Shakespeare and he spoke of the "vile squeaking of the wry-necked fife". However, the need for long marches and camp life saw the development of fife and drum music in the 15th century with the rest of Europe noting this military musical form at the climatic Battle of Marignano (near Milan, Italy) in 1515. The Germanic Principalities adopted this military music in the 1500's and 1600's. The French employed Swiss mercenaries in the 1600's and 1700's, who brought with them their fife and drum music and subsequently introduced it to the French Army. Fifes and drums were being used in Ireland as early as 1590, one hundred years before the instalment of Sir Henry Inglesby as Captain of the Guard at Carrickfergus Castle. The Voluntary: In effect, this means "get ready" (in particular, for the next order). The pikes would come to the (upright) Advance position, musketeers would Give rest to their muskets, and the next order (for example, "Company will prepare to march by Column of Divisions") would follow. The Call: "The Assembly" - the troops stand by their colours in their ranks and files. Used in camp and for example, for reforming the regiment if disordered on the battlefield after an attack. The March: Each nation tended to have its own set of marches, eg English, Scots, French, German. The English March is simple in form. Drummers however were famous (or in King Charles' eyes, notorious) for adding "twiddly bits" to make the tunes more challenging and lively. Charles even went so far as to try to ban these popular "flourishes", an interesting insight into his character. It is interesting to speculate that if this was achieved, Parliamentarian musicians perhaps had more fun than their Royalist counterparts, so just another reason for turning the (quite erroneous) Victorian myth of "dour Roundheads" on its head. The Troop: This was used when the troops came close to the enemy and needed to "draw in" their order (for example, when inevitably strung out on the march, or on the final advance to contact). The pikemen would come to the Advance, all ranks close up and following the order (verbal or by sign) to "Reform the Battalia", the troops would (hopefully smoothly) move from column into line of battle. The Battaile: In effect, the "Charge", a sometimes complex set of movements encompassing the pikemen "Charging their pikes" in a horizontal position and attacking the enemy, the musketeers firing, reloading and if necessary, "falling on" with clubbed muskets. The Retreat: Not a disorderly retreat, but a careful retirement, supposedly in step, backwards and facing the enemy, to reform. Followed by The Halt. Fifes and drums went on to become the tune of the American Civil War with both the British and Americans employing Fife and Drum corps. The musicians provided music for the army on the march and Napoleon proved that music was effective in motivating an army to march long distances. Through rhythms and tunes, they also were used to signal alerts and commands for soldiers, time to get up, breakfast call, sick call, assembly, lunch, duty calls, dinner, evening retreat or revally, lights-out (curfew). Muskets. In 1690 most Jacobite armies were using the match lock musket, a more primitive weapon than the flintlock which soon replaced it. However, some Jacobite armies were using the flintlock. Most of Williams infantry were equipped with flinklocks. Pikes. Pikes were still being used in Ireland during this time however they were somewhat dying out. Well equipped units would have one pike to every six muskets, although some units had no pikes. The bayonet was just coming into use during this period and many European, including English, forces were equipped with bayonets. The advantage of muskets over pikes were that soldier were no longer required to spend weeks of training to use pikes and swords but could pick up a musket and with several hours of training was battle ready. The standard infantry tactic was to form units into seven ranks. The first rank crouched, the second kneeling and the third standing as they fired together. The fourth, fifth and sixth ranks would then step forward and fire while the first three reloaded. The pikes stayed at the back ready to be called into action if cavalry approached. The pikes used by Sir Henry Inglesby's men in Carrickfergus Pageant each year are an exact copy of those found in Carrickfergus Castle. Cavalry. Grenadiers were troops who in addition to being equipped with a musket, were also armed with a bag of grenades. Dragoons were mounted infantry, they rode into battle on horses but dismounted to fight. Cavalry were equipped with swords and pistols. In addition to providing scouting and reconnaissance. Cavalry were expected to cover the rear of a retreating army. They also collected intelligence on enemy movements and tried to prevent the enemy cavalry from doing the same. Artillery. Artillery had quite a short range so it was most often used to give covering fire to or break up an attack. The sound of cannon fire was also effective in striking fear into the hearts of the enemy. With poor accuracy and a slow rate of fire, artillery did not claim an extensive amounts of caualties on the battlefield. The poor wee mite, A Drummer Boy in the height of battle. Example of late 17th century clothing. Uniform of Carrickfergus Town Guard (Curtesy of Carrickfergus Museum). Musketeers with matchlocks. (1) Front cover Woodwind instrument This article is about the whole family of instruments. For the flute commonly used in orchestras and bands, see Western concert flute. For other uses, see Flute (disambiguation). Shinobue and other flutes Part of a series onMusical instruments Woodwinds Bagpipes Bassoon Contrabassoon Cor anglais Clarinet Flute Oboe Piccolo Saxophone Brass instruments Baritone horn Cornet Euphonium Flugelhorn French horn Mellophone Tenor horn Trombone Trumpet Tuba String instrumentsBowed Cello Double bass Huqin Hurdy-gurdy Viola Violin Plucked Banjo Guitar Bass guitar Guzheng Koto Lyre Mandolin Harp Shamisen Sitar Tambura Ukulele Zither Percussion Bass drum Bell Carillon Celesta Cymbals Glockenspiel Gong Handbell Lithophone Marimba Mridangam Snare drum Steelpan Timpani Triangle Tubaphone Tubular bells Vibraphone Xylophone Keyboards Clavichord Electronic keyboard Harmonium Harpsichord Organ Piano Spinet Virginals vte The flute is a member of a family of musical instruments in the woodwind group. Like all woodwinds, flutes are aerophones, producing sound with a vibrating column of air. Flutes produce sound when the player's air flows across an opening. In the Hornbostel–Sachs classification system, flutes are edge-blown aerophones.[1] A musician who plays the flute is called a flautist or flutist. Paleolithic flutes with hand-bored holes are the earliest known identifiable musical instruments. A number of flutes dating to about 53,000 to 45,000 years ago have been found in the Swabian Jura region of present-day Germany, indicating a developed musical tradition from the earliest period of modern human presence in Europe.[2][3] While the oldest flutes currently known were found in Europe, Asia also has a long history with the instrument. A playable bone flute discovered in China is dated to about 9,000 years ago.[4] The Americas also had an ancient flute culture, with instruments found in Caral, Peru, dating back 5,000 years [5] and in Labrador dating back about 7,500 years.[6] The bamboo flute has a long history, especially in China and India. Flutes have been discovered in historical records and artworks starting in the Zhou dynasty (c.1046–256 BC). The oldest written sources reveal the Chinese were using the kuan (a reed instrument) and hsio (or xiao, an end-blown flute, often of bamboo) in the 12th–11th centuries BC, followed by the chi (or ch'ih) in the 9th century BC and the yüeh in the 8th century BC.[7] Of these, the bamboo chi is the oldest documented transverse flute.[7][8] Musicologist Curt Sachs called the cross flute (Sanskrit: vāṃśī) "the outstanding wind instrument of ancient India", and said that religious artwork depicting "celestial music" instruments was linked to music with an "aristocratic character".[9] The Indian bamboo cross flute, Bansuri, was sacred to Krishna, who is depicted with the instrument in Hindu art.[9] In India, the cross flute appeared in reliefs from the 1st century AD at Sanchi and Amaravati from the 2nd–4th centuries AD.[9][10] According to historian Alexander Buchner, there were flutes in Europe in prehistoric times, but they disappeared from the continent until flutes arrived from Asia by way of "North Africa, Hungary, and Bohemia".[11] The end-blown flute began to be seen in illustration in the 11th century.[11] Transverse flutes entered Europe through Byzantium and were depicted in Greek art about 800 AD.[12] The transverse flute had spread into Europe by way of Germany, and was known as the German flute.[12] The word flute first appeared in the English language during the Middle English period, as floute,[13] flowte, or flo(y)te,[14] possibly from Old French flaute and Old Provençal flaüt,[13] or possibly from Old French fleüte, flaüte, flahute via Middle High German floite or Dutch fluit. The English verb flout has the same linguistic root, and the modern Dutch verb fluiten still shares the two meanings.[15] Attempts to trace the word back to the Latin flare (to blow, inflate) have been called "phonologically impossible" or "inadmissable".[14] The first known use of the word flute was in the 14th century.[16] According to the Oxford English Dictionary, this was in Geoffrey Chaucer's The Hous of Fame, c. 1380.[14] A musician who plays any instrument in the flute family can be called a flutist,[17] flautist,[18] or flute player. Flutist dates back to at least 1603, the earliest quotation cited by the Oxford English Dictionary. Flautist was used in 1860 by Nathaniel Hawthorne in The Marble Faun, after being adopted during the 18th century from Italy (flautista, itself from flauto), like many musical terms in England since the Italian Renaissance. Other English terms, now virtually obsolete, are fluter (15th–19th centuries)[19][20][21] and flutenist (17th and 18th centuries).[15][22] Further information: Paleolithic flutes and Prehistoric music Chinese women playing flutes, from the 12th-century Song dynasty remake of the Night Revels of Han Xizai, originally by Gu Hongzhong (10th century) A fragment of a juvenile cave bear's femur, with two to four holes, was found at Divje Babe in Slovenia and dated to about 43,000 years ago. It may be the oldest flute discovered, but this has been disputed.[23][24] In 2008, a flute dated to at least 35,000 years ago was discovered in Hohle Fels cave near Ulm, Germany.[25] It is a five-holed flute with a V-shaped mouthpiece and was made from a vulture wing bone. The discovery was published in the journal Nature, in August 2009.[26] This was the oldest confirmed musical instrument ever found,[27] until a redating of flutes found in Geißenklösterle cave revealed them to be older, at 42,000 to 43,000 years.[3] The Hohle Fels flute is one of several found in the Hohle Fels cavern next to the Venus of Hohle Fels and a short distance from the oldest known human carving.[28] On announcing the discovery, scientists suggested that the "finds demonstrate the presence of a well-established musical tradition at the time when modern humans colonized Europe".[29] Scientists have also suggested that this flute's discovery may help to explain "the probable behavioural and cognitive gulf between" Neanderthals and early modern human.[27] Bone flute made of a goat's tibia, 11th–13th century AD. An 18.7 cm flute with three holes, made from a mammoth tusk and dated to 30,000–37,000 years ago, was found in 2004 in the Geißenklösterle cave near Ulm, in the southern German Swabian Alb.[30] Two flutes made from swan bones were excavated a decade earlier from the same cave and dated to about 36,000 years ago. A playable 9,000-year-old Chinese Gudi (literally, "bone flute") was excavated from a tomb in Jiahu along with 29 similar specimens.[31] They were made from the wing bones of red-crowned cranes and each has five to eight holes.[32] The earliest extant Chinese transverse flute is a chi (箎) flute discovered in the Tomb of Marquis Yi of Zeng at the Suizhou site, Hubei province, China, dating from 433 BC, during the later Zhou dynasty.[33] It is fashioned of lacquered bamboo with closed ends and has five stops on the flute's side instead of the top. Shi Jing, traditionally said to have been compiled and edited by Confucius, mentions chi flutes. The earliest written reference to a flute is from a Sumerian-language cuneiform tablet dated to c. 2600–2700 BC.[34] Flutes are mentioned in a recently translated tablet of the Epic of Gilgamesh, an epic poem whose development spanned the period from about 2100–600 BC.[35] A set of cuneiform tablets knows as the "musical texts" provide precise tuning instructions for seven scales of a stringed instrument (assumed to be a Babylonian lyre). One of those scales is named "embūbum", which is an Akkadian word for "flute".[35] The Bible, in Genesis 4:21, cites Jubal as being the "father of all those who play the ugab and the kinnor". The former Hebrew term is believed by some to refer to a wind instrument, or wind instruments in general, the latter to a stringed instrument, or stringed instruments in general. As such, Jubal is regarded in the Judeo-Christian tradition as the inventor of the flute (a word used in some translations of this biblical passage).[36] In other sections of the Bible (1 Samuel 10:5, 1 Kings 1:40, Isaiah 5:12 and 30:29, and Jeremiah 48:36) the flute is referred to as "chalil", from the root word for "hollow".[37] Archeological digs in the Holy Land have discovered flutes from the Bronze Age (c. 4000–1200 BC) and the Iron Age (1200–586 BC), the latter era "witness[ing] the creation of the Israelite kingdom and its separation into the two kingdoms of Israel and Judea."[36] Some early flutes were made out of tibias (shin bones). The flute has also always been an essential part of Indian culture,[38] and the cross flute believed by several accounts to originate in India[39][40] as Indian literature from 1500 BC has made vague references to the cross flute.[41] A flute produces sound when a stream of air directed across a hole in the instrument creates a vibration of air at the hole.[42][43] The airstream creates a Bernoulli or siphon. This excites the air contained in the resonant cavity (usually cylindrical) within the flute. The flutist changes the pitch of the sound produced by opening and closing holes in the body of the instrument, thus changing the effective length of the resonator and its corresponding resonant frequency. By varying the air pressure, a flutist can also change the pitch by causing the air in the flute to resonate at a harmonic rather than the fundamental frequency without opening or closing any of the holes.[44] Head joint geometry appears particularly critical to acoustic performance and tone,[45] but there is no clear consensus among manufacturers on a particular shape. Acoustic impedance of the embouchure hole appears the most critical parameter.[46] Critical variables affecting this acoustic impedance include: the length of the chimney (the hole between the lip-plate and the head tube), chimney diameter, and radii or curvature of the ends of the chimney and any designed restriction in the "throat" of the instrument, such as that in the Japanese Nohkan flute. A study in which professional flutists were blindfolded could find no significant differences between flutes made from a variety of metals.[47] In two different sets of blind listening, no flute was correctly identified in a first listening, and in a second, only the silver flute was identified. The study concluded that there was "no evidence that the wall material has any appreciable effect on the sound color or dynamic range". Historically, flutes were most commonly made of reed, bamboo, wood, or other organic materials. They were also made of glass, bone, and nephrite. Most modern flutes are made of metal, primarily silver and nickel. Silver is less common than silver alloys.[48] Other materials used for flutes include gold, platinum, grenadilla and copper.[49] Playing the zampoña, a Pre-Inca instrument and type of pan flute. In its most basic form, a flute is an open tube which is blown into. After focused study and training, players use controlled air-direction to create an airstream in which the air is aimed downward into the tone hole of the flute's headjoint. There are several broad classes of flutes. With most flutes, the musician blows directly across the edge of the mouthpiece, with 1/4 of their bottom lip covering the embouchure hole. However, some flutes, such as the whistle, gemshorn, flageolet, recorder, tin whistle, tonette, fujara, and ocarina have a duct that directs the air onto the edge (an arrangement that is termed a "fipple"). These are known as fipple flutes. The fipple gives the instrument a distinct timbre which is different from non-fipple flutes and makes the instrument easier to play, but takes a degree of control away from the musician. Another division is between side-blown (or transverse) flutes, such as the Western concert flute, piccolo, fife, dizi and bansuri; and end-blown flutes, such as the ney, xiao, kaval, danso, shakuhachi, Anasazi flute and quena. The player of a side-blown flute uses a hole on the side of the tube to produce a tone, instead of blowing on an end of the tube. End-blown flutes should not be confused with fipple flutes such as the recorder, which are also played vertically but have an internal duct to direct the air flow across the edge of the tone hole. Flutes may be open at one or both ends. The ocarina, xun, pan pipes, police whistle, and bosun's whistle are closed-ended. Open-ended flutes such as the concert flute and the recorder have more harmonics, and thus more flexibility for the player, and brighter timbres. An organ pipe may be either open or closed, depending on the sound desired. Flutes may have any number of pipes or tubes, though one is the most common number. Flutes with multiple resonators may be played one resonator at a time (as is typical with pan pipes) or more than one at a time (as is typical with double flutes). Flutes can be played with several different air sources. Conventional flutes are blown with the mouth, although some cultures use nose flutes. The flue pipes of organs, which are acoustically similar to duct flutes, are blown by bellows or fans. Main article: Western concert flute Western concert flute Usually in D, wooden transverse flutes were played in European classical music mainly in the period from the early 18th century to the early 19th century. As such, the instrument is often indicated as baroque flute. Gradually marginalized by the Western concert flute in the 19th century, baroque flutes were again played from the late 20th century as part of the historically informed performance practice. An illustration of a Western concert flute The Western concert flute, a descendant of the medieval German flute, is a transverse treble flute that is closed at the top. An embouchure hole is positioned near the top, and the flutist blows across it. The flute has circular tone holes larger than the finger holes of its baroque predecessors. The size and placement of tone holes, key mechanism, and fingering system used to produce the notes in the flute's range were evolved from 1832 to 1847 by Theobald Boehm, who helped greatly improve the instrument's dynamic range and intonation over its predecessors.[50] With some refinements (and the rare exception of the Kingma system and other custom adapted fingering systems), Western concert flutes typically conform to Boehm's design, known as the Boehm system. Beginner's flutes are made of nickel, silver, or brass that is silver-plated, while professionals use solid silver, gold, and sometimes even platinum flutes. There are also modern wooden-bodied flutes usually with silver or gold keywork. The wood is usually African Blackwood. The standard concert flute is pitched in C and has a range of three octaves starting from middle C or one half step lower when a B foot is attached. This means that the concert flute is one of the highest-pitched common orchestra and concert band instruments. Grenadilla wood piccolo with a modified wave headjoint Center: Piccolo. Right: larger flute The piccolo plays an octave higher than the regular treble flute. Lower members of the flute family include the G alto and C bass flutes that are used occasionally, and are pitched a perfect fourth and an octave below the concert flute, respectively. The contra-alto, contrabass, subcontrabass, double contrabass, and hyperbass flutes are other rare forms of the flute pitched up to four octaves below middle C. Other sizes of flutes and piccolos are used from time to time. A rarer instrument of the modern pitching system is the G treble flute. Instruments made according to an older pitch standard, used principally in wind-band music, include D♭ piccolo, E♭ soprano flute (Keyed a minor 3rd above the standard C flute), F alto flute, and B♭ bass flute. Further information: Bansuri and Venu A Carnatic eight-holed bamboo flute An eight-holed classical Indian bamboo flute. The bamboo flute is an important instrument in Indian classical music, and developed independently of the Western flute. The Hindu God Lord Krishna is traditionally considered a master of the bamboo flute. The Indian flutes are very simple compared to the Western counterparts; they are made of bamboo and are keyless.[51] Two main varieties of Indian flutes are currently used. The first, the Bansuri (□□□□□□□), has six finger holes and one embouchure hole, and is used predominantly in the Hindustani music of Northern India. The second, the Venu or Pullanguzhal, has eight finger holes, and is played predominantly in the Carnatic music of Southern India. Presently, the eight-holed flute with cross-fingering technique is common among many Carnatic flutists. Prior to this, the South Indian flute had only seven finger holes, with the fingering standard developed by Sharaba Shastri, of the Palladam school, at the beginning of the 20th century.[52] Cipriano Garcia playing a flute of the Tohono O'odham culture. Photograph by Frances Densmore taken in 1919. The quality of the flute's sound depends somewhat on the specific bamboo used to make it, and it is generally agreed that the best bamboo grows in the Nagercoil area of South India.[53] In 1998 Bharata Natya Shastra Sarana Chatushtai, Avinash Balkrishna Patwardhan developed a methodology to produce perfectly tuned flutes for the ten 'thatas' currently present in Indian Classical Music.[54] In a regional dialect of Gujarati, a flute is also called Pavo.[55] Some people can also play pair of flutes (Jodiyo Pavo) simultaneously. Main article: Chinese flutes In China there are many varieties of dizi (笛子), or Chinese flute, with different sizes, structures (with or without a resonance membrane) and number of holes (from 6 to 11) and intonations (different keys). Most are made of bamboo, but can come in wood, jade, bone, and iron. One peculiar feature of the Chinese flute is the use of a resonance membrane mounted on one of the holes that vibrates with the air column inside the tube. This membrane is called a di mo, which is usually a thin tissue paper. It gives the flute a bright sound. Commonly seen flutes in the modern Chinese orchestra are the bangdi (梆笛), qudi (曲笛), xindi (新笛), and dadi (大笛). The bamboo flute played vertically is called the xiao (簫), which is a different category of wind instrument in China. Main article: Daegeum The Korean flute, called the daegeum, , is a large bamboo transverse flute used in traditional Korean music. It has a buzzing membrane that gives it a unique timbre.[clarification needed] Main article: Fue (flute) The Japanese flute, called the fue, 笛 (hiragana: ふえ), encompasses a large number of musical flutes from Japan, include the end-blown shakuhachi and hotchiku, as well as the transverse gakubue, komabue, ryūteki, nōkan, shinobue, kagurabue and minteki. A sodina player in Madagascar The sodina is an end-blown flute found throughout the island state of Madagascar, located in the Indian Ocean off southeastern Africa. One of the oldest instruments on the island, it bears close resemblance to end-blown flutes found in Southeast Asia and particularly Indonesia, where it is known as the suling, suggesting the predecessor to the sodina was carried to Madagascar in outrigger canoes by the island's original settlers emigrating from Borneo.[56] An image of the most celebrated contemporary sodina flutist, Rakoto Frah (d. 2001), was featured on the local currency.[57] The sring (also called blul) is a relatively small, end-blown flute with a nasal tone quality[58] found in the Caucasus region of Eastern Armenia. It is made of wood or cane, usually with seven finger holes and one thumb hole,[58] producing a diatonic scale. One Armenian musicologist believes the sring to be the most characteristic of national Armenian instruments.[59] The Ọjà, which is a traditional Igbo flute The Ọjà // is a traditional musical instrument utilized by the Igbo people, who are indigenous to Nigeria. The ọjà (flute) is used during cultural activities or events where Igbo music is played. It is skillfully carved from wood/bamboo or metal and is played by blowing air into one end while covering and uncovering holes along the body to create different notes.[60] There are several means by which flautists breathe to blow air through the instrument and produce sound. They include diaphragmatic breathing and circular breathing. Diaphragmatic breathing optimizes inhalation, minimizing the number of breaths. Circular breathing brings air in through the nose and out through the mouth, enabling a continuous sound. Diple Flute method Frula Hand flute Irish flute Jazz flute List of flutists Native American flute Palendag Pipe and tabor Pipe (instrument) Recorder (musical instrument) Washint Vessel flute List of flautists ^ von Hornbostel, Erich M.; Sachs, Curt (March 1961). "Classification of Musical Instruments: Translated from the Original German by Anthony Baines and Klaus P. Wachsmann". The Galpin Society Journal. 14: 24–25. doi:10.2307/842168. JSTOR 842168. 4 Aerophones The air itself is the vibrator in the primary sense ... 421 Edge instruments or flutes a narrow stream of air is directed against an edge ^ Wilford, John N. (24 June 2009). "Flutes Offer Clues to Stone-Age Music". Nature. 459 (7244): 248–52. Bibcode:2009Natur.459..248C. doi:10.1038/nature07995. PMID 19444215. S2CID 205216692.. Citation on p. 248. John Noble Wilford (24 June 2009). "Flutes Offer Clues to Stone-Age Music". The New York Times. ^ a b Higham, Thomas; Basell, Laura; Jacobi, Roger; Wood, Rachel; Ramsey, Christopher Bronk; Conard, Nicholas J. (2012). "Testing models for the beginnings of the Aurignacian and the advent of figurative art and music: The radiocarbon chronology of Geißenklösterle". Journal of Human Evolution. 62 (6): 664–76. Bibcode:2012JHumE..62..664H. doi:10.1016/j.jhevol.2012.03.003. PMID 22575323. ^ "Brookhaven Lab Expert Helps Date Flute Thought to be Oldest Playable Musical Instrument, Bone flute found in China at 9,000-year-old Neolithic site" (Press release). Brookhaven National Laboratory. 22 September 1999. Archived from the original on 30 October 2007. Retrieved 31 December 2024. ^ "Music in the Ancient Andes". Metropolitan Museum of Art. August 2009. Retrieved 10 December 2020. Thirty-two tubular horizontal flutes were discovered in Caral ... made with pelican and condor bones could produce seven different sounds ... the discoveries at Caral proved that music was an integral part of the ritual life of the Andean people 5000 years ago. ^ Goss, Clint (22 November 2019). "The Development of Flutes in North America". Flutopedia. Retrieved 10 December 2020. ^ a b Sachs, Kurt (1940). The History of Musical Instruments. New York: W. W. Norton & Company. pp. 178–179. ^ "Ancient Chinese Musical Instrument's Depicted On Some Of The Early Monuments In The Museum". University of Pennsylvania Museum of Archaeology and Anthropology. The Erh Ya (c. 400 B.C.) says the ch'ih was made of bamboo, its length was 16 inches, one hole opened upwards, and it was blown transversely. ^ a b c Sachs, Kurt (1940). The History of Musical Instruments. New York: W. W. Norton & Company. pp. 158–159, 180. ^ Kadel, Ram Prasad (2007). Musical Instruments of Nepal. Katmandu, Nepal: Nepali Folk Instrument Museum. p. 45. ISBN 978-99946-883-0-2. Banshi ... \transverse flute ... made from bamboo with six finger holes ... known as Lord Krishna's instrument. ^ a b Buchner, Alexander (1980). Colour Encyclopedia of Musical Instruments. New York: Hamlyn. pp. 64–65. ISBN 0-600-36421-6. ^ a b Sachs, Kurt (1940). The History of Musical Instruments. New York: W. W. Norton & Company. pp. 287–288. ^ a b "Flute". The Free Dictionary By Farlex. Retrieved 25 May 2012. ^ a b c Simpson, J. A. and Weiner, E. S. C. (eds.), "flute, n.1", Oxford English Dictionary, second edition. 20 vols. Oxford: Clarendon Press; New York: Oxford University Press, 1989. ISBN 0-19-861186-2. ^ a b Smith, Fenwick. "Is it flutist or flautist?". Archived from the original on 16 January 2014. Retrieved 5 January 2015. ^ "Flute". Merriam-Webster. Retrieved 25 May 2012. ^ "Flutist". Oxford English Dictionary (American English). Archived from the original on 11 January 2015. Retrieved 5 January 2015. ^ "Flautist". Oxford English Dictionary (British & World English). Archived from the original on 11 January 2015. Retrieved 5 January 2015. ^ "Fluter (c.1400)". Oxford English Dictionary. ^ "Fluter". Webster's Revised Unabridged Dictionary of the English Language. Archived from the original on 11 January 2015. Retrieved 5 January 2015. ^ "Fluter". Random House Dictionary and Collins English Dictionary. Retrieved 5 January 2015. ^ "Flutenist". The Century Dictionary and Cyclopedia. 1906. Retrieved 5 January 2015. ^ Tenenbaum, David (June 2000). "Neanderthal jam". The Why Files. University of Wisconsin, Board of Regents. Archived from the original on 5 January 2001. Retrieved 14 March 2006. ^ Flute History Archived 1 September 2006 at the Wayback Machine, UCLA. Retrieved June 2007. ^ Ghosh, Pallab. (25 June 2009) BBC: 'Oldest musical instrument' found Archived 1 October 2010 at the Wayback Machine. BBC News. Retrieved on 2013-08-10. ^ Nicholas J. Conard; Maria Malina; Susanne C. Münzel (August 2009). "New Flutes Document the Earliest Musical Tradition in Southwestern Germany". Nature. 460 (7256): 737–40. Bibcode:2009Natur.460..737C. doi:10.1038/nature08169. ISSN 0028-0836. PMID 19553935. S2CID 4336590. ^ a b "'Oldest musical instrument' found". BBC News. 25 June 2009. Retrieved 26 June 2009. ^ "Music for cavemen". MSNBC. 24 June 2009. Archived from the original on 26 June 2009. Retrieved 26 June 2009. Scientists say they've found what they consider to be the earliest handcrafted musical instrument in a cave in southwest Germany, less than a yard away from the oldest-known carving of a human. The flute fragments as well as the ivory figurine of a 'prehistoric Venus' date back more than 35,000 years, the researchers report ... the real prize is a nearly complete flute hollowed out from the bone of a griffon vulture ... found in the Hohle Fels cave, just 28 inches (70 centimeters) away from the spot where the prehistoric Venus ... was found ^ "Flutes Offer Clues to Stone-Age Music". The New York Times. 24 June 2009. Retrieved 26 June 2009. ^ "Archeologists discover ice age dwellers' flute". CBC Arts. Canadian Broadcasting Corporation. 30 December 2004. Archived from the original on 28 May 2009. Retrieved 21 April 2009. ^ The bone age flute Archived 15 January 2009 at the Wayback Machine. BBC. 23 September 1999. ^ Zhang, Juzhong; Xiao, Xinghua; Lee, Yun Kuen (December 2004). "The early development of music. Analysis of the Jiahu bone flutes". Antiquity. 78 (302): 769–778. doi:10.1017/s0003598x00113432. Archived from the original on 3 June 2013. ^ Goodman, Howard L. (2010). Xun Xu and the Politics of Precision in Third-Century AD China. Brill Publishers. p. 226. ISBN 978-90-04-18337-7. ^ Goss, Clint (2012). "The Development of Flutes in Europe and Asia". Flutopedia. Retrieved 8 January 2012. ^ a b Goss, Clint (2012). "Flutes of Gilgamesh and Ancient Mesopotamia". Flutopedia. Retrieved 8 January 2012. ^ a b Judith Cohen, "Review of 'Music in Ancient Israel/Palestine: Archaeological, Written, and Comparative Sources', by Joachim Braun". Min-Ad: Israel Studies in Musicology Online. Vol. 3. (2004). Archived 19 September 2020 at the Wayback Machine ^ Strong's Hebrew Concordance, "chalil". Archived 17 February 2013 at the Wayback Machine ^ Hoiberg, Dale; Ramchandani, Indu (2000). Students' Britannica India. Mumbai: Popular Prakashan. p. 125. ISBN 978-0-85229-760-5. ^ Chaturvedi, Mamta (2001). How to Play Flute & Shehnai. New Delhi: Diamond Pocket Books (P) Ltd. p. 7. ISBN 978-81-288-1476-1. ^ Morse, Constance (1968). Music and Music-makers. New Hampshire: Ayer Publishing. p. 7. ISBN 978-0-8369-0724-7. ^ Arvey, Verna (2007). Choreographic Music for the Dance. London: Read Country Books. p. 36. ISBN 978-1-4067-5847-4. ^ Flute acoustics Archived 13 August 2010 at the Wayback Machine, UNSW. Retrieved June 2007. ^ Wolfe, Joe. "Introduction to flute acoustics". UNSW Music Acoustics. Retrieved 18 January 2006. ^ "The Flute". HyperPhysics. Retrieved 20 March 2016. ^ Spell, Eldred (1983). "Anatomy of a Headjoint". The Flute Worker. ISSN 0737-8459. Archived from the original on 16 November 2007. ^ Wolfe, Joe. "Acoustic impedance of the flute". Flute acoustics: an introduction. ^ Widholm, G.; Linortner, R.; Kausel, W.; Bertsch, M. (2001). "Silver, gold, platinum—and the sound of the flute". Proc. International Symposium on Musical Acoustics: 277–280. Archived from the original on 13 March 2008. ^ Meyers, Robert A., ed. (2002). Encyclopedia of physical science and technology (3rd ed.). San Diego: Academic Press. ISBN 978-0-12-227410-7. ^ [bare URL] ^ Boehm, Theobald. (1964). The Flute and Flute-Playing in Acoustical, Technical, and Artistic Aspects, translated by Dayton C. Miller, with a new introduction by Samuel Baron. New York: Dover Publications. ISBN 0-486-21259-9, pp. 8–12. ^ Arnold, Alison (2000). The Garland Encyclopedia of World Music. London: Taylor & Francis. p. 354. ISBN 978-0-8240-4946-1. ^ Caudhurī, Vimalakānta Rôya; Roychaudhuri, Bimalakanta (2000). The Dictionary of Hindustani Classical Music. Kolkata: Motilal Banarsidass Publication. ISBN 978-81-208-1708-1. ^ Abram, David; Guides, Rough; Edwards, Nick; Ford, Mike; Sen, Devdan; Wooldridge, Beth (2004). The Rough Guide to South India 3. London: Rough Guides. pp. 670, 671. ISBN 978-1-84353-103-6. ^ Paper authored by Avinash Balkrishna Patwardhan unveiling the fundamental principles governing Indian classical music by research on Bharata Muni's Natya Shastra at the National Symposium on Acoustics (1998), ITC Sangeet Research Academy, Calcutta, India. ^ Archived at Ghostarchive and the Wayback Machine: "Jodiyo Pavo by Mubarak Ali Husain 2016". YouTube. 24 March 2016. ^ Shaw, Geo (8 November 1879). "Music among the Malagasy". The Musical Standard. 17 (797): 297. Retrieved 15 November 2010. ^ Maminirina, Rado (15 July 2011). "Le billet Rakoto Frah vaut de l'or". Express de Madagascar (in French). Archived from the original on 9 May 2013. Retrieved 7 October 2012. ^ a b Pahlevanian, Alina. (2001). "Armenia §I: Folk Music, 3: Epics", in The New Grove Dictionary of Music and Musicians, second edition, edited by Stanley Sadie and John Tyrrell. London: Macmillan Publishers. ^ Komitas, Vardapet. (1994). Grakan nshkhark' Komitas Vardapeti beghun grch'ēn: npast mē Komitas Vardapeti srbadasman harts'in, edited by Abel Oghlukian. Montreal: Ganatahayots' Aṛajnordarani "K'ristonēakan Usman ew Astuatsabanut'ean Kedron". ^ Simwa, Adrianna (22 September 2017). "Top 10 Igbo Traditional Musical Instruments". Legit.ng – Nigeria news. Retrieved 10 February 2023. Buchanan, Donna A. 2001. "Bulgaria §II: Traditional Music, 2: Characteristics of Pre-Socialist Musical Culture, 1800–1944, (iii): Instruments". The New Grove Dictionary of Music and Musicians, second edition, edited by Stanley Sadie and John Tyrrell. London: Macmillan Publishers. Crane, Frederick. 1972. Extant Medieval Musical Instruments: A Provisional Catalogue by Types. Iowa City: University of Iowa Press. ISBN 0-87745-022-6 Galway, James. 1982. Flute. Yehudi Menuhin Music Guides. London: Macdonald. ISBN 0-356-04711-3 (cloth); ISBN 0-356-04712-1 (pbk.) New York: Schirmer Books. ISBN 0-02-871380-X Reprinted 1990, London: Kahn & Averill London: Khan & Averill ISBN 1-871082-13-7 Loewy, Andrea Kapell. 1990. "Frederick the Great: Flutist and composer". College Music Symposium 30 (1): 117–125. JSTOR 40374049. The famous Prussian king (1712–1786) was a composer and patron of music. Phelan, James, 2004. The complete guide to the flute and piccolo: From acoustics and construction to repair and maintenance, second edition. [S.l.]: Burkart-Phelan, Inc., 2004. ISBN 0-9703753-0-1 Putnik, Edwin. 1970. The Art of Flute Playing. Evanston, Illinois: Summy-Birchard Inc. Revised edition 1973, Princeton, New Jersey and Evanston, Illinois. ISBN 0-87487-077-1 Toff, Nancy. 1985. The Flute Book: A Complete Guide for Students and Performers. New York: Charles's Scribners Sons. ISBN 0-684-18241-6 Newton Abbot: David & Charles. ISBN 0-7153-8771-5 Second Edition 1996, New York: Oxford University Press. ISBN 0-19-510502-8 Wye, Trevor. 1988. Proper Flute Playing: A Companion to the Practice Books. London: Novello. ISBN 0-7119-8465-4 Maclagan, Susan J. "A Dictionary for the Modern Flutist", 2009, Lanham, Maryland, USA: Scarecrow Press. ISBN 978-0-8108-6711-6 Wikimedia Commons has media related to Flutes. Wikisource has the text of the 1911 Encyclopædia Britannica article "Flute". Look up flute in Wiktionary, the free dictionary. Ardal Powell. "Flute". Grove Music Online. Oxford Music Online. Oxford University Press. (by subscription) Essay on the Jiahu flutes from the Heilbrunn Timeline of Art History at The Metropolitan Museum of Art A selection of historic flutes from around the world at The Metropolitan Museum of Art Walking Stick Flute and Oboe, Georg Henrich Scherer, Butzbach, c. 1750–57 Glass flute, Claude Laurent, Paris, 1813 Porcelain flute, Saxony, 1760–1790 Pair of ivory flutes by Johann Wilhelm Oberlender, mid-18th century, Nuremberg Flute by Garion, Paris, c. 1720–1740 Conard, Nicholas J.; Malina, Maria; Münzel, Susanne C. (August 2009). "New flutes document the earliest musical tradition in southwestern Germany". Nature. 460 (7256): 737–740. Bibcode:2009Natur.460..737C. doi:10.1038/nature08169. PMID 19553935. S2CID 4336590. Flute acoustics Resources on flute acoustics from the University of New South Wales. Folk flutes (Polish folk musical instruments) Archived 20 March 2023 at the Wayback Machine Retrieved from " A fife and drum corps is a musical military unit consisting of a fife, a type of flute, and a snare drum in most cases. This unit is commonly used to signal battlefield formations, advances, and attacks, as well as to provide music for the troops as they march. It was common in the early military units to have a unit consisting of two fifes and two drummers for each company of at least 100 soldiers. They provided entertainment for the troops by joining ranks and leading the march, while playing motivational music as well as hometown favorites to build up the marching troops' spirits. A fife is a woodwind instrument that typically has six sound holes, although some versions may have 10 or 11 for added sound. It's commonly made from hardwood, but some are made of metal. The type of drum used in the classical fife and drum corps is called a rope tension snare drum. There can also be limited use of a bass drum in the modern units; however, this drum is typically used only in shows where the drummers remain stationary. The unit commonly plays only that music which is written especially for this type of musical group. Early American fife and drum corps competitions and performances were focused on the Revolutionary War period of dress. Tricorn hats, waist coats, and knickers were the period-correct style of uniform worn by the players as they mimicked the uniforms worn by the soldiers of that era. One of the oldest symbols in America depicting the fife and drum players is that of a trio of wounded men, one with a fife, one with a drum, and the other with a flag, marching as they played. This same trio has also been depicted marching in American Civil War garb. Modern fife and drum competit