Journal of the American Musical Instrument Society

VOLUME XI • 1985



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The Diatonic Harp in Ecuador: Historical Background and Modern Traditions *Part 2*

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S UBSTANTIAL PUBLISHED WORK on the Hispanic-American diatonic harp of the twentieth century has been rare, outside of a few general studies.¹ Concerning the more specific subject of the twentieth-century diatonic harp in Ecuador, published information is extremely meager² and

Part 1 of this article, appearing in this *Journal* 10 (1984): 97–118, traces the history of the harp in Ecuador up through the nineteenth century. In accordance with accepted anthropological practice, for the protection of individuals' privacy, all names given in the present article for Ecuadorian performers and for places smaller than the cantonal level are pseudonyms.

1. Frank and Joan Harrison, "Spanish Elements in the Music of Two Maya Groups in Chiapas," UCLA Selected Reports 1, no. 2 (1968): 2–44; Isabel Aretz, Instrumentos musicales de Venezuela (Cumaná, Venezuela: Editorial Universitaria de Oriente, 1967); Daniel Edward Sheehy, "The 'Son Jarocho': The History, Style, and Repertory of a Changing Mexican Musical Tradition" (Ph.D. diss., University of California at Los Angeles, 1979). Samuel Milligan's summary of the subject ("The Harp in Latin America," American Harp Journal 1, no. 3 [spring, 1968]: 16–20) presents certain accurate data (on some physical features, and diffusion), mixed with unfortunate stereotypes, such as the statement that "a simple country maker in an out of the way place may run the strings up the side of the neck" (p. 17); thus, he would evidently consider all Ecuadorian harps—past and present—as crude products of clumsy rural artesans, an implication that I hope the present article will refute.

2. The lacuna that has existed in Ecuadorian harp research is reflected in that instrument's near-absence in recent discussions by highly informed writers. Dale A. Olsen, "Folk Music of South America—A Musical Mosaic," in Elizabeth May, ed., Musics of Many Cultures: An Introduction (Berkeley: University of California Press, 1980), p. 396, mentions the presence of diatonic harps only in Venezuela, Colombia, Peru, Chile, Argentina, and Paraguay. Isabel Aretz, "Ecuador. II. Folk Music," The New Grove Dictionary of Music and Musicians (1980), vol. 5, p. 831, presents to my knowledge the first photograph of the northern Ecuadorian highland harp (what I call the arpa imbabureña) to appear in the English-language literature on the subject. It is shown being played by an indigenous harpist and accompanied, appropriately, by a golpeador; but the specific instrument-type itself receives no discussion. Alfredo Rolando Ortiz, Latin American Harp Music and Techniques for Pedal and Non-Pedal Harpists (Corona, Calif.: Alfredo Rolando Ortiz, 1979), p. 20, in a single paragraph devoted to the Ecuadorian harp, makes the following unacceptable remark: "In Ecuador the Indian influence is not as marked as in the Peruvian [harp] style." Unquestionably, the northern Ecuadorian harp style displays a marked indigenous character; see John M. Schechter, "Music in a Northern Ecuadorian Highland Locus: Diatonic Harp, Genres, Harpists, and Their Ritual Junction in the Quechua Child's Wake," 3 vols. (Ph.D. diss., The University of Texas at Austin, 1982), chaps. 3, 4.

even misleading: for example, the statement by Raoul and Marguerite d'Harcourt (based on their Andean research ca. 1910–20) that "Ecuador has a much smaller model of harp than that of Peru."³ This suggests that there is but one "Ecuadorian harp," which is incorrect. Today there are at least three distinct physical styles of Ecuadorian harp, two of which were probably in currency when the d'Harcourts were doing their research. Moreover, one of these styles—the type found in the central Ecuadorian highlands, which must date back at least to 1900—is comparable in size to the harp most widely diffused in Peru.

In spite of the lack of scholarly attention paid to Ecuadorian harps of the present century, certain aspects of their performance practice have been documented. The *golpe* tradition (beating the harp in time to the music), which Friedrich Hassaurek observed in the Otavalo area in 1863,⁴ today remains traditional among northern Ecuadorian Quechua⁵ musicians. It was standard practice, moreover, for *mestizo*⁶ performers in Ecuador, perhaps up to the 1930s or 1940s. Discussing a mestizo sung dance (probably an *albazo*, a genre of national folk music in allegro character and sesquialtera meter), Segundo Luis Moreno Andrade describes the singers, "que cuando se acompañaban del arpa tenían la obligación de ir marcando el ritmo con las palmas de las manos sobre la caja del instrumento"⁷ (who when accompanied by the harp were obligated to beat the rhythm with the palms of their hands on the sound-box of the instrument).

The presence of the *golpeador*—who indeed often sings as well as beating the rhythm—is a custom so well established in the northern and central Ecuadorian Sierra that leading Quechua harpists in both Tungurahua (central highlands) and Imbabura (northern highlands) Provinces always attempt to secure the services of a golpeador for their public

3. Raoul and Marguerite d'Harcourt, *La musique des Incas et ses survivances* (Paris: Librairie Orientaliste Paul Geuthner, 1925), p. 85: "L'Équateur connait un modèle de harpe beaucoup plus réduit que celui du Pérou."

4. Friedrich Hassaurek, Four Years among Spanish-Americans (New York: Hurd and Houghton, 1867), p. 274; see also part 1 of this article, pp. 111, 113.

5. Quechua (Kechua) is the indigenous language of the area; the term applies as well to the indigenous people of the northern Ecuadorian highland region.

6. For highland Ecuador, *mestizo* refers to a person of mixed Ibero-American and indigenous cultural heritage, whose primary language is Spanish and whose style of dress is typically Westernized.

7. Segundo Luis Moreno Andrade, "La música en el Ecuador," in J. Gonzalo Orellana, ed., *El Ecuador en cien años de independencia: 1830–1930*, vol. 2 (Quito: Imprenta de la Escuela de Artes y Oficios, 1930), p. 228.

performances. One of the Ambato-area harpists most in demand in the early twentieth century, Fernando Morales, had one or two select golpeadores whom he would always call upon to accompany him for fiestas, children's wakes, and other functions. The golpeador would have to be *fiel* (faithful) to the harpist—always present and striking the belly of the harp and, if requested, singing—throughout the period of the event, be it a single evening's celebration or a wedding lasting from three to four days. The harpist-golpeador pair would be offered a *mediano* (a large amount of food of significant value, such as a whole chicken, rabbit, or guinea pig) in addition to ample drink, for their services.⁸ In present-day indigenous harp performance in the Cotacachi area, Efraín, regarded by his colleagues as the finest harpist of the zone, also regularly performs with *una personal selecta* from a neighboring community as his golpeador.⁹ The Bihuela brothers, Sergio and César, play at children's wakes accompanied by their father as golpeador.

Certain facts are clear for the practice in Tungurahua, the province noted by Moreno Andrade for its strong harp tradition. There, the harp has been present at weddings, wakes, and taverns.¹⁰ Tungurahua harps are made in small cabinet makers' workshops, where instruments of substantial artistry are created.¹¹ In Riobamba, Chimborazo, adjoining Tungurahua Province, the harp appears at Corpus (Corpus Christi), not in the procession proper, but during post-procession activities at the sponsor's home.¹²

Perhaps drawing on this body of earlier research, as well as on his own field experience in his native country, Carlos A. Coba A. recently has summarized the use of the harp in Ecuador in the following terms:

ARPA: Cordófono compuesto, arpas, de marco sin aparato para modificar la afinación, diatónica y de ejecución digital. Es construída de cedro, pino, otros. Consta de caja, consola, columna o mástil. Encordadura de metal o de tripas de gato o de perro. Su ejecución es de pie o sentado. Poseedores de este instru-

8. Carlos Morales, interview-lesson, Illampu, Tungurahua, July 12, 1980.

9. Efraín, recording session, Saltamora, Imbabura, April 9, 1980.

10. Piedad Peñaherrera de Costales and Alfredo Costales Samaniego, *El Quishihuar o el Árbol de Diós*, vol. 1 (Quito: Instituto Ecuatoriano de Antropología y Geografía, 1966), pp. 157, 159.

11. Ibid., p. 159. Indeed, the Leal family of Ambato, whom I came to know in 1980, have for two generations made fine harps in a tiny workshop devoted primarily to cabinetry.

12. Paulo de Carvalho-Neto, *Diccionario del folklore ecuatoriano*, Tratado del folklore ecuatoriano, vol. 1 (Quito: Editorial Casa de la Cultura Ecuatoriana, 1964), p. 143. In the 1980 Corpus celebration that I observed in Soga, Tungurahua, the harp was not used.

mento: macro grupos mestizo hispano hablante e indígena quichua hablante. Provincias de Tungurahua e Imbabura. Rito festivo y/o de entierro.¹³

(HARP: Compound chordophone, harps, frame, without apparatus to modify tuning, diatonic, played with the fingers. Constructed of cedar, pine, other [woods]. Consists of sound-box, neck, forepillar. Strings of metal or of cat or dog gut. Played standing or seated. Possessors of this instrument: mestizo Spanish-speaking and Indian Quechua-speaking macro-groups. Tungurahua and Imbabura Provinces. Festive and/or burial contexts.)

Coba's statement is accurate, in my field experience, for what it says notably the vitality, still evident today, of the harp in these two provinces.¹⁴ Nevertheless, although Coba, Moreno Andrade, and others before them acknowledge the use of the harp in Tungurahua and Imbabura, they do not clearly state what is perhaps most significant about harp practice in these two areas, at least today: the fact that the harp traditions of the two areas are dissimilar, if not completely mutually exclusive, for they represent two distinct cultural groups (mestizo and Quechua), performing two distinct musical repertories on three distinct harp-forms. The physical features of these harp-forms (as well as a hybrid form) will be discussed below, followed by information on the two repertories of the two cultures.

The following discussion is based on data gleaned from my field research in the northern Ecuadorian highlands (October, 1979–April, 1980) and the central Ecuadorian highlands (April, 1980–September, 1980). I use the following names to refer to the three principal kinds of Ecuadorian harps in use today: *arpa imbabureña* (Imbabura harp), *arpa folclórica* (folkharp), and *arpa ecuatoriana-paraguaya* (Ecuadorian-Paraguayan harp).¹⁵ In addition, there is a hybrid form (*arpa híbrida*) that displays characteristics of the first two types. All of these harp-forms are single-strung and diatonic, lacking pedals.

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13. Carolos A. Coba A., "Instrumentos musicales ecuatorianos," Sarance 7 (October, 1979): 76.

14. Coba considers Tungurahua Province *the* center for Ecuadorian harpists (personal communication, March 5, 1980). Indeed, preliminary field research I conducted in this province in 1980 confirms Illampu parish and the Píllaro area as major centers for the circum-Ambato mestizo harp.

15. The first term is my own, and I use it because all the instruments with its configurations occur, at the present state of research, only in Imbabura Province. The second term is used by Jaime Leal, established furniture and harp maker of Ambato, to refer to this type of instrument; he employs the term because the type, once common in the circum-Ambato area, has given way in the last twenty years to the *arpa ecuatoriana-paraguaya* among the same group of musicians. The last term is mine; this instrument's Paraguayan provenience is common knowledge among both Ecuadorian harp makers and harpists.

The Arpa imbabureña

This type prevails in Imbabura Province; it is seen as an oddity by mestizos and Quechuas, harpists and nonharpists, in various parishes (Illampu, Laredo, Soga) of central Sierra Tungurahua Province, noted for its own arpa folclórica tradition. Figure 1 shows two arpas imbabureñas, one owned by the Toquepala harpist Raúl, seated with his harp to the left, and the other, owned by the author, held by a Toquepala boy to the right. Missing one leg, Raúl's harp rests upon a *cabuya* (cactus) stump, normally used as a stool. Raúl is shown alone with his harp in figure 2. Both photographs were taken in the outdoor patio of Raúl's home in Toquepala, outside of Cotacachi.

The arpa imbabureña is made of cedar, contains wooden nails, and has three circular unflanged belly sound-holes in "opposed" position, as shown in figure 3. It is five- or seven-staved. The straight legs are squared but with rounded (nearly cylindrical) edges; are turned with two concentric incisions usually at one, two, or three places; are completely exposed to view; and are angled. They meet at a point above a finger-sized sound-hole near the center of the breech but below the belly surface; they are shorter than the legs of Peruvian harps but longer than those of Paraguayan harps and of the Ecuadorian arpa folclórica. The neck is uncarved and lightly curved in inverted-arch form, with a slight under-hump at the front of the neck. The forepillar is likewise straight, squared with rounded edges, and turned with two concentric incisions commonly in three places; additional blackpainted rings at the two extremes of each incision-group may be present, somewhat heightening the turned effect. The forepillar is short, creating a low head, and there is no forepillar finial. The sound-box is slightly arched, wide, deep, supported by five to seven internal ribs, and edged with a pattern that may be either uncarved and continuous, or discontinuous and lightly carved. Wooden plugs are used at agujeros (holes where strings enter the belly surface), at least for the metal strings. Older exemplars, dating from the early twentieth century, from the nineteenth century, and from even earlier periods, may have cloth lining the inside of the belly soundholes. Also on older instruments, the glue used may be of bull's foot (pata de toro): the foot would be cooked, the liquid resultant becoming glue; this adhesive appears now in disuse.¹⁶ Pegs are either all of wood or all of iron, in most cases; both types of pegs are made locally. The single diatonic rank of

^{16.} Gerónimo Ortega (carpenter and instrument repairer), interview, Laredo, Tungurahua, August 13, 1980.



FIGURE 1. Two arpas imbabureñas. Harpist Raúl of Toquepala is seated at the left. Photograph by the author.



FIGURE 2. Raúl of Toquepala, tuning his arpa imbabureña. Photograph by the author.



FIGURE 3. Schematic drawing of the front of the arpa imbabureña, showing the "opposed" position of the three belly sound-holes.

strings is typically a combination of gut (sheep, dog, cat, or goat) for the bass and perhaps middle registers, sometimes nylon for the middle register, and steel (guitar strings) for the treble register. Tuning implements are iron keys in various designs or a sheep leg-bone (*tullu*—Quechua: "bone"); both of these types measure from 8 to 10 cm. in length. Measurements of nine arpas imbabureñas are given below in Appendix A.

A brief digression is necessary to establish certain lines of continuity in physical characteristics between the older European harps and those of colonial and postcolonial Latin America. If one examines the style of Renaissance harps in general,¹⁷ one notices that the neck is shaped in an inverted arch, created by the combination of a pointed or backsloping forepillar finial with an upsloping neck towards the back. This inverted-arch shape was continued in seventeenth-century Spain, as portrayed in the paintings of Francisco de Zurbarán (1598–1663?).¹⁸ In the late seventeenth century, James Talbot remarked on the Spanish harp he observed as having a

17. Ann Griffiths and Joan Rimmer, "Harp. 4. Renaissance Harps and Later Diatonic Harps," *The New Grove Dictionary*, vol. 8, p. 196 and figs. 11(a), 11(b).

18. Roslyn Rensch, *The Harp: Its History, Technique, and Repertoire* (New York: Praeger, 1969), pp. 76–77. Zurbarán's *Adoration of the Shepherds* (1638–39), reproduced in Joan Rimmer, "Harp. 5. Diatonic Harps in Spain and Latin America," *The New Grove Dictionary*, vol. 8, p. 198, no. 13 (top of page), and his *Temptation of St. Jerome* clearly depict the seventeenth-century Spanish harp. In both paintings, the instrument is shown to: (1) be good-sized, with at least twenty strings, (2) have a neck in the form of an inverted arch, (3) have a long, thin forepillar, and (4) be single-strung. Also, the *Adoration* shows a staved sound-box. Because Zurbarán's art has been characterized as "idealized naturalism" (Rensch, *The Harp*, p. 77), it is likely that he has given us a rather reliable image of the seventeenth-century single-strung Spanish harp.

"turn'd bow," gut strings, brass pegs, and head made of walnut; in addition, "on each side of the Belly [were] 3 Knots lessening upwards."¹⁹ Furthermore, according to Talbot, the Spanish harp had a lower head than contemporary harps of other European countries, and a rather thick, roundish belly.²⁰ A surviving seventeenth-century harp from Toledo, Spain, shows prominent turning of the central forepillar.²¹

In sum, when comparing descriptive and iconographic data of the arpa imbabureña and the seventeenth-century Spanish harp, one finds the following common features: metal pegs; single-course diatonic strings; presence of sound-holes astride forepillar (the arpa imbabureña has the "opposed" belly sound-hole pattern, not the "parallel set" pattern of some seventeenth-century Spanish harps and nearly all, if not all, nineteenthand twentieth-century Peruvian harps); staved sound-box back; neck in the shape of an inverted arch; forepillar straight and turned; roundish belly large in proportion to low, slender, delicate superstructure; low head; and the use of gut strings. Thus, significant features of tuning (diatonic), construction, configuration, and stringing are shared by the two groups of instruments three to four hundred years apart.²² It is my conclusion, based on all available data, that the harp played by circum-Cotacachi Quechua musicians in 1980 has remained essentially unchanged, with respect to its configurations, dimensions, and construction, for one to two hundred years. Furthermore, given the resemblances to the sixteenth-seventeenthcentury Spanish harp, one could conjecture that the precursors of today's arpa imbabureña date back even earlier into the colonial period.

19. Joan Rimmer, "James Talbot's Manuscript (Christ Church Library Music MS 1187): VI. Harps," *Galpin Society Journal* 16 (May, 1963): 67.

20. Ibid.

21. N. Zabaleta, "The Harp in Spain from the XVI–XVIII Century," *Harp News* 3, no. 10 (1964): 3.

22. Although a full discussion of features of diatonic harps elsewhere in Latin America cannot be given here, nevertheless certain prominent points of comparison may be pertinent. The use of cedar for diatonic harps is widespread in Latin America, appearing in instruments made in Mexico, Paraguay, Argentina, Venezuela, and Peru. Evidence from the sixteenth century shows that cedar was found at that time in the Otavalo-Cotacachi area; see Sancho de Paz Ponce de León, "Relación y descripción de los Pueblos del partido de Otavalo" (manuscript, written 1582, currently in the Benson Latin American Collection, University of Texas at Austin), in Marcos Jiménez de la Espada, *Relaciónes geográficas de Indias*, vol. 3, *Perú* (Madrid: Tipografía de los Hijos de M. G. Hernández, 1897), p. 114. Like most other Latin American diatonic harps, the arpa imbabureña has a staved sound-box. Its short height, yet with a wide and deep sound-box, is similar to the *Domingacha* harp of the state of Cuzco, Peru; see Josafat Roel Pineda, et al., *Mapa de los instrumentos musicales de uso popular en el Perú: Clasificación y ubicación geográfica* (Lima: Instituto Nacional de Cultura,

The Arpa folclórica

This type of harp (see fig. 4) was being made in 1980 of several woods (on the same instrument): cedar for the belly, forepillar, and back staves; walnut for the forepillar finial head carving and the horizontal strip in the base; cinnamon for the neck, legs, and the vertical strip on the belly that holds the agujeros; and *platuquero*²³ for the vertical white strips on the belly and between the back staves, and the horizontal white strips in the base. The instrument contains both larger wooden nails and small metal finish-

23. I have been unable to find an English equivalent of the name for this kind of wood.

^{1978),} p. 151. Like the arpa imbabureña, the Domingacha is played by Quechua musicians. The number (3) and position ("opposed") of the belly sound-holes on the arpa imbabureña, however, look north for analogues, to the Venezuelan *llanera* (from the Plains, or Llanos) and aragüeña (from the coastal states of Aragua and Miranda) harps, which are precisely the same as the Ecuadorian arpa imbabureña in these respects. Although the arpa imbabureña is normally smaller (one "hybrid" variant, however, is larger), it is particularly close in appearance to the arpa aragüeña in that they both have unhighlighted belly sound-holes and both have forepillars turned in intermittent-but-concentric fashion. They share the latter feature with both colonial and twentieth-century Colombian harps (see José Ignacio Perdomo Escobar, "Esbozo histórico sobre la música colombiana," Boletín latinoamericano de música 4, no. 4 [December, 1938]: 427, and George List, "Colombia. II. Folk Music," The New Grove Dictionary, vol. 4, p. 580, fig. 10) and with the modern arpa jarocha of Veracruz (see Ortiz, Latin American Harp Music, p. 8, and Sheehy, "The 'Son Jarocho,' " p. 86). The wooden pegs (occasionally), wooden nails, and legs that meet near the belly surface of the arpa imbabureña appear also in the Chiapas Indian harps of southern Mexico (see Harrison, "Spanish Elements," p. 10, and Rimmer, "Harp. 5. Diatonic Harps in Spain and Latin America," pp. 197, 198, fig. 14). The arpa imbabureña forepillar turning, like its staved sound-box, is widespread among Latin American diatonic harps; a few types (one of which is the arpa folclórica), however, lack this feature. The absence of neck carving also is more common than rare. The use of gut strings is also widespread, appearing not only in the arpa imbabureña, but also in the harps of Jalisco, Mexico; Tucumán, Argentina; Venezuela (the aragüeña and llanera); and Peru. Nineteenth- and/or eighteenth-century "Andean harps" are illustrated and discussed, respectively, by Pedro Pablo Traversari Salazar, Catálogo general del museo de instrumentos musicales (Quito: Editorial Casa de la Cultura Ecuatoriana, 1961), p. 64, and Richard Rephann, A Catalogue of the Pedro Traversari Collection of Musical Instruments / Catálogo de la colección de instrumentos musicales Pedro Traversari (Quito: Casa de la Cultura Ecuatoriana; Washington, D.C. [?]: Organization of American States and Yale University Collection of Musical Instruments, 1978), nos. 4001, 4003-4005, as I have noted elsewhere (John Schechter, review of Rephann, A Catalogue / Catálogo, in Latin American Music Review 1, no. 2 [fall-winter, 1980]: 270-71). The three harps illustrated by Traversari Salazar and the four arch-bellied harps discussed by Rephann conform both to the description given in the present article of the arpa imbabureña and to my compilation of dimensions and features of arpas imbabureñas examined in 1979–80 and presented here in Appendix A. Three of Rephann's four "Andean" harps so conforming are made of cedar. These early harps cause us to recall P. Bernardo Recio's statement, made in the eighteenth century, that the "most common instrument" among Ecuadorian circum-Quito highland Indians was the harp (see part 1 of this article, pp. 105–107).

132 JOURNAL OF THE AMERICAN MUSICAL INSTRUMENT SOCIETY



FIGURE 4. Arpa folclórica made in 1980 by Jaime Leal of Ambato. Photograph by the author.

ing nails. It has three flanged belly sound-holes (circular in shape and sometimes inlaid on older harps, oblong on newer harps) placed in "opposed" position, the smallest—typically also for the arpa imbabureña—at the upper right belly surface (from the harpist's perspective). Its back may be either round (older harps) or staved with as many as nine pieces (newer harps). Legs are cylindrical and turned (older) or flat-planed (newer), with or without carving. The angled legs extend to the bottom of the base or perhaps halfway up the base, but they do not meet. The legs of the arpa folclórica are shorter than those of the arpa imbabureña.

The neck is elaborately carved, more so than on any other type of Latin American diatonic harp I have seen. The instrument has a tall, straight, squared (with round edges) forepillar, unturned; the column has a carved finial and a carved bottom. The tall forepillar creates a high-headed harp with substantial overall neck curve, similar in appearance to the singleaction harp made for Marie Antoinette in 1780 by the Paris publisher and instrument maker Jean-Henri Naderman (1735–99).²⁴ The neck curve is less that of an inverted arch than that of a near-S shape. The sound-box is flat or barely arched, narrow, and shallow; it is supported by up to seven internal ribs (newer harps), and it has a thin uncarved edge all around. (On the harps made by the Ambato makers Lorenzo Leal and his son Jaime, the belly has paired, parallel vertical strips of white platuquero wood on both sides of the forepillar.) Tuning pegs are of iron. Wooden plugs of all the same shape (newer harps) or rough wooden plugs or even screws (older harps) hold all the metal strings (for the treble and middle registers) into round, metal-eyelet agujeros. The tuning implement is an iron key, of the same size as those used for the arpa imbabureña. Strings number from thirty-six to thirty-eight; on the harps with thirty-six strings, today the highest twenty-six are steel guitar strings, while the remaining bass strings are nylon.

The following list of measurements and additional features applies to the arpa folclórica made for me in 1980 by Jaime Leal of Ambato (see above, fig. 4). (Letters cited for the first five measurements refer to the points identified in the schematic drawing of the arpa imbabureña in Appendix A.)

Overall length (A–I)	142 cm.
Length of body (C–F)	106 cm.
Width of body at bottom (E–G)	47.5 cm.

24. See Marcel Tournier, The Harp (Paris: Henry Lemoine, 1959), pl. 2.

Width of body at top (B–D)	5 cm.
Depth of body from belly to bottom (F–H)	33 cm.
Vibrating length of longest string	106.5 cm.
Vibrating length of shortest string	15 cm.
Number of peg holes in neck	36
Number of string holes in belly (agujeros)	37

Although Sr. Leal made this instrument especially so that I (at 6 ft. 2 in., considerably taller than the average Ambato-area mestizo harpist) could play it, nevertheless the arpa folclórica in general tends to be greater in overall length, body length, string length, and the number of peg holes, pegs, and agujeros (and therefore strings) than the arpa imbabureña. On the other hand, the arpa folclórica, peculiar in its traditional locus of manufacture and performance to the central Ecuadorian Sierra, exhibits a lesser depth of body and width of body at the bottom than its northern three-holed cousin. Given the facts of elaborate neck carving and forepillar finial carving on the arpa imbabureña, together with the dramatic difference in the general size of the two types, it appears remarkable that they are both traditional harps in the same highland chain of the same country.

Owing to their uniqueness for Latin American diatonic harps and because they distinguish the arpa folclórica from the arpa imbabureña, the forepillar finial and neck carving on the former merit special discussion. The Spanish tradition of "relief-work" and "sculptured images" extends back to a harp listed in Queen Isabel's 1503 inventory of all objects kept in the Real Alcázar of Segovia.²⁵ The arpa folclórica forepillar finial carvings occur, in harps observed to date, in the shapes of Indian heads (fig. 5), rounded scrollwork (fig. 6), or a rounded consecutive-leaf pattern, typically beginning on the neck proper and continuing into the forepillar finial (fig. 7). Sometimes the continuation is eschewed and, instead, a carved head appears at the finial (fig. 8). Since finial carvings are confined to the width of the forepillar (ca. 3–3.5 cm.), head carvings, in effect, consist of two prominent profiles; carvings are only minimally appreciated from a direct front view. Figure 9 illustrates another carved head, this one on an arpa folclórica from thirty to sixty years old.

Neck carving on the arpa folclórica reflects the native soil on which it has been produced for at least one hundred years: Ambato, Tungurahua, a

^{25.} Higini Anglès, La música de la corte de los reyes católicos, Polifonía religiosa, vol. 1, 2d ed. (Barcelona: Consejo Superior de Investigaciones Científicas, Instituto Español de Musicología, 1960), p. 71.



FIGURE 5. Arpa folclórica made in 1980 by Jaime Leal of Ambato. View of the forepillar finial Indian-head carving. Photograph by the author.

city renowned in song (the *pasacalle* "Ambato, Tierra de Flores") and festival (the annual February "Fiesta de la Fruta y de las Flores") for its beautiful flora and abundant fruits. Figure 7 shows the beautiful relief-work of a sculptured flower, "followed" by the consecutive leaves of a tree. Figure 10 gives the abstract sense of the floral; this particular harp finial is also interesting in that someone has placed upper and lower teeth in the head and given it whiskers, lending the carving more animal than human likeness.²⁶

In the Latin American diatonic-harp context as a whole, the elaborate carving of the Ecuadorian arpa folclórica appears to occupy a unique posi-

26. The arpa folclórica has already been documented in photographs, although it has not been discussed as a type in the literature. A photograph entitled "An Ecuadorian . . . playing the harp" is given by Nicolas Slonimsky in *Music of Latin America* (New York: Thomas Y. Crowell, 1945), facing p. 57; the rounded front finial is observable. A picture of a seated man playing what is almost certainly a Leal family harp (see fig. 4 in the present article) is given by Piedad Peñaherrera de Costales, Alfredo Costales Samaniego, and Fausto Jordán Bucheli, *Tungurahua* (*Llacta*, vol. 13) (Quito [?]: Instituto Ecuatoriano de Antropología y Geografía, 1961), p. 219. On p. 223 of the same source an arpa folclórica is shown in duo with a lute-type, perhaps a *bandurria*; the harp has a rounded front finial, and the golpeador is present and at work.



FIGURE 6. Arpa folclórica (maker and date unknown) owned by the Hilton Shop, Quito. View of the neck and rounded scrollwork on the forepillar finial. Photograph by the author.



FIGURE 7. Arpa folclórica (maker and date unknown) owned by El Patio—Galería de Arte, Quito. View of the neck and forepillar finial, showing consecutive-leaf pattern. Photograph by the author.



FIGURE 8. Arpa folclórica, Instituto Otavaleño de Antropología, Otavalo (harp no. 28). View of the front part of the neck and the forepillar finial, showing a consecutive-leaf pattern ending in a carved head. Photograph by the author.

tion. There is light neck carving on some Yaqui harps of Sonora, Mexico, and Arizona, U.S.A.; the Chiapas Indian harps of southern Mexico have the distinctive pattern of bird-arch-bird-ball as consecutive neck-carving figures; the Domingacha and some other Peruvian harps have lightly carved "facing animals/birds" at the neck; and finial scrollwork is visible on Mexican jarocha and on Colombian llanera harps. None of these compares in extent or detail, however, with the neck carving of the Ecuadorian arpa folclórica. Furthermore, forepillar turning, which is characteristic of the majority of Latin American diatonic-harp exemplars, is distinctly absent from the arpa folclórica. The content of the neck and finial carving-flora and Indian heads, respectively—is peculiar to and apt for the manufacturing city, Ambato, the city of flowers and capital of Tungurahua Province, home of divers indigenous groups. It shares the use of cedar with its northern Ecuadorian cousin and with other Latin American harps. Like its Spanish seventeenth-century predecessors, it utilizes walnut. It is performed with an accompanying golpeador, as is its northern relative. Its overall size, length, and narrowness recall the Mexican jarocha and Paraguayan harps; all three types are played today by mestizo harpists. Unlike

138 JOURNAL OF THE AMERICAN MUSICAL INSTRUMENT SOCIETY



FIGURE 9. Arpa folclórica (maker and date unknown) owned by El Patio—Galería de Arte, Quito. View of the forepillar finial carved head. Photograph by the author.

most arpas imbabureñas I have seen, the arpa folclórica is traditionally carefully varnished, as were the Spanish harps made ca. $1500.^{27}$

27. Anglès, La música de la corte, p. 71.



FIGURE 10. Arpa folclórica (maker and date unknown) owned by Sumaglla— Folklore Azuayo, Quito. View of the neck and forepillar finial, showing abstract floral design and carved head. Photograph by the author.

The Arpa híbrida

Before discussing the third major harp-type of the Ecuadorian highlands, it is necessary to illustrate a group of harps that has cross-fertilized, displaying features of both the arpa imbabureña and the arpa folclórica. I call this type the *arpa híbrida*.

The instrument shown in figures 11 and 12 belongs to Efraín (seen in fig. 11), considered by his fellow musicians to be one of the finest circum-Cotacachi Quechua harpists. His harp's slightly arched belly, three unflanged belly sound-holes in opposed position, uncarved neck, intermittently turned rings on the forepillar, angled legs that meet near the belly surface, and the wide and deep belly all call to mind the arpa imbabureña. (Indeed, Efraín's home is the community of Saltamora, in Imbabura Province.) Yet the small ball, or *bolita*, that makes up the forepillar finial is odd; it appears on no other arpa imbabureña. Moreover, the forepillar has raised edges; this aspect, combined with the large overall size of the instrument, gives the harp a massive appearance. The harp is similar to the arpa folclórica and unlike the arpa imbabureña in that its neck sweeps up, creating a high head. Furthermore, the under-rounded neck-front, although "blocked" by the pillar, is nevertheless appreciated from the side and thus recalls the rounded scrollwork front of the arpa folclórica (see fig. 6).

140 JOURNAL OF THE AMERICAN MUSICAL INSTRUMENT SOCIETY



FIGURE 11. Efraín of Saltamora, playing his arpa híbrida. Photograph by the author.



FIGURE 12. Efrain's arpa híbrida, side view. Photograph by the author.

The arpa híbrida shown in figure 13 also possesses many of the features of the arpa imbabureña: three unflanged belly sound-holes, turned forepillar, uncarved neck, and slightly arched belly. But it too has the bolita forepillar finial. And here the legs are flat-planed and apparently reach only to the back of the harp, as is the case for the arpa folclórica. But in fact, when one looks inside the lowest belly sound-hole, one sees that the legs extend within and meet, as do the totally external legs of the arpa imbabureña. Hence, even in the single feature of leg construction, we have a hybrid: arpa folclórica externally and arpa imbabureña internally. The harp shown in figure 13 lacks the under-rounded neck-front of Efraín's instrument, but it too is higher-headed than the arpa imbabureña.

The twentieth-century Ecuadorian arpa híbrida shares many characteristics (bolita forepillar finial, three unflanged belly sound-holes in opposed position, intermittently turned rings on the forepillar, uncarved neck, and rather massive size) with the twentieth-century Venezuelan *arpa aragüeña*.²⁸ On August 1, 1980, in Illampu, Tungurahua, when I showed mas-

28. An example is shown in Aretz, *Instrumentos musicales de Venezuela*, supp., photograph no. 34.



FIGURE 13. Arpa híbrida, Quito. Photograph by the author.

ter harpist Carlos Morales the photograph reproduced here as figure 13, he said it looked like a "Venezuelan-style harp." In fact, the bolita and the comparative lack of additional carving or painting on the instrument are features that seem to occur nowhere else but in the northern Ecuadorian arpa híbrida and the Venezuelan arpa aragüeña.²⁹ Both of these harp-types probably derive their bolita and forepillar turning from José Ignacio Perdomo Escobar's Colombian colonial-period harp, an instrument that also had three belly sound-holes, but not in strictly opposed position, since two consecutive holes were placed on the same side of the forepillar.³⁰

Finally, another type of hybrid harp has been observed, the result of alterations made by the owner of the instrument. At first glance, figures 14 and 15 seem to show two similar harps, both having the three flanged sound-holes of the arpa folclórica. The instrument shown in figure 14 is

29. Harps of Tucumán, Argentina, may have the forepillar bolita, but are distinguished from the arpa híbrida and the arpa aragüeña by the lack (or, if present, the placement) of belly sound-holes; see Isabel Aretz-Thiele, *Música tradicional Argentina: Tucumán, historia y folklore* (Buenos Aires: Platt Establecimientos Gráficos [Universidad Nacional de Tucumán], 1946), p. 95, pl. 24, 25.

30. José Ignacio Perdomo Escobar, *Historia de la música en Colombia*, 3d ed. (Bogotá: Editorial ABC, 1963), plate between pp. 112 and 113.



FIGURE 14. Arpa folclórica, Quito (full view of the instrument shown in figure 7). Photograph by the author.



FIGURE 15. Arpa folclórica owned by Jorge María of Nariwala. This instrument has been altered to make it look like an arpa imbabureña. Photograph by the author.

indeed an arpa folclórica. The one in figure 15 began as the same type, but was subsequently altered. In April, 1980, it was owned by the Nariwala harpist Jorge María, who had purchased it in February, 1980, from Antonio, another harpist in the area. Antonio, in turn, had bought it—so he told me—years before, from a mestizo of Cotacachi, who himself had allegedly bought it for his daughter in Ambato. Antonio had devised impromptu belly edging and had shaved down the rounded forepillar finial and the neck carving, giving the instrument some of the characteristics of the arpa imbabureña. Thus the central highland harp had been made to look like its northern highland cousin. The arpa imbabureña aesthetic evidently demands that imports be re-created in its own image.

The Arpa ecuatoriana-paraguaya

Paraguayan rural harps of ca. 1940 featured a curved neck ending in a circular form atop the forepillar: this circle was not a forepillar finial as such because it belonged properly to the neck and was not an extension of the forepillar.³¹ Later Paraguayan harps have retained this curved neck-front and are further characterized by a neck in the shape of an exagger-ated, inverted arch (consisting, in effect, of two curved segments connected at nearly a right angle).³² This type of neck may be seen on the small harp (50 cm. in length), dating from the early nineteenth century, preserved at the Sucre House in Quito (fig. 16). At one time it was the property of the Marquesa de Solanda, wife of Antonio José de Sucre (Mariscal Sucre), Simón Bolívar's principal lieutenant in the Ecuadorian campaign, who defeated the Spanish at the Battle of Pichincha, Quito, in 1822.

The paintings of Francisco de Zurbarán are cited above as pictorial sources of information on the Spanish harp of the seventeenth century. His *Adoration of the Shepherds* (1638–39)³³ shows a harp with two figure-**S** shapes (similar to violin *f*-holes) on the belly, one on each side of the forepillar. The Solanda harp shown in figure 16 also has two **S**-shapes on its belly; they are painted in black and terminate in belly sound-holes. This type of harp, in larger form with a full complement of thirty-six to thirty-eight nylon strings (as with the Paraguayan harps), is in common use today in the central Ecuadorian highlands; because it is used in Ecuador but has the distinctive Paraguayan neck, I have given it the name *arpa ecuatoriana-paraguaya*.

The nineteenth-century Solanda harp has pegs, but performers of the arpa ecuatoriana-paraguaya today have adopted guitar-type mechanical tuning pegs (the practice is also common among the Paraguayans themselves). The instrument may be played either standing or seated: figure 17 shows Armando of Píllaro, Tungurahua, standing and playing his harp in his back yard; figure 18 shows the leading Tungurahua harpist Carlos Morales, seated, playing the same type of harp on the patio of his home in Illampu. Morales's harp has a metal lower-belly surface border similar in shape and proportion to the lower border design on the Solanda harp; Armando's harp lacks this border.

Aside from the nineteenth-century Solanda harp in Quito, the use of the arpa ecuatoriana-paraguaya in the central highlands can be docu-

^{31.} See Carlos Vega, Los instrumentos musicales aborígenes y criollos de la Argentina (Buenos Aires: Ediciones Centurión, 1946), pl. 20.

^{32.} See Ortiz, Latin American Harp Music, p. 14.

^{33.} See n. 18, above.



FIGURE 16. The Marquesa de Solanda harp (early nineteenth century) at the Sucre House in Quito, an example of the arpa ecuatoriana-paraguaya. Photograph by the author.

mented at least back to 1963 and probably earlier. On March 24, 1980, I was shown a black-and-white photograph by harp maker Jaime Leal in his Ambato home: pictured were Leal and his father, Luis, alongside five finished and nearly finished arpas ecuatoriana-paraguayas of their own manufacture. The photograph had been taken in 1963.

The arpa ecuatoriana-paraguaya takes another form. The Leal family, known for their carved-head forepillar finials, place this single mark of their central Ecuadorian craftsmanship on some harps that are otherwise almost entirely in Paraguayan style. Figure 19 shows a harp completed in early 1980 by Jaime Leal for a harpist in Cuenca, Ecuador. This instrument is typically Paraguayan in that it lacks belly sound-holes (and even painted **S**-shapes), although there is a sound-hole in the breech.

Three Harps—Two Repertories

The three types of Ecuadorian highland harps discussed above differ not only in their physical features, but also in their musical repertories. As observed in 1980, the arpa imbabureña was performed by Quechuaspeaking monolingual and bilingual indigenes outside Cotacachi, Imba-



FIGURE 17. Armando of Píllaro, Tungurahua, playing his arpa ecuatoriana-paraguaya. Photograph by the author.



FIGURE 18. Carlos Morales of Illampu, Tungurahua, playing his arpa ecuatoriana-paraguaya. Photograph by the author.

bura. The central genre of its repertory is the *sanjuán*, in simple duple meter, which is sounded and danced at all festive occasions, including the Quechua wedding and child's wake. Quechua harpists also perform the *pareja* and *vacación*. The pareja, slightly faster than the sanjuán, is in compound or simple duple meter; its dance is the same as that of the sanjuán. The vacación, not danced, is cyclical and ametrical and has close association with the child's wake ritual.

The arpa folclórica and the arpa ecuatoriana-paraguaya bear the relationship of predecessor and successor, respectively; for analytical purposes, they perform one repertory. In 1980, these two harp-types were played by Spanish-speaking mestizo musicians outside Ambato, Tungura-



FIGURE 19. Arpa ecuatoriana-paraguaya made in 1980 by Jaime Leal of Ambato. Photograph by the author.

hua, and probably elsewhere in the highlands as well. These musicians play *música nacional*, the repertory of Ecuadorian national folk music, whose principal genres include: *pasillo*, *pasacalle*, *albazo* (a general term for music with such varied names in Ecuador as "chilena," "cachullapi," "saltashka," "saltashpa"—and "albazo"), tonada, aire típico, sanjuanito, yaraví, and danzante. The last three genres listed above are of indigenous provenience, but—with extended pitch gamut, with the use of doubled thirds melodically, and with phrasing and other modifications—they are today accepted as elements of música nacional. Harpists of average ability will have examples of all of these genres in their repertories, music they will perform upon demand at special family or community fiestas, weddings, and other occasions. Harpists of superior ability and experience, such as Carlos Morales of Illampu, will possess a broad repertory of pieces in each of these genres; as an example, over a four-month period of recorded lesson-interviews with Morales, the artist performed a total of twenty-two different pasillos alone. In addition, these exceptional artists may play examples of some or all of the following genres (and perhaps others): *pasodobles, "foxtrós,"* Paraguayan *polkas*, Peruvian *wayñ(it)os*, Colombian *porros*, Ecuadorian *kapishkas*,

uadorian *valses, boleros*, Mexican *rancheras*, Paraguayan *galopas*, and Ecuadorian *paseítos*. Carlos Morales has examples of the eight principal Ecuadorian música nacional genres, as well as samples of these fourteen other types, in his regular working repertory.

Quechua Harpists Recorded 1972–78

The archives of the Instituto Otavaleño de Antropología (IOA) in Otavalo contain recordings of Quechua harpists in the Cotacachi area and elsewhere in Imbabura Province. The earliest example was recorded on February 26, 1972. A harpist identified only as "Morales" was recorded during the celebration of a Quechua wedding in Ilumán parish, Cantón Otavalo.³⁴ On March 29, 1975, in Otavalo, the harpist Juan Cayambe, a native of Pimampiro, Imbabura, was recorded playing an arpa imbabureña.³⁵ On July 4, 1975, two important cassette recordings were made, both by the three researchers Carlos Coba A., J. Peñín, and W. Reinoso. One recording is of the Toquepala harpist Ramón Pastaza; the other is of Efraín, then living in Tikulla. Efraín told the interviewers that he had been born near Cotacachi and that he had been playing the harp since about the age of twenty. When a questioner noted that Efraín's harp strings appeared to be made of different substances, the harpist identified the middle-register strings as "nylon" and the lowest as dog gut; the questioner stated that the upper strings were of "metal," and the harpist did not disagree. In response to a query as to the manufacture of the gut strings, the musician answered that the intestine first had to be carefully washed, removing the "meat" and leaving a fine membrane; this was then twisted and allowed to dry in the sun for one day.

Efraín said he had bought his harp in Cotacachi; he did not supply the name of the seller. When asked if anyone in the cantonal capital made

34. The collector was Patricio Guerra. Among the pieces performed on what sounds like an arpa imbabureña, with steel strings in the treble and gut strings in the bass, is the sanjuán "Carabuela," with golpe at a basic duration pulse, sung in Spanish. The catalogue no. is ECU. PROV. IMB. 47-M, side B.

35. The four recorded pieces are: "Carabuela," the sanjuán "Amor 70," "Tomo como hombre," and the albazo "Toro barroso." The catalogue no. is ECU. PROV. IMBABURA 19-P=88-M. The same harpist appears on a commercial recording, *Nanda Mañachi 1 (Préstame el camino)* [Lend me the way], LLAQUICLLA-IFESA, Guayaquil, 339-0501 (1977), performing what Cotacachi harpist Efraín in 1980 called "Cascarón," but which is entitled "Huanupamba" (Fertilizer field) on this disc; a photograph of Cayambe playing an arpa imbabureña appears on the front cover of this album.

harps, Efraín responded that the old man who had made his harp was dead, that perhaps his son made harps, but that he did not know his name. At that point, Coba A. requested a string-by-string tuning; one hears next the pitches given below in Appendix B, tuning 22, each played once, in descending order. This 1975 tuning diverges from a tuning that the same harpist offered me in 1980 (Appendix B, tuning 20).

The visitors asked Efraín to play *tonos del matrimonio* (wedding songs), and the harpist noted that to perform such pieces a golpeador was needed.³⁶ The eleven separate pieces recorded on this occasion include sanjuanes (among these, "Carabuela"), parejas, and vacación. Just before playing vacación, the harpist was asked to confirm that the music he was about to perform was called "Vacación of the Little Children," and that it was played when a *wawa* (Quechua: "child") had died; he confirmed both statements. At the conclusion of the vacación performance, he was asked if there was not another piece performed at the *wawa velorio* (child's wake) to accompany, for example, game-playing; he answered that there was not.³⁷ The harpist added that no music was played at the wake of an adult Quechua.

The cassette recording of the Toquepala harpist Ramón Pastaza was made in Toquepala at 11:30 A.M. on the same day as the Efraín cassette, July 4, 1975.³⁸ Pastaza gave his age as fifty-six and noted that he had been playing the harp since the age of thirty. Coba A. asked Pastaza for a string-by-string tuning; there follows his tuning, executed one string at a time, descending only (see Appendix B, tuning 21).

Pastaza's highest eleven strings were made of steel (guitar strings), strings 12–21 were goat gut, and strings 22–25 were dog gut. Counting the metal strings in the treble, one interviewer hazarded the guess that a string was missing, apparently referring to a peg in place beyond the highest string. The harpist responded that even if a string were placed there, it would not be used. (I found the same apparently intentional absence of strings in the practice of the Bihuela-family harpists, and the tunings given in Appendix B show that Quechua harpists in the Cotacachi area typically use fewer strings than their instruments can accommodate.) Coba A. and Pastaza then discussed the necessity of performing at all times with a golpeador.

^{36.} In fact, he was to play the entire field recording with no golpeador.

^{37.} In my experience at three wawa velorios, there was no other kind of music played besides sanjuán, vacación, and pareja; frequently, no music was performed at all when game-playing was in progress.

^{38.} Catalogue no. 28-M.

On February 24, 1978, at the IOA, Coba A. and R. Mora again recorded the Pimampiro harpist Juan Cayambe after a lapse of three years. The harpist gave his name and his age (sixty-two). After Coba A. had requested a string-by-string tuning, Mora struck each string once, in ascending order (see Appendix B, tuning 23). All of the strings on Cayambe's harp were made of steel.

Among other sanjuanes, Cayambe played "Carabuela," a piece performed by every harpist in recording sessions with IOA staff from 1972 through 1978; I found it very popular also among circum-Cotacachi Quechua harpists (not singers, however) in 1979–80. No golpe was present for the Cayambe performance; in fact, the striking of the belly was conspicuously absent from all of Juan Cayambe's sanjuán performances on this 1978 recording.

In addition to the material for solo harp, documentation exists in the IOA for harp-violin duet performance, of interest in view of the importance of these two instruments in the eighteenth and nineteenth centuries. On June 29-30, 1976, R. Mora recorded music presented at San Pedro celebrations in Imantag parish of Cantón Cotacachi.³⁹ In these performances, one hears clearly, simultaneously with the sounding of violin and harp, the tones of churu (Quechua: "conch") and flutes. The harpist and violinist play well; I was told on April 8, 1980, by the Alukí Quechua harpist Antonio that there were fine Quechua harpists in Imantag. A recording made by P. Rueda on June 29, 1976,40 contains, in addition to flute-duo music and churu at the San Pedro festival in Cotacachi-area comunas (clusters of Quechua Indian homes), also variegated music of a violin-harp duo recorded at San Pedro in Imantag on the same day.⁴¹ Finally, a recording made in Cantón Otavalo on December 31, 1977, by R. Mora⁴² consists of a number of pieces of música nacional (pasacalle, tonada, and albazo); no sanjuanes are performed. The musicians are from that canton.

39. Catalogue no. 72-M.

40. Catalogue no. ECU. PROVS. PICH. e IMB. 75-M.

41. On May 28, 1980, the harpist Juan Miguel of Jatun Tiku told me that the harp was not played at this festival in the Cotacachi area; only cross-flutes and harmonicas were used. Coba A. also told me, on May 27, 1980, that he knew of only one place—Imantag—where the harp-violin duo appeared at the week-long festival. Segundo Luis Moreno Andrade, *Historia de la música en el Ecuador*, vol. 1, *Prehistoria* (Quito: Editorial Casa de la Cultura Ecuatoriana, 1972), p. 151, does note that the harp is used at the San Juan festival in Imbabura, although this may have been as early as 1909, when he made most of his field observations on which his later writings are based; see Charles E. Sigmund, "Segundo Luis Moreno: His Contributions to Ecuadorian Musicology" (Ph.D. diss., University of Minnesota, 1971), pp. 17, 51.

42. Catalogue no. ECU. PROV. IMB. 133-M.

This concludes the review of recorded harp documentation found in the IOA archive in Otavalo. Particularly valuable for the present study are the interviews with and performances of the circum-Cotacachi harpists Efraín and Ramón Pastaza. The data on the pareja, both musical and descriptive, serve as a foundation for the information that I gathered on the same musical genre in 1979–80. Also confirmed is the fact that "Carabuela" is as close to a standard as one can find in the circum-Cotacachi (and even Imbabura) Quechua harpist's repertory. Finally, it can be noted that the two Cotacachi-area harpists who were recorded each use three different kinds of strings, at least two of which are gut and metal (a typical circum-Cotacachi practice, as shown in Appendix A), while the harpist from outside the Cotacachi area, Juan Cayambe, uses all metal strings.

Circum-Cotacachi Quechua Harpists in 1979–80

As an introduction to the discussion of Quechua harpists in the Cotacachi area in 1979–80, it is appropriate to recall Moreno Andrade's statement to the effect that the Quechuas of Imbabura Province possess an unusual aptitude for music, and that those of Otavalo and Cotacachi cantons play the violin and harp.⁴³ In addition, the following statement by José María Arguedas is particularly apt; although it refers to Peru, not Ecuador, it nevertheless recalls remarks made by P. Bernardo Recio about musical practice in the Quito area in the mid-eighteenth century,⁴⁴ and it finds an echo in the Cotacachi area today:

It was the missionaries who first taught the Indians to play the harp and the violin, instruments that I have heard many people in Peru describe as "native." There is a certain justification for this apparently absurd statement, for every Andean village, however small, has at least one Indian violinist or harpist, and, especially in the district capitals, only the Indians play these instruments.⁴⁵

In the course of my research outside Cotacachi in 1979–80, I met, interviewed, and recorded nine Quechua harpists. For each, at least one stringby-string tuning was recorded (see Appendix B), along with sanjuán music; in all but one case, a pareja was also recorded. The harpists' names are, in the order in which I made their acquaintance: Juan Miguel of Jatun Tiku, César Bihuela of Tikulla, Sergio Bihuela of Tikulla, Raúl of Toquepala, Federico of Toquepala, Jorge María of Nariwala, Antonio of Alukí, Al-

^{43.} See part 1 of this article, pp. 117-18.

^{44.} See ibid., pp. 105-107.

^{45.} José María Arguedas, "Songs of the Quechuas," Américas 9, no. 8 (August, 1957): 34.

fredo of Mollendo Chico, and Efraín of Saltamora. Some of these harpists have already been referred to, above. Many also play other instruments and sing.⁴⁶

Among these musicians, those most highly regarded by their colleagues and by Quechua nonmusicians circum-Cotacachi are Efraín and Sergio; I knew both by reputation before I heard either play. One prominent criterion for this reputation is shown by the numerous references one hears to Efraín's *being taken* to play in other neighboring communities. Another index of esteem is a particular harpist's rate of pay for standard performance occasions, such as wawa velorio or matrimonio: the figures quoted by several of his harpist-colleagues consistently placed Efraín at the pinnacle, locally, of his profession.

Though several of the harpists knew each other or had business with each other (selling harps to one another, teaching one another to play), I came to know them in sundry ways, generally through the offices of an interested third party. Most often that party was my informant, Don Valerio. I met the first harpist shortly after taking up residence in Alukí, the last harpist shortly before departing from that comuna.

Leonardo Morochos, himself a singer; his uncle, Leonardo Andrés Morochos, a good singer; and two mestizo children of Alukí brought me to the home of Juan Miguel on November 16, 1979; after performing briefly there, the harpist returned that evening—and on other occasions—to our Alukí schoolhouse home, where he played and recorded more extensively. Figure 20 is a photograph taken May 28, 1980; it shows Juan Miguel and his harp, along with his wife and daughter, in front of the corn field that surrounds their home in Jatun Tiku.

Having made my acquaintance and being aware of my interest in Quechua music, Don Valerio persuaded the reluctant young César Bihuela to consider playing and recording for me; Don Valerio invited César and his father, Miguel Armando, to Don Valerio's home in Alukí, where he gave them food and drink, and where César played two pieces on the harp for his host. Only thereafter did Don Valerio persuade the musician and his father-golpeador to accompany him to the Alukí schoolhouse, where I met the Bihuelas, listened to them, and recorded them. Over the next four months, César, with or without his father, returned many times to the

46. Juan Miguel plays cross-flute and sings; César sings and plays some guitar; Sergio sings and plays the *melódica*, a keyed aerophone; Antonio plays the *bandolín*, a mandolin with five courses of triple strings, and sings both the sanjuán and Holy Week liturgical music; and Efraín sings and plays the harmonica.



FIGURE 20. Juan Miguel of Jatun Tiku, playing his arpa imbabureña, with his wife and daughter. Photograph by the author.

school either to sing or to play the harp, or both. Figure 21 shows César at the Bihuela family harp, with Miguel Armando in his customary golpeador role; the harpist's mother is also present here in the patio area in front of their home. The photograph was taken on May 27, 1980.

Already familiar with his reputation as a harpist, I first met Sergio Bihuela at an outdoor fiesta the evening of December 22, 1979, when he played the *melódica* (a keyed aerophone) in the ensemble of the local Quechua federation; he did not play the harp that evening, though his younger brother, César, did. I first heard Sergio play the harp six nights later, on December 28, at "wawa velorio 1," the first child's wake I attended; he would be the harpist of contract at all three wawa velorios I observed. He returned to the Alukí school on other occasions, such as the evening of February 8, 1980, to play and tune my arpa imbabureña and to discuss string usage.

I encountered Raúl very early in the morning on February 10, 1980, when he suddenly appeared in the home of the deceased at "wawa velorio 3," taking Sergio's place for the remainder of the vigil, notably to perform vacación at the final sealing of the casket. Later, on March 16, I returned to



FIGURE 21. César Bihuela of Tikulla, playing his family's arpa imbabureña. His father, Miguel Armando, performs as golpeador, and his mother sits nearby. Photograph by the author.

Toquepala and listened to Raúl at greater length; on this date, he played both my harp and his own. Figure 2 (see above), taken the same day, shows Raúl tuning his arpa imbabureña against the outer wall of his Toquepala home.

I met Federico on March 16 also; he performed on my harp alongside his home in Toquepala. His father, unavailable at that moment, was—as I was told by my informant from that comuna—a fine harp maestro.

The case of Jorge María is more unusual. On March 27, I visited my friend, Don Valerio, to show him photographs I had taken of him when we had visited black musicians in the Valley of the Chota River, Imbabura. When I commented that I had never walked along the path by his home, he responded that an old harpist lived back there; Don Valerio identified him by his nickname.⁴⁷ At once we prepared to walk back along the path to

47. I learned several nicknames for harpists, but prefer not to mention them here in order not to compromise the musicians' anonymity. investigate the elder musician's current whereabouts. We followed the path back and around toward the principally mestizo village of El Portillo. Arriving at Jorge María's home—perhaps ten minutes' walk from that village—we spied a harp next to the patio wall. I was excited to see the instrument (see figure 15, above) because it differed from the arpas imbabureñas I had seen up to this point in the Cotacachi area. This instrument was narrower and had the three standard belly holes in opposed position, but with each of the holes surrounded by a wooden flange; the harp thus reminded me of the arpa folclórica I had seen in February at Jaime Leal's home in Ambato. Furthermore, it had all wooden pegs, something I had never seen before.

Since no one was at home, we went next door, where we found Jorge María, his neighbor, Rubén, Rubén's wife, and a Quechua adolescent. Don Valerio knew Rubén: the two had worked together once in Santo Domingo de los Colorados (Pichincha Province); Don Valerio knew Jorge María by reputation but not personally. We all spoke. Jorge María was reluctant to play the harp because, he said, strings were missing and his hands were sore. Don Valerio volunteered that I could return with my own instrument; I added that I would play for him as well as asking him to play for me. We offered to return also with cane alcohol and to pay Jorge María an unspecified sum. The harpist then agreed to our immediate return visit. We left at once and came back just at dark; we spent some three and onehalf hours that evening at Rubén's home, Jorge María playing first my harp, and then, for most of the evening, his own. Don Valerio and I returned to Jorge María's home on the morning of April 1, when we amplified the documentation of the musician with further recording, with photographs, and with harp measurements. Figure 22 (April 1) shows the elder harpist playing, seated against the patio wall of his home in Nariwala.

On March 30, Antonio came to the Alukí school and performed sanjuán and pareja on my harp. We would become very well acquainted during the following week of Semana Santa (Holy Week).⁴⁸

48. Antonio took a leading role as one of the two catechists, each of whom led indigenous processions in Cotacachi itself on different nights in Holy Week; he also aided in the liturgical singing (all the Holy Week singing by Quechua processioners and in-house singers was in the Quechua language) in the different Quechua homes in divers circum-Cotacachi comunas that hosted the great wooden cross of the main church during that week. (For a description of a Semana Santa procession with a Christ-statue and a large cross in nineteenthcentury Sevilla, Spain, see Ch. Davillier, *L'Espagne* [Paris: Librairie Hachette, 1874], pp. 344–45.) I was particularly fortunate to have been permitted to accompany the processional and postprocessional in-house singing on three of these nights: Wednesday, Thursday, and Friday. I participated as a singer in all of these occasions, recording simultaneously.

156 JOURNAL OF THE AMERICAN MUSICAL INSTRUMENT SOCIETY



FIGURE 22. Jorge María of Nariwala, playing his harp (also shown in figure 15), an arpa folclórica altered to look like an arpa imbabureña. Photograph by the author.

An acquaintance of Alfredo's, Antonio volunteered to take me to meet that older harpist. We made two visits to Alfredo's, on March 31 and on April 8; the first was spent recording music, measuring the harp, and photographing, the second photographing and measuring. Figure 23 (March 31) shows Alfredo tuning his arpa in the patio of his Mollendo Chico home; fellow harpist Antonio holds the cassette recorder.

Antonio had mentioned to me on March 30 that Efraín was the leading maestro of the zone; Alfredo repeated this evaluation to me on March 31.



FIGURE 23. Alfredo of Mollendo Chico, tuning his arpa imbabureña, surrounded by his family. Fellow harpist Antonio of Alukí stands at the right. Photograph by the author.

By then, I had also heard of Efraín from Don Valerio. At 5:00 P.M. on April 9, Don Valerio, other acquaintances of Efraín, and I arrived at the harpist's home; he soon appeared, accompanied by Martín Mateo, who would serve that evening as golpeador. We spent the next four hours with the harpist, listening and recording, photographing him and his wife and the harp, and measuring the instrument (see fig. 11, above).

Not surprisingly, given the close proximity of these harpists, there exists a network of instruction in performance and of trading of instruments. Juan Miguel studied briefly with Alfredo; thereafter, he says, he was selftaught.⁴⁹ Efraín was the maestro for Sergio Bihuela. Young César learned what he knows of the harp from listening to his brother play at home and at children's wakes; eventually, César came to assist his brother by sharing the evening's performance burden in that ritual. It must be added that César's godfather is harpist Ramón Pastaza of Toquepala, from whom the lad might also have learned playing technique. In 1980, well-used arpas imba-

^{49.} Juan Miguel, interview, Jatun Tiku, Imbabura, May 28, 1980.



FIGURE 24. Raúl of Toquepala, playing bass accompanimental pattern with typical left-hand position.

bureñas were trading among the harpists themselves for about S./500 (Ecuadorian Sucres), then worth about \$19.00 in U.S. currency.⁵⁰

50. My own arpa imbabureña brought varying estimates of current value and went through a series of string changes, all made by Quechua musicians. When I first brought it to the Bihuela home on January 12, one week after I had purchased the instrument in Quito, it had in place thirteen metal strings, eight nylon, and four gut. Miguel Armando Bihuela admired the wood and added one gut string; he suggested that the harp was worth S./500. On the way home from the Bihuelas', I met Rodrigo, a community leader, who also put its value at S./500. Also on January 12, Sergio Bihuela, seeing it for the first time, called it a pretty harp and added that he thought the twenty-six strings then in place were a complete set. Five days later at the Bihuela home, his brother, César, said he thought my harp was worth S./300. On the afternoon of February 4, the harp underwent another change in its string make-up when César, at the Alukí schoolhouse, put on three dog gut strings made by his father (who made all the Bihuela family gut strings) and two more steel strings, making a distribution of eight gut (bass), six nylon (middle), and ten steel (treble) for a total of twenty-four strings. César added that now the harp had, to his satisfaction, its full complement of strings. On March 19, Sergio substituted one more steel string for the highest nylon string. In this final configuration, my harp resembled closely the distribution, as to types of material, and total number of strings on both the Bihuela harp and the Efraín (1980) harp (see Appendix A, harps 3 and 9). Thus, the Bihuelas had modified my harp to fit their traditional string distribution, notably adding gut strings and eliminating nylon strings. The two oldest harpists studied, Alfredo (fifty to sixty years old) and Jorge María (at least seventy), both strung their harps without nylon strings.

Cotacachi Quechua harpists today perform at Quechua children's wakes,⁵¹ at Quechua multi-day weddings, and for household fiestas held following special Masses in honor of patron saints.⁵²

Conclusion

In conclusion, several points merit emphasizing. The harp reveals itself as a durable and significant instrument in Latin America. Its four hundred years there have seen it taking major roles in liturgy, evangelism, general entertainment, processions, weddings, and wakes. All of these functions, moreover, have been evident in the country of Ecuador. Study of modern Ecuadorian highland harp traditions evinces three major harp-types, distinguished by their physical features, cultural groups, and musical repertories. As shown below in Appendix B, the northern Ecuadorian Quechua harp is tuned diatonically, but is hexatonic, not heptatonic. It is not sufficient or desirable, then, to speak of "the diatonic Latin American harp" as a unique entity, for, despite its ubiquity, the instrument is quite distinctive in each Latin American country-in fact, in different regions of the same country, as in Mexico, Peru, and Ecuador. Examination of local, regional harp styles and tunings must go hand-in-hand with detailed investigation of area genres, repertory, and, where possible, individual styles of playing, for only with this broader background can the student begin to comprehend the rationales behind what he may hear, observe, and record. It is hoped that further research on the Latin American harp will focus on cultural and regional specifics rather than on broad generalizations, as the data are too sparse for generalized statements at the present time. Until we know more on the subject, the safest statement we can make about known Latin American diatonic harp-types is that they all have strings and are made of wood.

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51. See John M. Schechter, "*Corona y baile*: Music in the Child's Wake of Ecuador and Hispanic South America, Past and Present," *Latin American Music Review* 4, no. 1 (spring–summer, 1983): 1–80, for a detailed examination of the Quechua harpist's role at the circum-Cotacachi wawa velorio.

52. For a discussion of the role of the harp in the Quechua wedding and a description of these private Masses and fiestas, see Schechter, "Music in a Northern Ecuadorian Highland Locus," pp. 598–99; chap. 4, n. 10; and Appendix B, n. 18.

Appendix A

Measurements and Additional Features of Arpas imbabureñas Studied 1979–80

Nine Arpas imbabureñas

Harp 1. From the nineteenth century (?); owned by the author. Examined in Alukí, March 20, 1980. See figs. 1 (harp on right) and 24.

Harp 2. Probably from the nineteenth century; owned by Raúl. Examined in Toquepala, March 16, 1980. See figs. 1 (harp on left) and 2.

Harp 3. Owned by the Bihuela family of Tikulla. Examined at Luis's shop in Cotacachi, March 27, 1980. See fig. 21.

Harp 4. Provenance: Marca, Imbabura; owner unknown. Examined at Luis's shop in Cotacachi, March 28, 1980.

Harp 5. Provenance: Marca, Imbabura; owner unknown. Examined at Luis's shop in Cotacachi, March 28, 1980.

Harp 6. Owned by Alfredo. Examined in Mollendo Chico, March 31 and April 8, 1980. See fig. 23.

Harp 7. Owned by Jorge María. Examined in Nariwala, April 1, 1980. See figs. 15 and 22.

Harp 8. Owned by Juan Miguel. Examined in Alukíi, November 19, 1979, and in Jatun Tiku, May 28, 1980. See fig. 20.

Harp 9. Owned by Efraín. Examined in Saltamora, April 9, 1980. See figs. 11 and 12.



	Harp	Harp	Harp						
	1	2	3	4	5	6	1	8	9
Overall length (A–I),									
in meters	1.25	1.3	1.3	1.3	1.25	1.2	1.26	1.21	1.4
Belly shape	arch	arch	arch	arch	arch	arch	flat	arch	arch
Number of sound-holes in belly	3	3	3	3	3	3	3	3	3
Number of internal ribs	7	5	5	5	5	5	3 or more	5	5
Length of body (C-F),									
in cm.	79	94	84.5	82	79	83	96	88	87.5
Width of body at bottom									
(E–G), in cm.	52	57	58	58	59	58.5	50	56.5	60
Width of body at top (B-D), in cm.	5	7	7.8	8	7.5	7.5	9.5	6.5	7.5
Depth of body from belly									
to bottom (F–H) in cm.	39	33.5	34	33	35.5	34.5	26	32.5	37.5
Vibrating length of longest possible string, in cm.	76	82	80	84.5	*	77.5	98	72	85.5
Vibrating length of shortest									
possible string, in cm.	9	11	11.5	12	*	12	13	17	13.5
Number of peg holes in									
neck	30	32	32	33	32	33	34	31	32
Number of string holes									
(agujeros) in top of belly	31	*	30	33	30	30	36	29	29
Number of strings in place:									
steel	11	10	10	0	0	13	18	11	12
nylon	5	4	5	0	0	0	0	3	5
gut	8	10	7	0	0	14	8	6	7
plastic	0	1	1	0	5	0	0	0	0
total	24	25	23	0	5	27	26	20	24
Number of pegs in place:									
iron	24	5	23	0	6	27	0	0	27
wood	0	20	0	0	2**	0	26	20	0
total	24	25	23	0	8**	27	26	20	27
Tuning implements:									
iron	1	1	1	0	0	0	0	0	2
sheep leg-bone (tullu)	0	0	0	0	0	1	1	1	0

Table of Measurements and Additional Features

*Information not available.

**Including one half-peg.

Appendix B

Tunings of Circum-Cotacachi Quechua Harpists

Twenty-three Tunings

The following twenty-three tunings begin with twenty recorded by the author and presented here in chronological order according to the dates on which they were recorded. The harps used in the first twenty tunings are seven of the nine arpas imbabureñas listed above in Appendix A. Tunings 21–23 represent earlier recordings on file at the Instituto Otavaleño de Antropología (IOA) in Otavalo.

Consecutive numbers above the notation of the tunings indicate the number of strings present on the harp in question at the time of recording (where a string is missing in the middle, the corresponding number is given, but the staff is left blank). The first three tunings, by Juan Miguel, incorporate an initial (variant) pitch that has been assigned string no. 0, in order to illustrate the fundamental adherence of these tunings to the predominant melodic-generative intervalic kernel discussed below in the "Commentary" section. A string present but not tuned is indicated here by an "X" on the staff below its corresponding number. All tunings other than tunings 5, 6, 7, and 8 (which were taken by ear) were cassette- or taperecorded and then extrapolated from these recordings in the field by means of reference to a Wm. Kratt A-440 thirteen-key chromatic pitch instrument, "The Master Key," model MK2-C, which measures semitones. In accordance with standard ethnomusicological practice, arrows are used here to signify less-than-semitone inflection of pitch in the direction indicated. The tunings are effectively presented as a comparative intervalic structural chart, most of the tunings being transposed here so that string no. 1 will read e"; in these transposed tunings the original pitch level is indicated. The alignment by common initial pitch is made in order to facilitate comparisons of the relative consistency of particular "zones" of pitches.53 Tunings 16 and 17 have been left untransposed because their actual pitches are discussed at some length below.

53. There are precedents for the use of comparative transcriptions, if not pertaining to tunings. Pandora Hopkins ("The Purposes of Transcription," *Ethnomusicology* 10, no. 3 [September, 1966]: 310–17) and Charles Boilès ("Reconstruction of Proto-Melody," *Yearbook for Inter-American Musical Research* 9 [1973]: 45–63) both employ transcriptions aligned vertically to emphasize their comparative nature and purpose. The methodology for both of these studies of versions, or variants, of a single piece of music may be said to derive from Constantin Brăilou's *Variationstrieb* methodology, in which the performer's variation instinct

Tuning 1. Juan Miguel, harp 8; recorded at his home, November 16, 1979, afternoon. 19 strings tuned (originally a whole-tone lower).



Tuning 2. Juan Miguel, harp 8; recorded at the Alukí school, November 16, 1979, evening. 19 strings tuned (originally a whole-tone lower).



Tuning 3. Juan Miguel, harp 8; recorded at the Alukí school, November 19, 1979, evening. 18 strings tuned (originally a whole-tone lower).

Tuning 4. César Bihuela, harp 3; recorded at the Alukí school, December 14, 1979, afternoon. 23 strings tuned (originally a half-tone lower).



is documented in transcription of first the complete melody and later only the textual, rhythmic, and/or melodic variants of the same melody; see his "Outline of a Method of Musical Folklore," *Ethnomusicology* 14, no. 3 (September, 1970): 389–417 (originally published in Romanian, this article is a translation of the French version, "Esquisse d'une methode de folklore musical," *Revue de musicologie* 40 [November, 1931]: 233–67). Bruno Nettl has termed the comparative method a "major ingredient" of ethnomusicological study ("Comparison and Comparative Method in Ethnomusicology," *Yearbook for Inter-American Musical Research* 9 [1973]: 159).

Tuning 5. César Bihuela, harp 1; recorded at the Alukí school, January 22, 1980, afternoon. 7 strings tuned (originally a whole-tone lower).



Tuning 6. César Bihuela, harp 1; recorded at the Alukí school, January 23, 1980, afternoon. 13 strings tuned (originally a major third lower).

Tuning 7. César Bihuela, harp 1; recorded at the Alukí school, February 4, 1980, afternoon. 23 strings tuned.



Tuning 8. Sergio Bihuela, harp 1; recorded at the Alukí school, February 8, 1980, evening. 23 strings tuned (originally a whole-tone higher).

Tuning 9. Sergio Bihuela, harp 3; recorded February 9, 1980, evening. 24 strings tuned (strings 1–10 were a half-tone higher at the beginning of the tuning process, but had slipped to pitches indicated here by the conclusion of the tuning process).

Tuning 10. Raúl, harp 3; recorded February 10, 1980, morning. 23 strings tuned (pitches of strings 15–17 are very approximate).



Tuning 11. Federico, harp 1; recorded at his home, March 16, 1980, morning. 24 strings tuned (originally a whole-tone higher).



Tuning 12. Federico, harp 1; recorded at his home, March 16, 1980, morning. 24 strings tuned (originally a half-tone higher).



Tuning 13. Raúl, harp 1; recorded at the Toquepala Community Center, March 16, 1980, midday. 24 strings tuned (originally a half-tone higher).



Tuning 14. Raúl, harp 2; recorded at his home, March 16, 1980, afternoon. 25 strings tuned (originally a half-tone higher).

Tuning 15. Sergio Bihuela, harp 1; recorded at the Alukí school, March 19, 1980, morning. 11 strings tuned (originally a whole-tone higher).



Tuning 16. Jorge María, harp 7; recorded at the home of R. Menéndez, March 27, 1980, evening. 26 strings tuned (the higher pitch given for string no. 1 being a harmonic of the lower pitch).



Tuning 17. Jorge María, harp 7; recorded at the home of R. Menéndez, March 27, 1980, evening. 26 strings tuned.



Tuning 18. Antonio, harp 1; recorded at the Alukí school, March 30, 1980, evening. 12 strings tuned (originally a major third higher).



Tuning 19. Alfredo, harp 6; recorded at his home, March 31, 1980, morning. 27 strings tuned (originally a major third higher).



Tuning 20. Efraín, harp 9; recorded at his home, April 9, 1980, early evening. 24 strings tuned (originally a whole-tone higher).



Tuning 21. Ramón Pastaza; recorded July 4, 1975. 25 strings tuned (originally a perfect fifth higher).



Tuning 22. Efraín; recorded July 4, 1975. 24 strings tuned.



Tuning 23. Juan Cayambe; recorded at the IOA, February 24, 1978. 28 strings tuned (originally a whole-tone higher).



Commentary

Analysis has revealed that a three-note kernel comprising the consecutive intervals of a minor third and a major second seems to serve as an important melody-generating element in the circum-Cotacachi sanjuán.⁵⁴ The characteristic structure of the sanjuán phrase⁵⁵ requires that the harp-

54. See Schechter, "Music in a Northern Ecuadorian Highland Locus," pp. 323–25, for a detailed discussion of this kernel.

55. The complex litany form of the sanjuán consists of a regularly repeated primary mo-

ist have at his disposal, in intervalic terms, the following descending sequence: minor third, major second, minor third. If we arbitrarily assign the highest actual note to the pitch e'' (as has been done in most of the tunings given above), this sequence translates into the following pitches: $e'', c \sharp'', b'$, $g^{\sharp'}$. Examining the tunings of those circum-Cotacachi harpists with the finest reputations-Efraín, Ramón Pastaza, and Sergio Bihuela-we observe that of six tunings (including those recorded in 1975) by these three artists, four can be said to follow the predicted pattern: tunings 8, 15, 20, and 21. The other two, tunings 9 and 22, diverge; but, except for tuning 21, all four clearly mark the tonic by the distinct absence of the minor supertonic in consecutive treble octaves.⁵⁶ Perusing the other harpists' tunings, we find the four-note figure described above in tunings 1, 2, 3, 5, and 6. Young César Bihuela, still learning technique, has, nevertheless, grasped this one element; even in tunings 5 and 6, where the lad tuned but seven and eight treble strings, respectively, he adhered to the four-note high-treble tuning pattern.

A second tuning pattern is also apparent (see note 56): essentially hexatonic tuning in the upper ten or so strings (the harpists often delineate this sector by use of metal strings down to this point, as shown in the "Table of Measurements and Additional Features" in Appendix A) over the intervalic span of about a twelfth, with the minor tonic signaled by the absence of the supertonic in consecutive octaves (see tunings 7, 10, 4, 18, and 19).⁵⁷ Often, the tonic receives further emphasis by consecutive-string doubling in the lower treble octave; this octave emphasis in the treble is observed in tunings 6, 16, 17, 20, and 22.

Thus, with the exception of tuning 21 (where the primary melodic octave is in fact heptatonic), the consistent pattern appears to be hexatonic in

tive varied occasionally by a secondary motive at a higher pitch level; see Alan Lomax, *Folk Song Style and Culture* (New Brunswick: Transaction Books, 1968), p. 58.

^{56.} Sanjuán data at hand support the hypothesis that for circum-Cotacachi Quechua, the minor supertonic in the primary melodic octave is totally eschewed; its absence establishes the hexatonic gamut that operates as an outer tonal limit for the sanjuán melody.

^{57.} The fact of nonperformance of the minor supertonic receives added support in tunings 8 and 10. In the former, by Sergio Bihuela on my harp, string 10 was not tuned; Sergio said of it, "se salta"—it was to be "skipped over." In the latter, by Raúl at the third child's wake, played on the Bihuela harp, the same string position was "empty": a space was present instead of a string, clearly indicating that no string was desired by the Bihuelas in that spot. As can be seen, that "spot" occurs in the melodic sequence where the minor supertonic would fall. Note in tuning 8 how Sergio carefully avoids the minor supertonic in three consecutive octaves, while Efraín (tunings 22 and 20) avoids it in only two consecutive octaves, and Ramón Pastaza (tuning 21) avoids it only in the primary melodic octave.

minor for the upper ten or eleven pitches, with the four-note initial pattern—or, above the highest tonic string, two or three pitches a major second apart and within the minor tonality frame. Although many of the circum-Cotacachi sanjuanes are pentatonic, certain prominent ones in the repertory ("Achi mamita kumari" and "Ilumán Tiyu"⁵⁸) are hexatonic; thus, the harpist must tune his instrument hexatonically in order to accommodate both harmonic structures.

The case of Jorge María, typically, is unique. His tunings, 16 and 17, show two distinctive features. In the first place, the primary melodic octave is clearly not hexatonic, but pentatonic, in intention: d'', c'', a', g', f', d'—with appropriate 3–1 skips in consecutive octaves and reinforcement of the lower octave by the doubling of consecutive pitches. Secondly, even with this decidedly pentatonic intention, nevertheless the pitch A# (Bb) appears very prominently in the upper treble and the lower bass octaves. Musical transcription⁵⁹ and my sanjuán thematic catalogue⁶⁰ reveal that this pitch figures importantly not in the primary motives of Jorge María's sanjuanes, which are always either pentatonic or tetratonic, but in the secondary motives.⁶¹

Although the data appear not greatly clouded for the upper ten or eleven strings (the treble register), they become conspicuously more irregular in the middle and bass registers. Young harpists (César Bihuela), those whose reputations are not outstanding (Juan Miguel), and harpists who are admittedly out of practice on the instrument (Antonio) will not attempt to tune one or both of these registers (see tunings 5, 6, 1, 2, 3, and 18). Ramón Pastaza (see tuning 21) sustains heptatonic G[#] minor down into the bass register, with his lowest pitch a tonic fundamental. Note that with tuning 21, in each of the consecutive octaves, the harpist tunes his strings so that, with four fingers, he can easily play the G[#]-minor triad with both octave pitches: beginning with string 25 and ascending, we perceive the root, third, and fifth of the triad in every other string, with two strings skipped approaching the upper octaves. Bass-register hand position appears to dictate this placement of pitches: the basic pitches of the tonality frame fall comfortably under the hand as they are thus placed. (The harpist will use

^{58.} See Schechter, "Music in a Northern Ecuadorian Highland Locus," pp. 252–86, for the "Sanjuán Thematic Catalogue," which provides the melodic outlines of these and all other sanjuanes recorded in the field.

^{59.} Ibid., pp. 628–29.

^{60.} Ibid., pp. 252-86.

^{61.} See n. 55, above.

only the bass and middle registers, not the upper treble register, for accompanimental patterns.) Figure 24 shows Raúl on March 16, 1980, as he played my harp (see Appendix A, harp 1) at the Toquepala Community Center; the photograph illustrates this typical left-hand (for a righthanded harpist) accompanimental plucking pattern. Note that the harpist is about to pluck every other string in the bass register; in this case it appears that the spacing is the same between all fingers, including the forefinger and the thumb.

In one instance it was possible to follow a Quechua harpist's tuning sequence. Early in the recorded material of "wawa velorio (child's wake) 3" on February 9–10, 1980, appears a ten-minute example of the process the circum-Cotacachi professional harpist (here, Sergio Bihuela) goes through in order to tune his harp under natural contextual conditions.⁶² Sergio tunes in zones, each one an octave wide. Within each zone, principal tuning pitches are repeated alone and in sequence with other triadic notes in that same zone. The first zone, with which the tuning begins, is that of the melodic (treble) tonic, a #' to a #. In this first and highest zone, certain patterns of tuning predominate: (simultaneous) 8-1 (octave) by itself and 8-1 against (simultaneous) 7-3; (consecutive) 8, 7, 5, 4, 3, 1; 1, 3, 5, 8, 7, 6, 4, 3, 1; and 1, 3, 5, 8, 7, 6, 4, 4, 4, 5, 6, 7, 6, 4, 3, 3, 1. The second octave tuning zone comprises the following pitches: g, f, d# (eb), d, c, A# (Bb), and G, with the basic (triadic) emphasized pitches being g, d, $A \notin (B \flat)$, and G. Descending further, the next lower octave tuning consists of: $A # (B \flat), G \#, F, D \# (E \flat), C \#$, and $AA \ddagger (BB \flat)$.

Examining all three zones, one perceives that all are in minor mode; the melodic-treble and middle zones are hexatonic, and the bass is pentatonic. In each zone, the minor supertonic is excluded. In the tuning process within each zone, the octave pitches of each tonic zone receive emphasis, compared with the other pitches. In tuning, the pitches are most often sounded in descending order, notably when only triadic notes are played. The "outer" (highest and lowest) zones are in the same (apparently) intended key, A# minor; the "middle" zone is in a contrasting key, G minor. The common tone in these two keys, A# (Bb), serves both the middle and the lowest zones of tuning. The tuning of 8-1 against 7-3, for Sergio, becomes significant when one realizes that these two intervals, sounded in

^{62.} Schechter, "Music in a Northern Ecuadorian Highland Locus," pp. 613–25, presents a detailed description and analysis of this process. Only the results of that analysis will be summarized here.

melodic succession, occur frequently in this harpist's performances of all three genres: sanjuán, pareja, and vacación.⁶³ Tuning 9 represents the final complement of pitches resulting from this tuning process. Given the fact that a loss of a semitone occurred in the tuning of the (melodic) treble pitches from the outset to the conclusion of the process (from the minor tonic of A# to that of A#), nevertheless an examination of the strings' location-keeping in mind the above discussion of finger placementreveals that the strings are tuned in such a manner that the four active fingers of Sergio's left (bass) hand can easily play the bass tonic chord of A# minor: a larger space will often fall between 5 and 8 (corresponding to the index finger and thumb of the left hand) than between 1 and 3 (ring finger to middle finger) or between 3 and 5 (middle finger to forefinger). Again referring to the final complement of pitches produced by the tuning process, it can also be seen that Sergio's tuning also accommodates the fingers to the relative major, C#, needed for the performance of the bimodal sanjuán.64

Work also with Jorge María, especially, and with Alfredo and other harpists produced a considerable body of evidence with respect to the Quechua musician's tuning processes. It is hoped that the data from Sergio summarized above might suffice to exemplify the prominent aspects of these processes. The principal point to be stressed is the interdependence of (1) the melodic and harmonic demands of the actual repertory to be played and (2) the individual's style of playing (e.g., Sergio's alternation of 8-1 and 7-3) and the accommodation to the fingers.

63. Examples are sanjuán performances, whether these are in the minor tonic key itself, such as "Cascarón" (Schechter, ibid., musical ex. 2, pp. 371–74), or in the subdominant of the minor, as with "Ilumán Tiyu" (ibid., musical ex. 9, pp. 647–49), the hybrid sanjuán-pareja "Chilka" in both its sanjuán and pareja parts (ibid., musical ex. 5, pp. 542–44), various parejas (ibid., musical ex. 4, pp. 520–41), and the vacación (ibid., musical ex. 6, pp. 556–60). Early in the evening, then, the harpist prepares that octave and fifth that he expects to use as standard adjacent harmonic figures in performances to come during the night's vigil.

64. Like certain other Andean genres, such as the *wayno*, *yaraví*, and *albazo*, the sanjuán characteristically exploits the ambiguity of the relative major and minor; see Schechter, ibid., pp. 326–28, for a fuller discussion.

Appendix C

Organogram of the Circum-Cotacachi Arpa imbabureña, 1979–80

The organogram presented here is a final summary of data pertaining to physical features, materials of construction, playing position, performance practice, function, and valuation of the arpa imbabureña, as observed in the Cotacachi area in 1979–80. It is modeled on the organogram for a diatonic frame harp without tuning action presented by Mantle Hood in *The Ethnomusicologist* (New York: McGraw-Hill, 1971), p. 186. Hood's organograms are based on the instrument classification system of Erich M. von Hornbostel and Curt Sachs.⁶⁵

The following key identifies the symbols used here in addition to Hood's basic chordophone organogram. Some symbols are those suggested by Hood (in which case the appropriate page numbers in *The Ethnomusicologist* are cited in parentheses), and some are my own.

К / В ((: :	Tuned with Key or with Bone (p. 149). Double-incised forepillar carving, often in three places.			
W I G S RS #20-27 5 GH8	 Pegs are of Wood or of Iron. Bass strings are of Gut. Middle-register strings are of Gut or of Nylon. Treble strings are of Steel. Tuned to Relative pitch (p. 149), which Slips during playing. Slatted (staved) back. Number of principal strings (p. 187). Hardness scale for materials: wood (pp. 149–50). Harp is associated with a Group of High social status (p. 154), whose rat- 				
Two sol Three d circles	id .iff s:	dots: Terent-sized	Played with bare fingers of both hands (pp. 166, 187). Three different-sized belly sound-holes in opposed posi- tion.		
grade	d	sizes:	Often five internal ribs supporting arch of soundbox.		

65. Erich M. von Hornbostel and Curt Sachs, "Systematik der Musikinstrumente: Ein Versuch," Zeitschrift für Ethnologie 4, 5 (1914), trans. Anthony Baines and Klaus P. Wachsmann, "Classification of Musical Instruments," Galpin Society Journal 14 (1961): 3–29.

66. This symbol, a downward-facing semicircle, appears painted in white on the blue crosses that mark children's graves in the Quechua sector of the Cotacachi cantonal cemetery.

THE DIATONIC HARP IN ECUADOR

- \bigcap : Low-middle position of performer with respect to harp, that is, seated on a low stool (p. 164); players are males only. : Wawa velorio.66 MF : Matrimonio. R : Ritual is involved with the use of the harp (p. 154). Broken diagonal line beginning in bottom left corner: Harp is angled against the performer (p. 163). Short diagonal line in bottom right corner: Harp is plucked (p. 166). **S8** : The Society values the harps at 8 (p. 154). **P9** : Performers value the harps at 9 (p. 154). M8 : Relative value of harps in relation to other instruments of the culture equals 8 (p. 154). 3 : Hardness scale for techniques of decoration (p. 154).
- **V**-shape at bottom: Harp is held between the legs (p. 152).
- Bent line within this V: Harp is supported on the right shoulder (for righthanded harpist) (p. 165).
- **C** : Harp is indispensable in the life Cycle of persons in the culture (p. 154).

