A NEW WORLD MBIRA: the Caribbean Marímbula

by DONALD THOMPSON

As is well known, many musical instruments of African origin have survived and flourished in America, in many cases becoming adapted to circumstances which differ widely from those surrounding the development and use of the prototypes. The mbira's appearance in the New World has occasionally been noted, in forms closely resembling the African types. However, little attention has been given to a peculiarly Caribbean form of the mbira or to the changes which have taken place in both the structure and the function of the transplanted instrument during its adaptation to a whole range of new social, musical and material circumstances.¹

Several types of mbira have been found in the New World, most of them corresponding closely to African models in size, construction, playing technique, and the number and disposition of reeds or tongues. Also corresponding to African usage is the customary New World nomenclature. Names most frequently found in America are "malimba", "marimba", or related terms: "marimb'la", "marimbola", "marimbola", and "marimbula". "Quisanche", a rare exception but one also traceable to African usage, has been reported in the Río de la Plata region of South America.²

The earliest descriptions of New World mbiras appear to date from the midnineteenth century, and are to be found in language dictionaries, travelers' reports, and literary works. An early Cuban dictionary of colloquialisms, Pichardo's Diccionario provincial, describes the marimba in terms which could be applied as well to African mbiras. Carefully pointing out that the instrument is used by newly imported African slaves (bozales), Pichardo describes a small box upon which are mounted a number of flexible wooden strips (palillos or tablillas). These, when struck by the player's thumbs, emit soft sounds. The lexicographer's terminology is inexact; he used the Spanish verb herir, which means to strike in the sense of delivering a blow, while the technique of playing the instrument is by deflecting or plucking the tongues. Nonetheless, it is clear that what is described is a hand-held mbira with box resonator.

The instrument was extremely popular among slaves in Río de Janeiro, according to Thomas Ewbank, a North American who visited Brazil in 1846. Although each African nation represented in the city's slave population had its characteristic mbira, the differences were not great, and Ewbank's description corresponds closely to the general type: "A series of thin steel rods, from ten to fifteen, are fixed on a thin board, five or six inches square. Grasping [the instrument] with his fingers beneath, and his thumbs on the keys, [the player] produces, by pushing them down at one end and letting them fly back, a soft humming sound." Ewbank's accompanying sketch shows a seated performer holding a bowl-shaped gourd between his knees while his thumbs rest upon the keys of a mbira nestled within. A great deal of adaptation to European styles of music may have already taken place in the instrument's

function, for Ewbank also describes "... a slave walking along with a load on his head and both hands in a large gourd, out of which he drew a fashionable waltzing tune." 5

Other nineteenth-century American descriptions also correspond to the African prototype. Walter Goodman, visiting Cuba in the 1870's, described evening gatherings of Negroes in which a member of the party would sing humorous or satirical pieces, accompanying himself on a guitar or on "... a primitive instrument formed out of a square box upon which are arranged strips of flexible iron of different lengths and tone."

There are notices of the instrument's use in Louisiana, where a variant of the name also appeared. George W. Cable's description of Negro songs and dances, "The Dance in Place Congo," contains reference to the "marimba brett", an instrument which consisted of joints of reed held against a board or box by a retaining wire. "The performer, sitting cross-legged, held the board in both hands and plucked the ends of the reeds with his thumb nails. The result was called - music."

That the mbira was also widely known in Puerto Rico during the time of slavery is suggested by a passage in a comedy of plantation life, Ramón Caballero's La juega de gallos o El negro bozal. José, the negro bozal of the play's title, proposes to Nazaria, a pretty criolla, or native-born slave, in broken Spanish. Among other inducements, he promises to amuse her by playing the marimba. As there is no evidence of the struck idiophone or xylophone type of marimba having been known in Puerto Rico at this time, José's talent must have been directed toward playing the mbira.⁸

Small mbiras have been known in the Caribbean until recent times. Fernando Ortiz devoted an entire chapter of his monumental work on Afrocuban instruments to the marimbula, adopting this common and distinctive Caribbean term for the entire class of plucked idiophones. Many of the instruments which he described in 1955 were small enough to be grasped by both hands, with either the thumbs alone or thumbs and index fingers employed in performance. Both Ortiz and Israel Castellanos have described other Cuban mbiras which were specifically designed to be held on the lap of a seated performer, and small instruments have been recently seen in Puerto Rico and Haiti as well. 10 It is, however, a much larger and considerably altered form of the mbira that is most frequently seen in the Caribbean today. To a description of this large form, and using the name "marimbula", the rest of our remarks will be directed.

Characteristically, the modern manimbula is approximately the size and the shape of a small suitcase. The tongues are mounted not in a horizontal plane atop the instrument, but vertically, on the front. Above the tongues, the surface of the hollow box-resonator is pierced by a sound-hole. The manimbula rests on the floor or on the ground like a piece of hand luggage, and the resemblance is often heightened by the presence of a carrying handle atop the instrument. Occasionally, instruments are equipped with spacers at the lower corners or across the bottom to raise the box an inch or so above the ground (Fig. 4). In performance the player sits upon the instrument, facing forward with his knees apart, while leaning down to reach the keyboard with the fingers of one hand or both.

This radical departure from the form and the playing technique of the ancestral mbira is accompanied by a striking difference in function. Transcriptions, recordings, and verbal descriptions of the African instrument leave no question but that

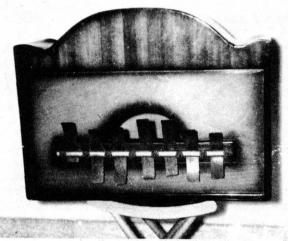


Fig. 1 San Germán, P.R.; Claudio Camacho, maker. 25" x 18½" x 8". Tuning from player's right to left: C, g, c, C, e-flat, e-flat', a-flat'.

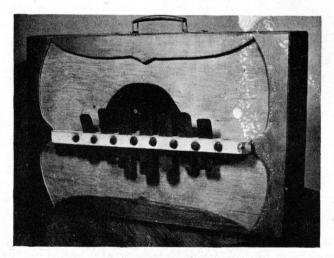


Fig. 2 San Germán, P.R.; Eleuterio Alicea, maker. 25" x 16½" x 7½". Tuning from player's right to left: g, B-flat, E-flat, D-flat, A-flat, e-flat, b-flat.

its music is medium to high in pitch (approximately mezzo-soprano range), rapid in motion, and rhythmically contrapuntal in function. The large marimbula, wherever it appears in the Caribbean, serves a different purpose; here, it functions as a rhythmic-harmonic bass in folk-popular or commercial-popular dance music. As the forms and styles of these species are closely associated with European models, the marimbula's function very nicely represents the blend of European and African elements that is characteristic of a great deal of Caribbean music.

Construction of the marimbula conforms to certain more or less standard patterns of size and proportion. Some variety is found, however, in the materials from which

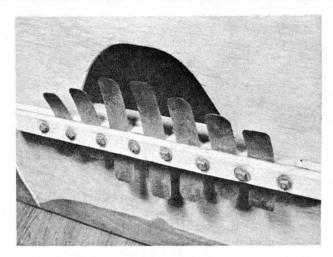


Fig. 3 The same instrument as in Fig. 2, showing method of clasping tongues.

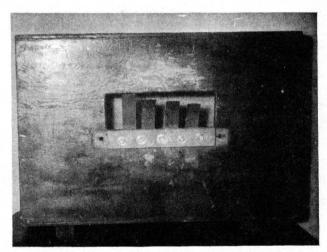


Fig. 4 San Juan, P.R.; constructed by an unidentified maker to specifications by a Dominican performer. 25" x 16½" x 11". Tuning from player's right to left: F, A, c, f.

marimbulas are made and in the manner of finishing or ornamenting the completed instruments.

Plywood of approximately quarter-inch thickness is a favored material for the front and back surfaces, with thicker pieces for sides, top, and bottom. The construction of the box follows local custom and individual skill in carpentry, and ranges from rough handiwork to highly skilled cabinetry. The rectangular form is all but universal; an occasional exception occurs, such as a handsomely made instrument from San Germán, Puerto Rico, whose top is curved into a compound arch (Fig. 1). The maker of this particular marimbula is a skilled craftsman, and the instrument contains other refinements which are not generally found. The interior is

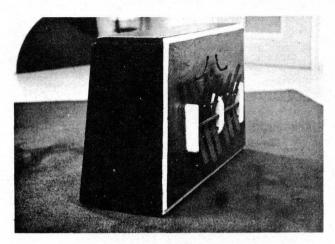


Fig. 5 Willemstad, Curaçao; unknown maker. Trapezoidal form; 31"(27") x 20" x 11"(9"). Tuning not ascertained. Photograph courtesy of Bureau Cultuur en Opvoeding, Willemstad.



Fig. 6 San Germán, P.R.; Eleuterio Alicea, maker. 23" x $14\frac{1}{2}$ " x $7\frac{1}{2}$ ". Tuning from player's right to left: g-sharp, B, G-sharp, D-sharp, B₁, F₁, C, G, c, g.

braced by linings similar to those of a guitar, and the exterior is enameled in a "flamed" red and brown pattern similar to that which is used on sturdy tropical hardwood furniture.

The wooden parts of a marimbula are ordinarily finished in workaday varnish or enamel, with little attempt at decoration. Occasionally, however, one sees an example of ornamental scene-painting, or of wood framing which both reinforces and adorns an instrument's larger surfaces (Fig. 2).

The Cuban lap-held marimbulas that Ortiz described have, generally, two sound-holes: one in the surface upon which the keyboard is mounted, and the other in the end opposite the player. Other placements are also noted; one of Ortiz's examples contains two sound-holes on the keyboard side, and a vertical model is shown which

has its second sound-hole in one of the lateral surfaces. A more generally favored arrangement, however, is a single sound-hole, often of semicircular form. The hole is oriented with the curve upward, and the instrument's tongues are mounted in such a way that they extend vertically over the straight lower edge of the hole (Fig. 2). Other shapes also occur, including rectangular (Fig. 4), circular, and lozenge-shaped, in addition to designs that can only be described as fanciful. A specimen seen in Curaçao, for example, has a small hole in the center of the flat surface above the keys and a reverse curve pierced above and at each side of the hole (Fig. 5). An instrument seen in San Germán, Puerto Rico, has a compound sound-hole comprising five pierced sections which together form a stylized lyre (Fig. 6).

The universally preferred material for the marimbula's tongues is steel cut from the springs of discarded wind-up phonographs. This spring steel is usually from one inch to $1\frac{1}{4}$ inch wide and a little less than $\frac{1}{3}$ inch thick. When cut into short pieces it is stiff yet flexible, and retains the useful curve of its previous function.

With phonograph springs becoming difficult to find, makers have turned to other sources. Clock springs of various widths have been found useful, for example, although they are likely to be too narrow, too thin, and too flexible for the deep pitches of the larger instruments. Rum cask hoops have reportedly been used in Jamaica, while often mentioned as a source of metal is the steel strapping from lumber shipments. A marimbula in a folk instrument collection in Curaçao has tongues made of a long saw blade from which the teeth have been removed by grinding (Fig. 5), and several informants in Spanish-speaking areas report the use of the *chaveta de zapatero*, or shoemaker's knife, in marimbula keyboards.

Two different methods of fastening the tongues to the box are found, and one of these is almost identical to a method that is used in many parts of Africa to secure the tongues of the mbira. In this method, the tongues are held laterally against two horizontal bridges, formed of metal rods or wooden dowels, by a third. The ends of the tongues thus extend both above and below the bridges, and curve outward from the front of the box. Tuning is managed by pulling the appropriate lengths of tongue free above the bridges, in this way determining the vibrating length of each tongue (Fig. 5).

A second method is simpler in construction and more reliable in maintaining the instrument's pitches, but is dependent upon the availability of small hardware (bolts, nuts, and washers) and it involves slightly more sophisticated carpentry. Here, the tongues are tightly clasped between two narrow boards which together form a holding fixture. The entire assembly is bolted to the front of the instrument, the bolts passing between the tongues. With pressure removed from the tongues by loosening the nuts, pitch can easily be adjusted by drawing out the appropriate lengths of metal (Fig. 3).¹²

A variant of this method is seen in the arched-top instrument described above (Fig. 1). Here, instead of being clasped between two boards, the tongues are secured against a single board by a length of $\frac{3}{4}$ inch iron pipe. A groove is carefully cut in the board to fit the curve of the pipe, and the tongues are snugly sandwiched between the matching concave and convex surfaces of the two parts.

The number of tongues varies widely; Haitian and Dominican instruments are likely to have only three or four, while Cuban and Puerto Rican examples are likely to have ten or more. The extremes are probably the instruments described at second hand by Fernando Ortiz and Harold Courlander. Ortiz relates having heard of a two-

tongue marimbula being used in a Cuban ensemble of marimbulas and other instruments, ¹³ and Courlander quotes a source as having seen a Haitian instrument with five complete octaves. ¹⁴ The latter must have been an experimental model, for the expression "five complete octaves", implying tuning to the complete diatonic cycle, is foreign to the instrument's traditional function in folk-popular music.

Several dispositions of pitches are found. Instruments with only three or four tongues often have pitches in an ascending series beginning at the player's right. From five tongues onward, however, the more common method is to place longer tongues in the center of the set, extending outward on both sides to successively higher pitches. In the larger sets there is a tendency to divide the series in half by tuning to the essential basses, plus other useful notes, of two different tonalities. Thus, a marimbula may have the series C, c, g, extending outward from the center for the right hand; and E-flat, e-flat, a-flat, extending outward for the left. Another may display a right-hand series containing only a-flats and e-flats, and a left-hand series of f's, c's and g's.

Thanks to this bitonal tuning, the more elaborate instruments offer the possibility of borrowing or crossing over between the halves of the keyboard, the player catching a note in one series which falls euphoniously into the harmony of the other. Thus, an instrument with c's and g's on one side and a-flats and e-flats on the other permits the use of the minor sixth and minor third degrees in the key of C, the leading tone in A-flat, and many other more or less satisfactory options. Due to the tolerance which is accepted in marimbula tuning, these options extend beyond the realm of enharmonics, becoming a matter of the ear accepting a vague low pitch in place of an absent neighbor. For example, an e-flat can be accepted as a tolerable d for a bass in dominant harmony in the key of C.

Unisons, seconds and octaves occasionally occur between elements of the two halves of a keyboard, but this is by accident not design. An instrument owned by the present writer, for example, possesses a right-hand series of E-flat, B-flat, g; and a left-hand series of D-flat, A-flat, e-flat, and b-flat. The upper two notes on the left are the octaves of the lower two on the right, while other relationships immediately suggest themselves within the general field of tonality outlined by the keys of E-flat, A-flat, and D-flat. There is no evidence, however, that the keyboard had been laid out to profit by such possibilities. The general practice of maximbula makers is to start with a good low note or two in the center, then tune outward in two separate series. Any benefits to be derived from borrowing notes from one series or the other are the player's concern not the maker's, and will depend on his "ear", his dexterity, and the harmonic scope of the piece being performed.

The marimbula's playing technique is similar to that of the ancestral mbira, with the adaptations which are required by the keyboard's shift from horizontal to vertical disposition. Instead of the thumbs, the player's index and middle fingers, held slightly curved, are used in depressing the tongues. The thumbs, being considerably shorter than the other fingers, are almost useless in the marimbula hand position. They are available, however, for playing secondary rhythms against the wood of the box itself. Players of three- and four-tongue marimbulas tend to use only the right hand on the keyboard; the left is used for striking the front and side of the instrument. This percussive art is highly cultivated; indeed, the rhythmic elaborations of a marimbulero's left hand on the variously resonant sections of the instrument's body are often more highly praised than the ostinato basses which his right hand plucks from the keyboard.

Other percussive effects have been reported in connection with the marimbula. Castellanos described occasions of excitement during which the instrument had simply been placed face down on the player's lap and used as a wooden drum¹⁷ and there are reports in Puerto Rico of *marimbuleros* striking their heels against the front of the instrument as an additional percussive supplement.¹⁸

Fernando Ortiz has described the use of small mbiras in Afro-Cuban religious and fraternal ceremonies.¹⁹ This usage, demonstrating the continuity in the New World of African ritual and its implements, has been limited to African slaves and their descendants. The large marimbula has lost all of these elevated and occult associations, while even its racial connections have been all but swept away by the fundamental shift in function which has accompanied the instrument's descent in pitch and growth in size. The marimbula has become simply an inexpensive and easily portable bass instrument, used in many styles of folk-popular music. It is, in effect, the poor man's bass fiddle.

The string bass is used in large dance orchestras, in hotel and recording ensembles, by jobbing combos, and for other purposes connected with commercial-popular music; the marimbula appears in rural communities and in the less prosperous sections of the cities, where it provides the bass for the music-making of neighborhood conjuntos. In Haiti it can be seen in the streets during popular festivities, ²⁰ while a conjunto tipico of accordion, drum, güiro, and marimbula often greets arriving tourists at the Dominican Republic's principal airport. In Puerto Rico, the instrument appears during Christmas asaltos, the roving neighborhood parties which wind up and down the steep streets of mountain towns. For many of these purposes a string bass is neither available nor practical; the sturdy and manageable marimbula is the nearly ideal bass.

The instrument's tonal limitations are at most only mildly bothersome in the milieu for which it is appropriate and in which it is cultivated, for much of the music which it is called upon to perform is limited to the tonic-dominant cycle. A three-tongue instrument tuned to the tonic, supertonic, and dominant scale degrees serves nicely for the non-modulating Dominican *merengue* and for other simple folk-popular species. More elaborate marimbulas, such as the ten-tongue models seen in Puerto Rico, can provide tolerable basses for even the freely modulating boleros which the country folk have learned from the ubiquitous television and phonograph. Naturally, the basses are not always the ones which the harmony demands nor those which the performer would like to produce, but on one half of the keyboard or the other there is likely to be a note that is close enough to serve.

The usual method of launching a piece illustrates the tolerance with which other instrumentalists view the marimbula's limitations. After deciding what piece will be played, the performers may attempt to pitch it in a key for which the *marimbulero* has some basses available. If agreement cannot be reached, due to a guitarist's limitations or to strictures created by a singer's range, no regrets are felt. The piece will be played anyway, the marimbula providing a cycle of basses perhaps a vague second or third off the true key. While true basses are good to have if they are available, they are by no means essential. A Puerto Rican instrument-maker has summed up the position most accurately: "What you need is a low note, a higher note, and one not so high. The rest is rhythm." ²

The marimbula has enjoyed a modest ripple of popularity in recent decades, partly as a result of the interest shown in *música típica* by ministries of culture, tourism

boards, travel offices, and other commercial and governmental agencies. Perhaps inevitably, instrument-makers and other enthusiasts have attempted to improve the instrument by enlarging it still further or by adapting its principle to other instrumental forms and other styles of music.

A five-octave Haitfan instrument has been mentioned by Harold Courlander, and Fernando Ortiz, tongue in cheek, once claimed credit for having devised a name for an experimental Cuban model. Invented by Gilberto Valdés, the Valdímbula, as Ortiz baptized it, possessed sixty tongues disposed in four ranks, the pitches so laid out that the performer's arm movement would be reduced to a minimum.²² Experimental instruments recently being built in Puerto Rico include what might be called a "highboy" or "stand up" model, its horizontal keyboard placed at a height of three feet above the ground, and a marimbula in the shape of a string bass.

It is impossible to predict the future of this hardy Afro-Caribbean instrument, but the existence of experimental models invites speculation. It may be only a matter of time, for example, until some neighborhood handyman fits a pin-and-barrel mechanism to a diatonic marimbula, thereby reinventing the music box. In the meantime, the marimbula's skewed but resonant basses will continue to propel merengues. plenas, aguinaldos, and other humble classes of neighborhood music along whatever paths the folk-popular music of the Caribbean may take.

NOTES

- 1 The writer is grateful to the editor of this journal for bringing to his attention the many valuable contributions dealing with the mbira which have appeared in its pages, and has happily adapted the nomenclature used in an earlier form of this article to that recommended by Hugh Tracey, "A case for the name mbira",
- African Music, II, 4 (1961), pp. 17-25.

 2 Miguel A. Jauregui, "El carnaval en Montevideo en el siglo XIX", Revista nacional (Montevideo), June, 1943, cited by Fernando Ortiz, Los instrumentos de la música afrocubana (5 vols., Havana: Cárdenas, 1952-55), V, p. 89.
- 3 Esteban Pichardo, Diccionario provincial casi-razonado de vozes cubanas (3rd ed., Havana: Impr. La Antilla
- 1862), p. 175.

 4 Thomas Ewbank, Life in Brazil, or a journey to the land of the cocoa and the palm (New York: Harper & Bros., 1856), p. 112.
- 508., 1630, p. 112.

 5 Ibid., p. 111.

 6 Walter Goodman, The pearl of the antilles, or an artist in Cuba (London: Henry S. King, 1873), p. 124.

 7 George W. Cable, "The dance in Place Congo", Century magazine, XXXI, 4 (1886), p. 519.

 8 Ramon C.F. Caballero, "La juega de gallos, o el negro bozal", Recuerdos de Puerto Rico (Ponce, P.R. 1852),
- 8 Kamoli C.F. Cabaletto, 22 jacga as gallon, of the control of the
- 11 Ortiz, op. cit., p. 105.
 12 Harold Courlander, The drum and the hoe (Berkeley: University of California Press, 1960), contains illustrations showing both types of fixture in use on Haitian instruments. See illus. 83 and 85, following p. 112.
- 13 Ortiz, op. cit., p. 113. 13 Ortiz, op. cit., p. 113.
 14 Harold Courlander, Haiti singing (Chapel Hill: University of North Carolina Press, 1939), p. 67.
 15 This arrangement is similar to that of many African mbira keyboards, and probably represents in the marine-bula the continuation of an ancient tradition rather than the application of any principle of mechanical efficiency. In the large instrument's altered playing position, in fact, the progression outward from the center to ever-shorter tongues appears to be a disadvantage.
 16 In the method of pitch designation used here, C., C, c, and c' refer to the lowest note of four successive octaves; c' is middle c on the piano keyboard.
 17 Ortiz, op. cit., p. 106.
 18 This information was provided by Mr. Héctor Vega Drouet, San Juan, from his own notes on Puerto Rican folk instruments.

- folk instruments.
- 19 Ortiz, op. cit., pp. 99-102. 20 Courlander, "Musical instruments of Haiti", loc. cit.
- 21 Don Claudio Camacho, San Germán. 22 Ortiz, op. cit., pp. 117-118.