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Ricardo Dal Farra

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Résumé de l'article

La musique et les technologies électroniques ont joint leurs forces l'une à l'autre en Amérique latine il y a longtemps. Plusieurs compositeurs provenant de divers pays étaient en effet attirés par les nouvelles possibilités qu'offrait d'abord l'enregistrement sur bande, puis le synthétiseur à voltage contrôlé, et enfin l'ordinateur.

Cet article comprend des extraits d'entrevues avec les compositeurs César Bolaños du Pérou, Alberto Villalpando de Bolivie et Manuel Enríquez du Mexique. Ils ont été sélectionnés afin d'offrir au lecteur une introduction au travail et à la pensée de quelques-uns des compositeurs latino-américains les plus largement reconnus et dont la production inclut de la musique électroacoustique datant des premières années du genre.

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The Southern Tip of the Electroacoustic Tradition

Ricardo Dal Farra

Music and electronic technologies have been matching forces for a long time in Latin America. Many composers from different countries in the region were attracted by the new possibilities that tape recording at first, then voltage-controlled synthesizer and computers, were offering.

This article includes excerpts from interviews held with composers César Bolaños from Peru, Manuel Enríquez from Mexico and Alberto Villalpando from Bolivia. These fragments were selected to offer the reader an approach to the musical work and thought of some Latin American composers active in the electroacoustic music field from the pioneering years.

César Bolaños: Variation as finger work

Peruvian composer César Bolaños[1] (b. Lima, Peru, 1931) composed the first electroacoustic piece on tape at the CLAEM (the Latin American Higher Studies Musical Centre of the Torcuato Di Tella Institute), one of the main Latin American centres for contemporary art during the 1960s[2]. He also created mixed media works integrating advanced technologies at that time, including computer assisted composition.

The following two excerpts from an interview with César Bolaños held in his house in Lima, Peru, were recorded by the author in August, 2004.

1. César Bolaños studied music in Lima at the National Conservatory of Music, then in New York at the Manhattan School of Music in 1959 and at the RCA (Radio Corporation of America) between 1960 and 1963. He moved to Buenos Aires in 1963, having received a fellowship to study at Centro Latinoamericano de Altos Estudios Musicales or CLAEM (Latin American Higher Studies Musical Centre), Torcuato Di Tella Institute.

Bolaños composed his first tape piece at CLAEM, *Intensidad y Altura* (1964), which was also the first electroacoustic music composition produced at the Centre, while its lab was still in its earliest stages of development.

He also composed, among other works: *Lutero*, electroacoustic collage on tape (1965); *Alfa-Omega*, for two reciters, theatrical mixed choir, electric guitar, double bass, two percussionists, two dancers, magnetic tape, projections and lights (1967); *I-10-AIFG/Rbt-1* for three reciters, French horn, trombone, electric guitar, two percussionists, two technical

operators (lights and radios), nine synchronized slide projectors, magnetic tape, amplified acoustic instruments and a programmed light signal system (controlled by perforated paper) acting as conductor (1968); and *Canción sin palabras* (*ESEPCO II*), for piano with two performers and tape (1970), computer assisted composition created in collaboration with Argentinian mathematician Mauricio Michberg.

More information on César Bolaños is available in English at:

<http://www.fondation-langlois.org/flash/e/index.php?NumPage=1598>,

and in French at

<http://www.fondation-langlois.org/flash/f/index.php?NumPage=1598>

2. Other photos of the Latin American Higher Studies Musical Centre at the Torcuato DiTella Institute in Buenos Aires are available through the Daniel Langlois Foundation web site: <http://www.fondation-langlois.org/flash/e/index.php?NumPage=545> [the old laboratory] and <http://www.fondation-langlois.org/flash/e/index.php?NumPage=549> [the new laboratory]

CLAEM – Instituto Torcuato Di Tella, Buenos Aires, Argentine, 1966. The CLAEM's lab was renovated in 1966, following a project by its new technical director, Fernando von Reichenbach (Collection de musique électroacoustique latino-américaine, Fondation Daniel Langlois).

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César Bolaños: I went to New York in 1958 and stayed there until 1963, immediately after that I went to Argentina.

Ricardo Dal Farra: And then in Argentina, was *Intensidad y Altura* [1964] your first piece?

C. B.: Yes, *Intensidad y Altura* was the first work using electroacoustic media that I produced at the Di Tella Institute.

R. D. F.: And how did the lab get started? You were in charge of setting it up?

C. B.: The laboratory was very… [hesitates] there was no lab, really, at the beginning. The engineer Bozarello was contracted, and we built the first lab together. The intention at that time was to put creative ideas into practice using electronics. And it was built up from whatever we had at our disposal, a home tape recorder, later an Ampex arrived, and then a Neumann microphone. That was more or less all, besides some modulators built by Bozarello himself. Everything was so simple. For speed variation, I would simply use my fingers.

R. D. F.: Do you mean tape speed variations?

C. B.: Exactly. *Intensidad y Altura* was produced that way… with my finger! Many things were done by finger [laughs].

R. D. F.: And what else did you use to produce *Intensidad y Altura*?

C. B.: Not much else. Some cymbals, small cans, and the voice reading the poem. The poem was read backwards.

R. D. F.: Really?

C. B.: It was read backwards… but then the tape was played backwards [laughs]. That way, the voice sounded distressed. It was difficult to get that quality from a voice in any other way. The title of the poem, by César Vallejos, was also "Intesidad y Altura".

R. D. F.: And you were using an Ampex stereo tape recorder, a Grundig stereo, and a Philips mono?

C. B.: That's right. And the Neumann microphone.

R. D. F.: And a white noise generator.

C. B.: That was also built by Bozarello; there was also a spring reverberator that he built. He contributed a lot at the beginning.

R. D. F.: And in 1966 you composed *Interpolaciones*,[3] for electric guitar and tape.

C. B.: Exactly. Let's start with the tape. Some of its sounds come from electronic and others from *concrète* sources. But the original *concrète* sounds were transformed in the lab in such a way that many of them seem to be generated electronically as well.

R. D. F.: And for the guitar, there was a little device used for the spatial distribution of its sound?

C. B.: It was originally a four-channel piece. The sound distribution over those channels could be controlled using some micro-switches the guitar performer had close to his feet. Using those micro-switches you could make the sound jump from the front speaker to any other.

R. D. F.: Julio [Viera, who premiered the piece], was playing the guitar and controlling the guitar sound distribution over the concert space.

C. B.: Only the guitar sounds, not those from the tape.

Manuel Enríquez: Electroacoustics through a crystal

The composer, conductor and performer Manuel Enríquez[4] (b. Ocotlán, Mexico, 1926 - d. Mexico City, Mexico, 1994) was one of the major figures of Mexican new music in the late 20th century. In Mexico, he was the director of

3. The complete recording as well as the score of *Interpolaciones* are fully available online at the web site of The Daniel Langlois Foundation for Art, Science, and Technology as part of the Latin American Electroacoustic Music Collection created by the author. Audio recording: <http://www.fondation-langlois.org/flash/e/index.php?NumObjet=15780&NumPage=556>

Score: <http://www.fondation-langlois.org/flash/e/index.php?NumObjet=14580&NumPage=556>

Video excerpt of Bolaños' interview, in which he speaks about *Interpolaciones*:

<http://www.fondation-langlois.org/flash/e/index.php?NumObjet=36520&NumPage=547>

4. Manuel Enríquez Salazar studied music with his father, later with Ignacio Macarena and Miguel Bernal Jiménez and then at The Juilliard School of Music in New York. In 1971 he was recipient of the Guggenheim Foundation's fellowship and studied at the Columbia-Princeton Electronic Music Center.

In Mexico, Enríquez was violinist at the Guadalajara Symphonic Orchestra and the National Symphonic Orchestra, and director of the National Conservatory of Music, the National Music Research and Documentation Centre and the National Institute of Fine Arts.

He was a prolific and innovative composer, some of his works are: *Cuarteto I* for string quartet (1959); *Cuatro piezas* for cello and piano (1961); *Sonatina* for cello (1962); *Cuarteto II* for string quartet; *Díptico I* for flute and piano (1969); *3 x Bach* for violin and tape (1970); *Mixteria* for actress, four musicians and electronic sounds (1970); *Díptico II* for violin and piano (1971); *Viols* for one string instrument (after *Móvil II*, 1969) and tape (1972); *Láser I* for tape (1972); *Ritual* for orchestra (1973); *Trauma* for actress, four musicians and electronic sounds (1974); *Contravox* for mixed choir, percussions and tape (1976); *Del viaje inmóvil* for voices, musical instruments, electronic

several major music institutions and as a violinist he performed worldwide. Enríquez has an extensive catalog including orchestra, chamber, and electroacoustic compositions.The following excerpts have been taken from an interview with Enríquez recorded in Tacuarembó, Uruguay, in April, 1992[5].

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Manuel Enríquez: [...] This is what I remember[6] [...] It was the foundation of the Electronic Music Lab in the Conservatory [the National Conservatory of Music in Mexico City], as part of the Composition Workshop led by Carlos Chávez.[7]

Ricardo Dal Farra: Raúl Pavón was in charge of the lab, and Héctor Quintanar...[8]

M. E.: Quintanar was the artistic director, but Pavón was the technical director [...] In 1972, I was appointed director of the National Conservatory and I tried to breathe new life into the laboratory. I was also creating electronic music, but not only there. At that lab I used to assemble and mix, but I was travelling a lot at that time. I also produced works at Columbia [the Columbia-Princeton Electronic Music Centre in New York] [...] After that I returned to Mexico, and composed some other works—old pieces, but I still like them [...]. Then I moved to Paris around 1975. I lived there for three years and had the opportunity to work for a short time at the Pantin laboratory. It was Jean-Étienne Marie's small studio, in the north of Paris. Fernand Vandenbogaerde and Michel Decoust were there [...]. I composed some pieces there; I think the main work was the one I wrote for the double-bass player Bertram Turetzky, for double-bass and tape. Later I composed a second version for violin and tape.

R. D. F.: Is that the piece *Viols* or *Conjuro*?

M. E.: *Conjuro*. I produced *Viols* at Columbia, in parenthesis, on a bet from Mario Davidovsky, who used to say to me, because I am a violinist, that my instrument was totally useless [laughs] [...] There are many ungrateful opinions about electronic music out there. Some composers—some of them, fortunately not all—think that electronic music must be judged from a different point of view, that it must be seen through a different theoretico-technical crystal. I have discussed this with distinguished people who embrace this type of aesthetic; very analytical, theoretical people who want to convince me that because in electroacoustic music you *generate* the sound, it is completely different from instrumental music; that's not how I see things. We must keep thinking in terms of musical laws: surprise, contrast, variety, duration. It doesn't

sounds and images (1976); *La casa del sol* for musicians, dancers, actors and electronic sounds (1976); *Conjuro* for double-bass and tape (1976-77); *Sonatina* for orchestra (1980); *Misa prehistórica* for electronic sounds (1980); *Interminado sueño* for actress and orchestra (1981); *A Juarez*, cantata for baritone, choir and orchestra (1983); *Manantial de Soles* for soprano, actor and orchestra (1984); *Cuarteto IV* for string quartet (1984); *Interecos* for percussion and electronic sounds (1984); and *Díptico III* for percussion and string orchestra (1987). More information on Manuel Enríquez is available in English at http://www.fondation-langlois.org/ flash/e/ index.php?NumPage=1602 and in French at http://www.fondation-langlois.org/ flash/f/index.php?NumPage=1602

5. An audio extract from the Enríquez interview is available online at The Daniel Langlois Foundation web site at: <http://www.fondation-langlois.org/flash/e/index.php?NumObjet=36580&NumPage=1602>

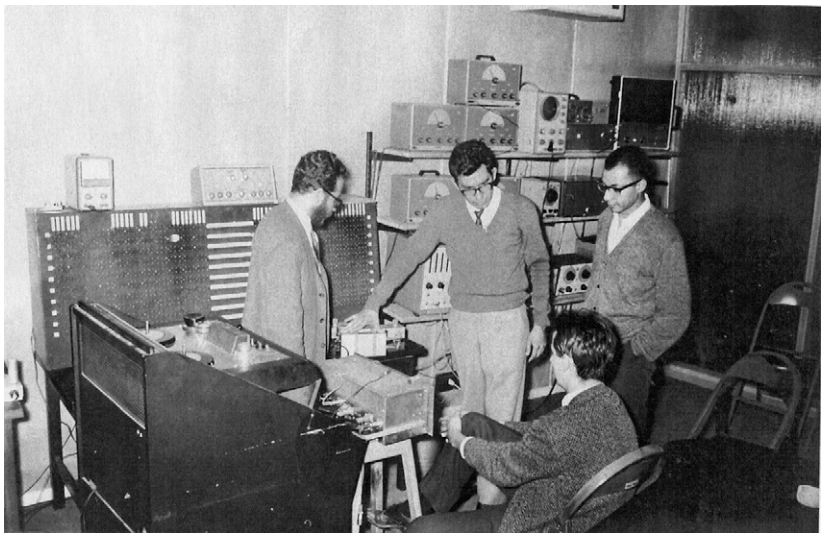
6. The complete recording as well as the score of Enríquez' *Viols* (*Móvil II*) for any string instrument and tape, are fully available online at the web site of The Daniel Langlois Foundation for Art, Science, and Technology as part of the Latin American Electroacoustic Music Collection created by the author. Audio recording: <http://www.fondation-langlois.org/flash/e/index.php?NumObjet=15810&NumPage=556>

Score: <http://www.fondation-langlois.org/flash/e/index.php?NumObjet=16850&NumPage=556>

Program notes in English are available at <http://www.fondation-langlois.org/flash/e/index.php?NumPage=1661>

and in French at <http://www.fondation-langlois.org/flash/f/index.php?NumPage=1661>

7. Although an abundance of tape music was being produced in Mexico in the 1960s, the first Electronic Music Lab in Mexico was only established in 1970, at the National Conservatory of Music.



César Bolaños is shown teaching composition with electroacoustic media in the old laboratory of the CLAEM, 1965. From left to right : Rafael Aponte Ledée (Porto Rico), César Bolaños (Pérou), Gabriel Brncic (Chili), Blas Emilio Atehortúa (Colombie) (Collection de musique électroacoustique latino-américaine, Fondation Daniel Langlois).

matter through what means these aims are achieved. I believe that the supposedly aesthetic difference is what somehow unjustly divides the criterion and even the opinion of the public as far as what electroacoustic music and what acoustic instruments are. For me there is no justice in that, because music is good or bad, whatever you use to produce it, isn't it? If I am listening to an electroacoustic composition, I respect it as much as if I am listening to a chamber piece or a work for soloist. Of course there are differences: the electroacoustic composer is his/her own performer. Whereas one group depends very directly on the performer, the other depends on the equipment.

So far... so close to your land: Alberto Villalpando

Alberto Villalpando[9] (b. La Paz, Bolivia, 1940) is considered one of the main driving forces of contemporary music in his country. His extended catalogue includes opera, orchestra, chamber and electroacoustic music. He also composed the music for several well-known Bolivian films. Villalpando was awarded the Culture National Prize in Bolivia for his distinguished musical career. The following interview was recorded by the author in La Paz, Bolivia, in July, 1994.

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Alberto Villalpando: Miguel Angel Rondano and I were fellows at the Conservatory (the National Conservatory of Music), in Buenos Aires[10]. We

8. Raúl Pavón (b. 1930) and Héctor Quintanar (b. 1936) co-founded the electronic music laboratory.

9. Alberto Villalpando studied music in Potosí, Bolivia and later in Buenos Aires, Argentina, where he went in 1958 to enter the National Conservatory of Music. In 1963 he received a scholarship to study at CLAEM — Di Tella Institute, taking courses with Alberto Ginastera, Olivier Messiaen, Luigi Dallapiccola, Riccardo Malipiero and Bruno Maderna, among other composers.

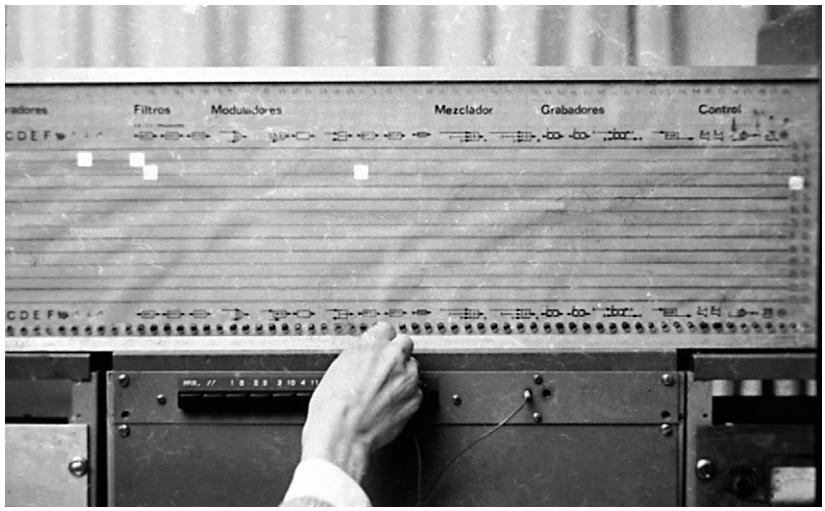
Back in Bolivia since 1965, Villalpando has been director of the Music Department at the Ministry of Culture, director and professor of composition at the National Conservatory of Music in La Paz and Bolivia's Catholic University, and Cultural Attaché of the Bolivia's Embassy in France.

His extended catalog includes, among other works: *Cinco canciones* for soprano and piano (1960); *Trío*, for flute, clarinet and bassoon (1961); *Cuatro juegos fantásticos* for clarinet, cello, piano and percussion (1962); *Liturgias fantásticas* for orchestra (1963); *Estructuras* for piano and percussion (1964); *Cantata solar* for soprano, baritone, mixed choir and chamber orchestra (1964); *Evoluciones* for piano (1965); *Mística No. 1* for string quartet (1965); *Mística No. 2* for piano (1965); *Concertino* for flute and orchestra (1966); *Danzas para una imagen perdida* (ballet) for chamber orchestra (1969); *Mística No 3* for double string quartet, flute, French horn, double bass and tape (1970); *Mística No. 4* for string quartet, piano and tape (1970); *Tres piezas* for piano (1971); *Bolivianos...!* electroacoustic music on tape (1973); *Música para orquesta No. 1* for orchestra (1974); *Cantata de Homenaje* for soloists, mixed choir and orchestra (1975); *Música para orquesta No. 2* for orchestra (1975); *Mística No. 5* for clarinet, French horn, bassoon, violin, viol, cello and double bass (1976); *Yamar y Armor* (ballet) for voice, tape and orchestra (1977); *Término cartela en lacería churrigueresca* for two guitars (1986); *Interludio* for solo violin (1986); *Desde el jardín de Morador*

for computer and synthesizers (1989); *Preludio al vino* for solo guitar (1989); *De los elementos* for computer and synthesizers (1991); *Las transformaciones del agua y del fuego en las montañas* for orchestra (1991); *Mística No. 6* for violin, cello and piano (1993); *Manchaypuytu*, opera in three acts (1995-96); *Qantatai* for choir, narrators and electronic sounds (1996-97); *Sonatita de piel morena* for cello and piano (1999); *La Lagarta* (ballet, in three acts) for narrators and electroacoustic sounds, based on texts by Blanca Wiethüchter (2002). Alberto Villalpando biography is available in English at <http://www.fondation-langlois.org/flash/e/index.php?NumPage=1622> and in French at <http://www.fondation-langlois.org/flash/f/index.php?NumPage=1622>

10. An extract from Villalpando's interview is also available online at the Daniel Langlois Foundation for Art, Science, and Technology web site: http://www.fondation-langlois.org/flash/e/index.php?NumObjet=36570&NumPage=548

11. Argentina's electrical current runs at 50 Hz; the same story is related by alcides lanza in this issue.



CLAEM – Instituto Torcuato Di Tella, Buenos Aires, Argentine, 1966. Touch-controlled patch-bay, designed by Fernando von Reichenbach, built with spare part from the telephone compagny (Collection de musique électroacoustique latino-américaine, Fondation Daniel Langlois).

started experimenting with *musique concrète*-type sounds that we transformed on tape recorders, copying the tracks from one to the other, changing speeds, and so on. In that way we did what I could call a 'sonorisation', for a visual arts exhibition presented by Delia Puzzovio, Carlos Squirru and a wonderful draftsman, Gimenez […]

Ricardo Dal Farra: What year was that?

A. V.: We completed it in 1962, and the exhibition was held in 1963.

R. D. F.: And the Di Tella Institute?

A. V.: The Di Tella began in 1963, but Ginastera had already quit the Conservatory by mid-1962 in order to work for the organization which was the centre for music study at the Institute (the Centro Latinoamericano de Altos Estudios Musicales, or CLAEM). At the beginning at the Di Tella Institute there was no electronic music laboratory, we only had some audiofrequency generators, a very nice Ampex tape recorder that came from the United States… But that was like a dog's dream, because that tape recorder ran on 60 Hz power, and so it didn't work properly[11]. In any case, we achieved a few things, mostly with César Bolaños, a Peruvian fellow, that finally was able to include an electroacoustic composition in one of the concerts. […] When I went back to Bolivia, I kept working on projects based on the experiences I had had in Buenos Aires. Mostly integrating texts, and the [live] voice, into a series of

works. That was more efficient, and more eloquent and expressive than what was possible with tape recorders. I composed the incidental music for a play called *Atoj Juancito* […] then I composed the music for another play, *El cuento del zoo*. That was a more elaborate production, because I was able to work in a radio studio […]. Later I had other electroacoustic experiences, but this time with a synthesizer I had bought. It was an EMS Synthi, an English synthesizer […] I composed a work for ballet [with it], *Yamar y Armor*. Even though it was conceived for orchestra, there are electronic sonorities mixed in with the orchestra, and the second act has a long electronic fragment in which the tape part plays for nine minutes with no acoustic instruments.

R. D. F.: What year was that?

A. V.: That was around 1974 or 1975 […] and the text was by Blanca Wiethüchter […] My interest in the Synthi dates back to when a colleague, Mesías Maiguashca, bought one and showed it to me in Spain. Later I went to visit him in Cologne, and there I created an electronic fragment, using his Synthi, which I used in two of my chamber compositions, *Mística No. 3* and *Mística No. 4* […]

R. D. F.: And when did you compose those pieces?

A. V.: They are from 1970. It was because of them that I then bought my Synthi. […]

R. D. F.: And *Bolivianos…!*?[12]

A. V.: Ah, yes, *Bolivianos…!*. It was composed as a result of a specific proposal, because at that time I was writing an opera called *Perdido Viajero*. That was really an aborted opera project because the text was to have been written by someone who was then a close friend, who suddenly—and I never knew why—got angry with me. Anyway, it's a funny story […]. This poet who was writing the text only delivered the first act of the opera, but never the second and third acts; with that first act, I had already begun working. This opera was an attempt to claim a Bolivian identity, the essence of being Bolivian. It was a really nice libretto, and I started to compose. During the first act, I needed a scene of a political character — it was really a political demonstration that was taking place as if in a nightmare of one of the characters; in fact, it *was* a nightmare. The action takes place around the time immediately following the Chaco war,[13] which was really the first time in Bolivian history in which a sense of national identity took hold. The Bolivian nation became unified after that event, which explains its relevance. Then the text aludes to Enrique Peñaranda, the president at the time […], and to problems concerning education and ignorance

12. The complete recording of Villalpando's *Bolivianos…!* (1973) for tape is fully available online at the web site of the Daniel Langlois Foundation for Art, Science, and Technology as part of the Latin American Electroacoustic Music Collection created by the author: <http://www.fondation-langlois.org/flash/e/index.php?NumObjet=15870&NumPage=556>

13. The Chaco War (1932-1935) was fought between Bolivia and Argentina.

[…]. I went to Italy to participate in a symposium on musical notation. There I met our common friend Leo Kupper, and he was very generous and invited me to go with him to Brussels. There we worked the texts with two of Leo Kupper's friends, both actors. They made some really unbelievable logotones[14] […] We also met a Bolivian girl, Jeanette Inchausti, who at that time was studying dance with Maurice Béjart in Belgium. She had extraordinary vocal and phonetic capabilities, and took the most important part when the full text was read. That is how this opera fragment was produced. Since it was never completed, the only concrete thing that remained was the electronic part. Then I named it, almost as a euphemism, *Bolivianos...!*.

14. A term used to refer to sounds produced by the glottis and through other extended uses of the voice.

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