Analysis of Christian Calon's "The Standing Man"

by Bijan Zelli

The Standing Man, by French-Canadian composer Christian Calon, was composed between 1995 and 1996 during his stay in Berlin as a guest of the Deutscher Akademischer Austauschdienst (DAAD). It was premiered in June 1996 in Berlin. Based on a ballade by François Villon, the work is a 24-track composition intended to be performed on twenty-four loudspeakers arranged on four levels. The subtitle, *Adventures in Audio Reality*, refers to the central topic of the work, namely various modifications of the sonic world. These modifications, or in Calon's language "metamorphoses", are presented as the experiences of a standing human taking in the world through a camera. *The Standing Man* is a unique composition among the works of Christian Calon because of both its almost three-quarter hour duration and its architectural and geometrical treatment of space. It is designed as a sound installation with the music repeating on a loop, allowing the audience to take different positions in the three-dimensional performance space and thus experience different sound images. With its large number of tracks, *The Standing Man* is a piece of music with an orchestral and heterophonic texture. The following analysis explores different aspects of the composition in detail, based on lengthy discussion with the composer and the author's personal study of the composition.

Christian Calon and "l'Elaboration d'une machine à métamorphoses"

Regarding acousmatic music in Europe, USA and Canada, it must be said that the so-called "Montréal style" is, after the the pioneering work created in Paris starting in the early 1950s, the most important and most influential direction that this music has taken. Christian Calon not only ranks among the most important members of the Montréaler circle, but is also, owing to his numerous influential works, normative within the style. Calon belongs to the second generation of the electroacoustic composers. He identifies himself as an acousmatic music composer due to the similarity of his working method and æsthetic to those of musique concrète. While the first generation of composers developed the grammar and theory of acousmatic musical language in an atmosphere of post-war optimism and constructivity, the Canadian composers, including Calon, further developed the style by taking on influences not only from other composers but also from other sorts of music, such as band music, sound installations, and multimedia and computer music.

Composing is primarily an act of selection for Calon, a reduction of the myriad possibilities offered by the collection of sound materials he uses as a starting point. The selection is based on *flexible listening*, an analysis of the sounds' many characteristics and a determination of the possible connections between subjective interpretation and musical context. This reductive process determines the underlying material for the composition, and in this way the piece begins to materialize. At this point there is a crucial decision in regards to musical preferences that helps distinguish one acousmatic music composer from another. This decision concerns the process of alienating sounds from their sources, which both lends a new identity to the sounds and organizes them into a solid form. For Calon, composing is a process that is to be arranged into two phases: finding the sound in its original context and composing with the sound. The most important characteristics of Calon's compositional method are, without a doubt, his æsthetics of sound and performance.

Calon systematizes the solutions to the problem facing today's electroacoustic composers regarding the composition

of electroacoustic music. He presents his method as a programme comprising three important stages of the compositional procedure: the search for sound material, flexibility and development. This is the core of what Calon describes and advocates with the phrase "l'elaboration d'une machine à métamorphoses." Since the sound material is taken to be the source of inspiration for compositional ideas — including the principles of form, temporal process and spatialization — the first and the third stage are closely connected. The second stage underpins the construction of the entire composition. The element connecting the sound events, or, as Calon says, the sound *transformations*, is not time but space. Time does not lose its function but instead has the task of making the connections between spaces possible. As a result, time, space and sound transformations function as the three poles that make up the
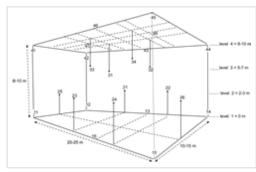

Figure 1. Speaker setup for Christian Calon's *The Standing Man*. Speaker "11" is the first speaker on the first level, "25" the fifth speaker on the 2nd level, etc. [Click image to enlarge]

foundation of the piece, with the transformations, or metamorphoses, as the central pillar. Spatial characteristics, temporal structures and symbolic values are then brought together in a coherent network that, from the first stages of composing up to the performance of the final piece, is shaped and influenced by the temporal and spatial development of the metamorphoses. As a result, Calon prefers the phrase "elaboration d'une machine à métamorphoses" to the term "composition".

The Standing Man

The succession of acousmatic images in *The Standing Man* describes the world through sound transformations and metamorphoses. It should be noted that the composition is understood here as a succession of *sound images in space* and not of *sounds in time* (Calon 1997). This is of particular importance in *The Standing Man* — the metamorphoses do not function as a secondary, descriptive tool, but instead are the most prominent feature of the composition. *The Standing Man* could not be properly realized as a stereo piece, because the differentiation of space forms an intimate relationship with the sonic content of the composition.

Another significant aspect of *The Standing Man* is its attitude toward the question of realism. Choosing the world and *Adventures* through it as the central theme of a piece asks, if not outright obligates, a composer such as Calon to consider a realistic approach toward sound. This does not necessarily mean a strict loyalty to nature, but in Calon's case refers to an interplay between human perception and computer-based processes. He states that "the sound spaces are of human dimensions: they are meant to convey life-like sounds to the ear" (Calon 1996). To explain the role of the subjectivity of perception in this context would seem to be unnecessary. The upright-standing human and the sound images taken up by his camera do not function in the piece as immediate perceptions or even filtered ones, but instead symbolize the complex relationship that develops from the dialectic confrontation of subjectivity and objectivity. The listener can occupy any vantage point in observing the world described in the piece. Calon explains:

> The space inside the hall and the flow of time in the work are conceived in such a way as to present the listener with the possibility to move from one area to another and to sit at some defined spots. The sound and light spatial treatment in the work are non-directional and fragmented, and the listener has a choice of perspective. (Calon 1996)

With its extraordinary performance form, *The Standing Man* entails the socialization of the electroacoustic composition and a dramatic expansion of the genre.

The Standing Man features audio of a boy reciting a 15th-century ballade by poet François Villon. It is interesting that, although the original text is in French, the composer prefers the German translation, which inevitably lacks the original literary tone of Villon's poem. A spatialized electroacoustic work in which a boy recites a German text is immediately reminiscent of *Gesang der Jünglinge* by Karlheinz Stockhausen. Differentiating the two compositions are, among other aspects, their widely dissimilar durations, the serial treatment of the recitation in *Gesang* and Stockhausen's innovation in combining concrete and synthetic sounds. The formal structure of *The Standing Man* and

its similarity to Stockhausen's work could be understood as the result of a combination of different elements: Calon's interest in the narrative organization of sound, Stockhausen's influence as a well known composer, and lastly Calon's æsthetic view, which gives priority to the development of music in space.

The text used in Calon's work, *La ballade des pendus* by François Villon, is typical of the 15th-century form. Through its three ten-line stanzas and five-line *envoi*, the work takes as its central themes transience, death and passion. The narrative perspective of the text is that of a hanged man who speaks to his *frères humains*. The humanity and fraternity conveyed here through the symbolization of mankind are still relevant to the reader and listener today. Villon lets the dead talk and ask for pity. The passive condition of the dead is changed here to unrest. This change serves as the core of both poem and music.

The musical treatment of Villon's text in *The Standing Man* is, on the whole, simple. It does not involve any mathematical allocation of syllables, vowels or consonants. Rather, the text is spoken directly in a soloistic manner and without transformation, and through the organization of dynamics and alternation of sound and vocal events it is quite intelligible in the accompanying sound environment. If Calon was consistent in his compositional treatment of the text, that is, if he treated the voice in other compositions as he does in *The Standing Man*, perhaps one could conclude that a preference for a realistic approach to the voice is a compositional strategy. However, this is not the case. In *Minuit*, an earlier composition by Calon, he transforms the vocal part in a completely conscious and planned manner, thus remaining faithful to his metamorphosis theory.

Structure and Form of the Work

Calon organized five categories of sound that serve as the fundamental musical sound material for the composition: "S-Bahn sequences", "breaking wave with rocks", "medieval music", "wind" and sailboats" and "aerial element with unpredictable motion", in reference to the origin of the sounds. The sounds used in the finished piece comprise only a portion of the total sound supply devised at the outset.

Similarly, Calon prepared a supply of sound movements and studied their performance possibilities. It is of course unnecessary to consider every single theoretical possible sound movement in space (this would offer an unmanageable number of combinations), but instead only those practical contextual sound movement patterns which are relevant to the sound material. In addition to those common, even standard patterns — such as localized sound positioning, the Doppler effect, etc. — which are found in abundance in electroacoustic works, the composer developed movement patterns that can only be performed using a three-dimensional loudspeaker system. These spatial movements can be divided into five categories:

- Dispersive — The sound positioning expands from one speaker to an array of speakers (Fig. 2);
- Contractive — The sound positioning shrinks from an array of speakers to a small number of speakers (Fig. 3);
- Contrapuntal — simultaneous movements of different sounds among speakers (Fig. 4);
- Linear — linear movement of the sound from one speaker to an adjacent one;
- Geometrical — The sound positioning articulates a geometrical pattern.

Figure 2. Diagramme showing dispersive movement over the speaker setup for Christian Calon's *The Standing Man*. [Click image to enlarge]

The premiere (and to this date only) performance of *The Standing Man* took place between the 7th and 14th of June 1996 at the Ballhaus Naunynstraße in Berlin as a part of the annual Inventionen festival. In this performance, four groups of six loudspeakers each were set up on four levels in a space with dimensions of 20–25 by 10–15 meters with a height of 8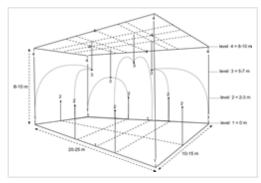–10 meters; distances of approximately 2.5, 2.5 and 4.0 meters separate the levels of loudspeakers. The speakers on each level were positioned along the perimeter of the space, except for those on the third level, which were closer to the centre. This creates a "dome" enclosing the lower

performance area with another layer of "distant" speakers sitting far above the dome (Fig. 1).

The Standing Man is organized in six sections, each with a fixed length. Calon assigns each section a title corresponding either partially to the content of the sections, such as "Scratch" and "Avion ruisseau", or not at all, as with "Kouchi." Each section (except "Cri" and "Midibahn") is also divided into three subsections, which can be understood as an exposition, a main part and a coda.

The first section, "Kouchi" (dur. 6:45), is comprised of an introduction (0:00–1:27), an interplay between the boy's voice and the concrete sounds (1:27–3:40) and finally the concrete sounds alone (3:40–6:45). Although each subsection possesses its own spatial character, the whole section is contrapuntal. The section begins with a
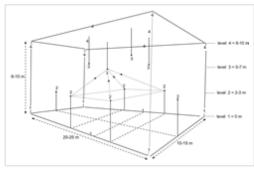
Figure 3. Diagramme showing contractive movement over the speaker setup for Christian Calon's *The Standing Man*. [Click image to enlarge]

soundscape, first with the sound of water and then breathing, walking, insects and birdcalls, which move together slowly, over one-and-a-half minutes, from one corner to the centre of the space. The type of movement is dispersive — the sounds expand from one spatial position, loudspeaker 12 (the second loudspeaker on the first level), to a space comprising loudspeakers 13, 16, 21, 22, 23 and 24. The introductory character of this section is thus reinforced through this spatial movement: from a corner (far) to the centre (close), comparable to the appearance of an actor on stage in a theatre performance. In addition, the presence of a subjective viewer — whence the title of the work, *The Standing Man* — is stressed by the sounds of breathing and walking. The soundscape of the introduction is moved to the background with the entrance of the boy's voice, and eventually fades out slowly. The second subsection begins with the word "Menschenbrüder" (at 1:27). Just as a solo singer in an Italian opera slips into the foreground after an instrumental section, the boy now takes the lead role. His voice, both here and throughout the whole composition, is placed on the third level (i.e. on loudspeakers 31, 32, 33 and 34). The untransformed character and static projection of the voice on four centred loudspeakers ensure both that the boy will be clearly heard everywhere in the auditorium and that, unlike the world, the voice remains invariable, much like a holy testament. This subsection is outlined by an interplay between the voice of the boy and a polyspatial overlay of repetitive air sounds, which, with their rotary movements, provide a contrasting texture. The air sounds emerge first starting at 2:11 and, after a short break, interact with the vocal part again (2:19–2:35). The air sounds consist of different sound layers, both transformed and untransformed, that move in circles from the second up to the fourth level. The interplay between the boy's voice and this polyspatial part continues through to 3:40, when this subsection comes to end with the words "er möge uns verzeihn" ("He wills to absolve us all"). The last subsection features rotary sound movements, which, in the absence of the boy's voice, lend an abstract character to the music. The air sounds, which until now have been statically confined to their loudspeaker levels and functioned as part of a contrapuntal texture, directly address the listener through the application of the Doppler effect, with sounds approaching (6:00, 6:26, 6:34) or moving off into the distance (6:14). In addition, the sound spectrum is extended through the use of bell sounds and medieval instruments. A water drop (6:43) ends the section.

The second section is titled "Cri" (dur. 3:32) is, along with "Avion ruisseau", one of the shortest sections of the composition. "Cri" (Cry) is divisible into two subsections, an introduction and a main part. The section begins with a complex of air and insect sounds, tones, and the noise of a motorcycle starting up, all confined to the second level of loudspeakers (Fig. 5). A fluttering bird, moving away from the listener, replaces the sound complex after approximately fifteen seconds. The bird is placed, in a nod to realism, high up on the fourth level, where the music gradually

1. The spectral changes of this tone constitute the most interesting aspect of this section, and would make for an interesting spectogramme analysis in a further study of the composition.

turns into different kinds of air noises that constantly fade in and out. Here, unaltered sounds and metamorphoses alternate. The air sounds now have an abstract character that is enforced with a high tone (beginning at 0:38). The tone lasts approximately two minutes, and over this duration goes through different modifications in spectrum, dynamics, density and tone colour. (**1** <#1>) The tone's volume builds to four increasingly intense climaxes before

fading to the background in time for the entrance of the boy's voice. In the spatial arrangement, the tone moves from bottom to top, beginning on the first level, rising directly to the third and finally ending on the fourth level. With the recitation of the text (starting at 2:38) the dynamics of the tone are regulated according to the time structure of the boy's voice in such a manner that the voice and the tone together form a coherent texture. The "jerky" tone clearly mirrors the boy's text: "niemals sind wir ruhig, keinen Augenblick" ("Never do we have rest").

The third section, "Midibahn", is the longest section of the composition (dur. 14:32) and is characterized by the absence of the boy and a predominantly symmetrical form that ties together its two rather different subsections. "Midibahn" (Midi Train) is, in a way, the instrumental section of *The Standing Man*, a primarily vocal composition. The first subsection (dur. ca. 7:00) is separated from the second subsection (dur. 7:24) by a transitional sound. The first subsection is a soundscape built on birdcalls and the sounds of water, wind and insects. This is similar to the soundscape of "Kouchi" with the difference that the sounds here are projected over loudspeaker pairs 11 and 41, 12 and 42, 14 and 44, and 15 and 45, creating an enveloping sound environment. This soundscape fulfils two functions: first, it forms a sound field in which the insects, with their continuous movement on the second and third levels, take the lead
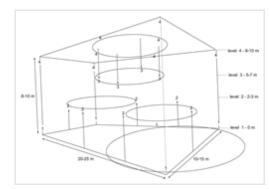

Figure 4. Diagramme showing contrapuntal movement over the speaker setup for Christian Calon's *The Standing Man*. [Click image to enlarge]

role (starting at 1:16 and lasting 1:38); second, it acts as sound material that serves as a formal element through computer-assisted processing. The subsection is divisible into three parts: an untransformed soundscape with static and dynamic elements, a metamorphosis of this soundscape (starting at 2:54) and, finally, the recapitulation of the first part. A car crossing the space from loudspeaker 11 to 14 (starting at 7:01) connects the two parts of this section. The second subsection resembles the first subsection, particularly in its formal structure. Here, too, there is a static sound field with dynamic elements represented, which, after an exposition, goes through a transformation and returns again to its initial form. The sound environment this time is a train station decorated with sounds of medieval instruments, which together as man-made sounds stand in contrast to the natural sounds in the first subsection. The static station sounds and the medieval instruments at first alternate with each other, projected on the loudspeakers on the first and the third levels. Dynamic elements emerge first at 10:29, where different ascending and descending tone scales (as with the insect noises) on the second level simulate approaching and distancing trains. The transformation of the sounds begins at 11:09. The sounds return to their original form very quickly (12:05) in comparison to the first subsection.

In the fourth section, "Scratch" (dur. 11:11), the vocal part is present once more and pulled strongly into the foreground. It consists of three subsections: an introduction, a main part and a coda. As the title suggests, scratching sounds are the most important sounds in this section. It begins with a sound complex constructed from air sounds of different kinds, which are variously projected punctually, contrapuntally and in a completely unstructured manner in the space over three minutes. The character of this introduction is clearly chaotic, standing intentionally in contrast to the next subsection that, although still chaotic, unpredictable and spontaneous in its sounds, is at least spatially structured. The spatial organization here is based on the spectral allocation of the space and the assignment of different sound registers to different loudspeaker levels. That is, the highest sounds are projected on the fo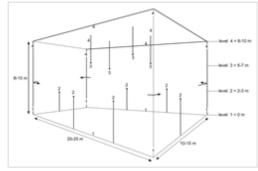urth loudspeaker level and the lowest sounds on the first. The third loudspeaker level, as in other sections, is reserved for the boy. The second subsection

Figure 5. Diagramme showing linear movement over the speaker setup for Christian Calon's *The Standing Man*. [Click image to enlarge]

begins with scratching sounds, which are emphatically divided up five times by bell sounds (3:55, 4:38, 5:58, 6:20 and 6:33). They then pull into the background (starting at 6:43), accompanying the boy's voice and filling in its pauses.

More than before, the voice of the boy is the centre of attention. The background noises are organized in such a way so that the task of the subsection is primarily to deliver the text clearly. The recitation is interrupted three times, by bell sounds (6:56, 7:38) and a breaking sound (7:19), all without negatively affecting the semantic structure of the text. Three further bell sounds (9:37, 9:56, 10:13) lead this long subsection (over 7:00) into the next subsection (0:40), which reprises the first part's sound content and spatial character to end the section.

The fifth section, "Avion ruisseau" (3:33) has three subsections of a static character, marked on the one hand by the choice of a certain sound material — such as water drops, door sound or bells — and on the other hand by means of static sound positioning. The first subsection (dur. 1:32) works like an introduction. The second subsection (dur. 1:27) can be regarded as the main part of the section, while the last subsection (only 0:34) works like a coda. "Avion ruisseau" begins with the sound of walking heard on the right side of the first level. Shortly thereafter, this is mixed with water noises across the entire first level (starting at 0:14). The presence of the "standing man" is felt again here in what is by now a familiar sound environment, reminiscent of the introduction of "Kouchi". The sounds of a door struck twice on the second level and bells on the third level end the introduction. The main part of "Avion ruisseau" resembles the second section of "Scratch" in two ways. First, both employ sounds referencing the titles of the sections: scratching sounds in "Scratch", airplane (*avion*) and water (*ruisseau*) sounds in "Avion ruisseau". Second, the boy's recitation dominates both sections. From 1:42 to 2:57, the voice is accompanied by a split sound field comprising a static water sound on the ground (first level) and an airplane (fourth level). The water creates a sound carpet, which extends from the first to the third subsection (0:14–3:22). Conversely, the airplane is heard over a shorter time (1:32–2:57). Aside from the movement of the water drop in the next subsection, the movement of the airplane sound is the most important dynamic element of this section. The airplane begins somewhere between loudspeakers 11 and 41, crosses the implied sky of the space and ends somewhere between 14 and 44. The flowing water on the ground, the flying airplane in the sky and the boy's voice on the third level form a sharply divided and differentiated sound environment. The third subsection is characterized by an interplay between the boy's voice and the water drop. This is reminiscent once again of the structure in "Kouchi" (boy and repetitive air sounds) and "Scratch" (boy and bells), in which the breaks of the recitation are filled in with other sounds. In this short subsection, the sound of the water drop, processed with reverberation, is spatialised in an interesting manner. The reverberation of the water drop is a dispersive movement, leading the water drop from the third level to loudspeakers 13, 25, 16 and 26 on the first and second levels. The impression is as though the water drop falls down from the third level, hits the ground and sprays outwards.

The sixth section is titled "Effacement" (5:43) and can be regarded as an extension of "Avion ruisseau" —the dominance of the vocal part, which had characterized the music from the fourth section ("Scratch"), is continued here. The formal structure of "Effacement" (Deletion) again reminds one of the three-part form in "Avion ruisseau" and "Scratch", in which an introduction, a main part and a coda are distinguishable. The subsections differ here particularly in duration (1:15, 2:25, 1:58) and sound organization, whereby the interplay between the vocal part and other sounds is made prominent. The spatial character is marked by the presence of static sounds on the second to the fourth levels, relating strongly to the third stanza of the poem. The introductory subsection begins with the sounds of medieval instruments, which were presented for the first time in "Midibahn." The instruments rotate on the second and fourth levels
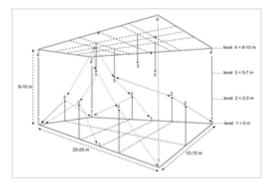

Figure 6. Diagramme showing geometrical movement over the speaker setup for Christian Calon's *The Standing Man*. [Click image to enlarge]

at the beginning and continue through the whole of subsections one and two, stopping only approximately one minute after the beginning of the coda (4:40). The musical role of these instruments in "Effacement" differs from that in "Midibahn" in that they are used here not only for their bright sound colour and historical associations, but also partly because of their newly won strength of musical expression. For example, motivic contributions of these instruments (1:05, and in particular 1:29, 2:02, 3:17) are worth mentioning — the instruments abandon their repetitive, static and accompanimental function to interfere musically with the voice and thus (particularly at 1:29) help

to create a sense of drama. Another element that strongly connects "Effacement" to "Avion ruisseau" is the water drop, which, unlike in "Avion ruisseau", is presented without reflection. The water drop plays an especially important role in the first subsection. This is because of its rhythm, which is heard as irregular, while being consistently arranged at intervals of 10 and 13 seconds. This water drop organizes the temporal structure of the whole section. The interplay with the voice, exactly the same as in "Avion ruisseau", is similarly based on a temporal function. The last subsection, the coda, consists mainly of transformed sea sounds on the first level. This ending serves to unify *The Standing Man* with an element of untransformed nature in the world of metamorphoses.

Conclusion

The Standing Man, a composition by Christian Calon, has been analyzed here in detail. *The Standing Man* is both a typical and an atypical composition in the framework of the acousmatic music tradition. In a sense, it is typical because of its narrative structure, method of sound modification and imaginative spatialization; it is atypical because of its form as a sound installation, its length (42 minutes) and its realization as a multi-track, rather than stereo, piece. The polyphonic texture of the composition, the division of the performing space into four different levels and the combination of real and transformed sounds lends vitality, variation and attractiveness to this music that would otherwise be a contemplative, introverted and passive experience for the listener. *The Standing Man* doesn't unfold in portions of time, but through spatial sound images. The geometrical and architectural treatment of the space in different organically organized sections strengthens and enriches the expressiveness of the musical language of the composition. Calon succeeds in creating an innovative acousmatic music composition with *The Standing Man*, although faithfully loyal to the core techniques of the tradition.

Bibliography

Calon, Christian. Work description in Inventionen programme. September 1996. Available online at **http://alcor.concordia.ca/~kaustin /cecdiscuss/1996/0915.html** <http://alcor.concordia.ca/~kaustin/cecdiscuss/1996/0915.html>

_____. Personal Interview by the author in Berlin, November 1997.

Biography

After completing his studies in electrical engineering at Sharif University of Technology (Teheran, Iran), Bijan Zelli immigrated to Sweden, where he changed his career from engineering to music. He received his Master in Music Education in 1996 and his PhD in Musicology in 2001. He moved to the United States in 2007 and currently works as music educator and researcher in San Diego, California. Bijan Zelli has performed many music lectures in different countries and publishes academic papers in German, Farsi, Swedish and English. His article "**The Choreography of Noise/ Analysis of Henry Gwiazda's 'buzzingreynold'sdreamland'** <../14_4/zelli_gwiazda.html>" was recently published in *eContact!*
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