

*John Cage and Alvin Lucier performing
Christian Wolff's For 1, 2 or 3 People,
Crowell Hall, Wesleyan University,
February 21, 1988, as part of the
John Cage Symposium*

photo by Nancy Walz

**THE HUMBLE
BALLOON PROVES
TO BE NOT JUST
A TOY, NOR A MERE
NOVELTY, BUT
A VERSATILE
INSTRUMENT OF
ENDURING VALUE...**

My Beautiful Balloon Part 1

**A History of the Balloon as
A Sound Producer in Experimental Music**

Improvisation on Tenor Balloon by Judy Dunaway at MEX, Dortmund, Germany, 1996.



photo by Franz Luthie

by Judy Dunaway

Since around 1990 I have been writing compositions for balloons—over thirty works to date—and using balloons as my main instruments for improvisation. People often ask me, “How did you come up with the idea of playing balloons?” My initial influence was improviser Eugene Chadbourne, from whom I borrowed the idea of using the balloon as a preparation element for electric guitar. But more importantly, the idea is rooted in the philosophies of John Cage, and influenced by the Fluxus movement, other avant-garde composers of the '60s, free improvisers, sound artists, creators of experimental musical instruments, and electroacoustic explorers. In the process of writing my masters thesis at Wesleyan University, I had the opportunity to research more thoroughly the development of my favoured instrument. I discovered an abundance of composers and musicians who had incorporated this multi-dimensional sound producer into their work throughout the latter half of the twentieth century. In fact, one can almost trace the development of experimental music by simply following the trail of balloons.

Rubber was discovered by the Mayans and later transported and intro-

duced to the Western world by Christopher Columbus. Early forms of the rubber balloon, probably more closely resembling what we would call today a “whoopee cushion,” appeared throughout the nineteenth century. Various methods for processing rubber were developed in the nineteenth and early twentieth centuries, eventually leading in the late 1920s to the first mass production of modern toy balloons. Interestingly, this coincided with the invention of recorded sound, and balloons were reportedly used for sound effects in some of the earliest Disney cartoons. Since their creation, balloons have served as noise-makers for children and at parties, and balloon sounds have been featured by comedians and clowns.

As experimental music emerged in the twentieth century, composers were looking for new sound sources. The unusual and irreverent sounds of the toy balloon must have made it an attractive candidate for representing insurgent ideas.

In the early '50s, John Cage advocated the liberation of sounds from abstract ideas, focusing instead on their acoustic details and their surrounding environments. He believed that everyday life was more interesting than so-called “art,” and that this theatre of life was

more than simply an aural experience. In 1963, as part of the first Annual New York Avant Garde Festival, Charlotte Moorman included a balloon pop in her interpretation of Cage's *26'1.1499* for a string player (Moore 1987, 24).

Balloons appear frequently in the works of early '60s avant-garde composers and artists associated, both directly and indirectly, with the Fluxus movement. Fluxus, which emerged around 1960, strove to break down the differences between art and daily life. It grew out of Surrealism, Dada, and the philosophies of Marcel Duchamp and John Cage, and was spearheaded by the artist George Maciunas. While the Fluxus movement was more a community of artists than a particular philosophy, at different times this group emphasized certain aesthetics. In the early '60s, in an effort to steer their work away from, as Maciunas' stated, “‘intellectual’, professionalized, and commercialized culture,” Fluxus focused on events that embodied “a general rejection of art as separate from ‘reality’” (Smith 1998, 94–5). The balloon represented well the ideals of early Fluxus, in that it was an everyday object, had visual appeal and theatrical potential, and signified, with its comic and rude sounds, a rejection of high cul-



photo by Tom Nunn

The Crustacean, a balloon-mounted instrument invented by Tom Nunn in the late 70s. A metal plate with protruding rods is placed on inflated balloons in buckets.

ture. In Ben Patterson's *Septet from Lemons* (1963), seven steam kettles were placed on a stepladder, small balloons were affixed over the spouts of the kettles, and alcohol burners were then lit under the kettles. As the water heated, the variously coloured balloons inflated to produce a loud "flute concert." Performers threw darts at the balloons, which then exploded. In Maciunus's own *Balloon Ticket*, presented at the Flux Orchestra concerts of 1964 and 1965, imprinted balloons were used as ticket stubs for the audience. The balloon was inflated by the ticket-purchaser to gain entry to the concert, and then popped by the ticket-taker with a pin, thus breaking down the traditional boundaries and making the audience members and ticket-takers part of the performance. Other Fluxus works of this period include Maciunus's *Balloon Javelin* (1965) and *Balloon Racket* (1965), Ay-O's *Balloon Obstacle* (1966), and realizations of works by Robert Watts (Hendricks 1988, 321–2).

Mauricio Kagel, one of the best-known members of the European avant-garde of the '60s, includes balloons in his groundbreaking work *Acustica* (1968) for experimental sound-producers and loudspeakers. This explicitly notated work combines regular instruments, objects of daily life, and technology of the day. The work is significant in a historical context, as it presents numerous innovations in graphic notation, mixed media, and a combination of aleatoric procedures, performer choice, and improvisation to achieve indeterminacy. One of the

most fundamental motivations behind this piece is Kagel's desire to extend the traditional sound vocabulary through non-traditional means.

The piece functions on two levels: tape playback and live performance. The performers choose from 152 separate pages of scored material, each player finding for him / herself the pages he / she wishes to realize in the course of the performance. Each page features a particular object or instrument used as a sound producer. The introduction to the score gives a listing of the sound producers, with construction methods, approximate measurements, where appropriate, and photographs. A special graphic symbol is assigned to each sound producer. The tape composition is a recording of the same sound producers as are used by the live players. Additionally, a "Sound Director" mixes and manipulates the piece through specifically placed stereo loudspeakers, and also makes, through this means, improvisational contributions to the work.

Acustica includes seven pages of balloon parts, notated by a combination of drawings, written description, and traditional and non-traditional notation. The balloon sounds described include: the sound of inflation; a double-reed effect created by stretching the neck of the deflating balloon with the fingers and manipulating it to achieve various pitches and sound effects; deflation of the balloon into the mouth while making various mouth shapes; rubbing the balloon in various manners; and combining the balloon

with a trombone mouthpiece to achieve additional effects.

In the late '60s composer Anthony Braxton realized the practical considerations and implications of the balloon as a sound producer in his work. Balloons first appear on the 1969 recording of Braxton's *B-X-∞ MO 47A*, (from *Sixteen Compositions* [1966–72]) on BYG Records, with Leroy Jenkins, Steve McCall, and Wadada Leo Smith. Braxton's *Composition 25* (1972) calls for 225 balloons in the "unit E" section of the piece. In Graham Lockes' "Forces in Motion," Braxton is quoted concerning *Composition 25*:

I didn't have enough money for the electronic equipment that could make those kind[s] of sounds. I'm interested in the expanded reality of sound opened up by the post-Webern continuum, but I'm restricted to using cheap materials. So, you know, I was walking down the street one night and I thought, Hey, I gotta have balloons! (Locke 1988, 27)

In conversation with me at Wesleyan University, Braxton said that the balloons were used as improvisational tools, and he was not interested in writing special notation for them. For *Composition 25* he prepared a small table with balloons and other items for each of the fifteen musicians. In the latter half of "unit E," the musicians are instructed within the actual score to "squeeze, scrape and pop" the balloons. Braxton thus establishes a completely new sound environment within the piece, without using expensive

electronics. Additionally, he temporarily frees his musicians from the usual constraints of their instrument, encouraging new ideas for collective improvisation.

Directly or indirectly following Braxton's lead, many musicians emerging on the free improvisation scene in the '70s incorporated balloons into their regular palette of sounds. Improvising vocalist and percussionist David Moss, who began using balloons around 1975, says:

I was looking for different ways to make continuous sound; not the usual percussion style of mallet rolls or tam-tam sustains. At that time I was experimenting with finding objects whose sounds would blend and contrast interestingly with my voice. So the balloon was a natural extension of my use of air / mouth sounds.

Moss rubs the balloons, sings through them, puts objects inside and shakes them to generate pulses or sustained sounds, and uses them instead of drumsticks to hit drums and other instruments for a soft, high-speed attack.

Guitarist, singer, songwriter, and free improviser Eugene Chadbourne has used balloons prolifically throughout his career. He states, in reference to a music column he authored in the '70s for the *Calgary Herald*, "I was first inspired to use balloons when I had a chance to interview a soundman for Disney, one of the oldest guys ... he told me about many different sound effects that were created either with balloons or condoms!" Chadbourne's music is a combination of country music, folk music, and free improvisation, much of it including his own politically pertinent lyrics. He has released hundreds of recordings, and says "I believe pretty much there are some balloons or balloon-generated sounds on every single one of my albums." Chadbourne describes his use of balloons as "kind of like using different picks, or a bow, or a fuzz-box, or whatever ... [The balloon] is a really versatile object that can be used in many, many ways to make or alter sounds." He uses them both as a preparation element on his guitar and separately as part of his "performance vocabulary."

In the realm of European improvisation, the liner notes of a 1978 LP tout the abilities of British percussionist Terry Day, a contemporary of Evan Parker and

Steve Beresford, proclaiming his "highly developed technique on the balloons, using fingers, mouth, escaping air and so on" (Cusack et al. 1978).

In the '70s and '80s, experimental musical-instrument builders saw the use of new instruments as a way to free themselves from traditional ideas of music-making. These improvising musicians were inspired, in part, by the ideas of Harry Partch, who rejected Western European music, created his own instruments out of found materials, and then developed an entire body of musical works based on these instruments. These artists were also influenced by the work of Bernard and François Baschet, two brothers who began designing and building experimental musical instruments in Paris in the 1950s. The Baschets' art is not usually considered part of the avant-garde, due to their focus on a more traditional idea of beauty, but they were innovators in their creation of sound sculptures, children's instruments and environments, concert instruments, and large-scale musical sculptures. Some early Baschet instruments used specially made plastic balloons as sound radiators (the surface acting as a soundboard) and vibrational insulators (balloons used in mountings for other sounding components, allowing them to vibrate freely without shaking other nearby components).

In California in the late '70s, Prent Rodgers created balloon flutes by stretching and fixing balloon rubber over either end of a short transverse flute with a blowhole in the middle, and then pressing the balloon pieces to change the pitch. Rodgers also developed ideas of both blown and plucked membranophones, made by stretching and affixing balloon rubber over one end of a tube. In the '80s another Californian, Tom Nunn, created the "Crustacean": bowed stainless steel rods mounted on a balloon base, using balloons as a vibrational insulator. Nunn also made balloon drums in tuned sets by stretching the rubber over the tops of tubes.

In Europe in the '70s, Belgian instrument builder and singer Moniek Darge used a balloon as an extra resonator underneath the strings of her "Ballonofoon," a bowed instrument. In the '80s, Swiss tuba player Leo Bachmann created a simple variation of

a Scottish bagpipe called the "Leophone." For the "Leophone," the mouthpiece of an inflated balloon is attached to a tube with toneholes, and then the player holds the balloon to the side of the tube in such a way that only a small amount of air escapes, causing the membrane to vibrate and produce a tone.

The balloon appears in sound installations as early as 1978, when multimedia artist Laurie Anderson used a rubber sphere to create her Acoustic Lens at the Franklin Institute in Philadelphia. The sphere (which appears in photographs to be a large balloon anchored in a frame) was inflated with CO₂ and inserted into a wall between two rooms. One room contained a tape player which played a recording of a person whispering slogans by Benjamin Franklin. The other room, containing a statue of Franklin, was silent. Working on optical principles, the lens focused the sound from the tape player to the exact point in the other room at which a viewer would encounter the statue of Franklin. The viewer would stand near the statue, with no loudspeaker visible, and hear the whispered slogans (Anderson 1994, 54). Sonic artist Alvin Lucier employed the same type of acoustic lens principle for his piece *Heavier Than Air* (1998). In this piece, several performers whisper sentences through CO₂-inflated balloons held in front of their mouths while slowly changing the direction of the lens from left to right, thus focusing the sounds in various parts of the room.

New styles that melded a variety of new musical and artistic ideas emerged in the '70s and '80s. Some composers saw the exclusive use of the large and unusual sound vocabulary of balloons as a way to create alternate soundscapes.

British composer David Bedford's *Balloonmusic 1* for any number of players from 2 to 1,000, each with 2 Balloons, a pin and their voices (1973) was commissioned by Universal Edition as part of their *Music for Young Players* series of works written by contemporary composers for school-aged children. The piece has, however, functioned as a contemporary work for adults as well, and has been presented at numerous new music concerts and events.

Bedford states that the original intention of the piece was for "young children to get to know the sounds of con-

temporary music by participating in it themselves." Though the form is clearly defined and somewhat classically structured, the piece steers clear of any classical sounds or harmonies. The score is written in the form of a chart, with events designated to happen within a certain time frame. Two groups of players are guided by a conductor. Throughout the piece, the balloon sounds are usually imitated and doubled by the voices of the players. The repeated A section consists of ascending and descending glissandi, created by releasing air through the balloon's double-reed-like opening. Subsequent sections feature the two groups in unison actions, such as rubbing the balloon to generate a low loud rasp; rubbing it continuously for a high squeak; producing the ever-classic "rude" sound, as air is released in short bursts; and producing the sounds of inflation. The piece ends with balloons both popped and released into the air.

While Bedford himself acknowledges that the piece is humorous, it can be related, if analyzed in a serious light, to the '60s works of Penderecki, Ligeti, and Lutosławski. Sounds happen within general time frames, so there is no exact synchronization between individual players. High frequency glissandi ascend and descend in potentially massive chromatic tone clusters, particular pungent if the sounds are doubled by the high voices of young children (as originally intended). The continuous rubbing section toward the end of the piece crescendoes into a murky yet intense polyrhythmic mass of squeaks. Pitches are not defined and the piece is free of any conventional rhythm. (Note: Bedford has not yet written a *Balloonmusic 2*.)

In 1988 Marion de Laet, a student of Frederick Rzewski and Louis Andreissen at the Royal Conservatory in Den Haag, the Netherlands, wrote a composition for eight balloons entitled *Air*. De Laet's compositions were primarily multimedia, and she saw her use of balloons in the context of creating both an aural and visual experience. She made a detailed index of the various sound possibilities, including the double-reed sound and the sounds of rubbing, plucking, and popping, and viewed the balloons as constituting a small wind orchestra, fulfilling the roles of brass, strings, and percussion. She used four

different sizes of balloons, and, noting that the different sizes of balloons had different ranges (the larger the balloon, the lower the pitches yielded), she designated them soprano, alto, tenor, and bass. The work is fully scored, using a combination of traditional and non-traditional notation, including special symbols that represent the various balloon sounds. The première of this composition was videotaped and later presented on Dutch television.

Another artist who has worked with the balloon, exclusive of other instruments, is percussionist Ricardo Arias, a Colombian-born improviser who studied in Spain and the Netherlands before settling in the U.S.A. a few years ago. Around 1987, in Colombia, Arias began using balloons as part of his improvisational sound vocabulary. In 1993 Arias created his "Balloon Kit," (a take-off on the term "drum-kit") an array of balloons of various kinds mounted on directors' chairs. Arias describes his uses of the balloons in two ways: as elastic "aerophones" and as elastic "membranophones" (percussed, rubbed, scratched, snapped, tapped, plucked, etc.) (Arias 1988, 53). Arias states, "I play [the balloons] mostly with my hands and forearms and with the aid of extraneous objects (pieces of Styrofoam, rubber bands, cocktail mixers, etc.)." Arias's musical philosophy combines the ideas of the experimental musical-instrument builders and the thinking of Anthony Braxton, in that he is interested in making "complex textural music without reverting to either traditional instruments or electronic devices" (Arias 1997, 33).

While some artists have seen balloons as an alternative to electronics, many electroacoustic composers have found balloons to be rich source material for electronic processing. Toy balloons are acknowledged as one of the principal sound sources in British electroacoustic composer Jonty Harrison's *Hot Air* (1995), which was commissioned by the Groupe de Recherches Musicales, and received an honourable mention at the 1996 Prix Ars Electronica in Linz, Austria. Balloon sounds serve as the starting point from which Harrison sonically free associates, introducing various impressions of air throughout the piece, and exploring the textural sound material in minute detail via electronic processes

(Harrison 1996). Swedish composer Pelle Dahlstedt's *Gummi* (1994–96), which received the Prix Résidence in Bourges, France, in 1996, consists exclusively of a huge bank of recorded balloon sounds. The conceptual focus of the piece is speeding up and slowing down, rather than maintaining steady pulses. Dahlstedt relied mostly on extensive editing to create his piece, with a particular emphasis on looped attacks.

Throughout the history of experimental music, balloons have been used in works in which any sound producer of indeterminate nature may be employed (including the aforementioned 1963 Cage performance by Charlotte Moorman). Photographs of a 1968 performance of Cornelius Cardew's *Treatise* (1967) show David Bedford and Francine Eliot playing balloons (Nyman 1974, 118). Balloons were played by John Cage himself, along with Christian Wolff and Alvin Lucier, in a 1988 performance of Christian Wolff's *For 1, 2 or 3 People* (1964) at Wesleyan University in Connecticut. I played balloons in John Zorn's *Cobra* (1984) at the Knitting Factory in New York City in July 1992. These are only a few examples of such use.

This article by no means represents a comprehensive record of all instances of the use of balloons in experimental music. It is intended only as an overview, the main point being to show that the rubber toy balloon appears frequently throughout the major experimental music movements of the past forty years, thus indicating the amazing potential of this simple object.

My own work, then, does not come out of a void. Creating a large body of work for balloons has allowed me to develop a vocabulary outside the realm of classical heritage. It has inverted the Fluxus ideal to the perverse extreme, raising the ordinary and mundane to high art. I have fetishized this simple cheap toy in my music, as the violin has been fetishized for centuries by Western-European-influenced composers.


My body of work for balloons has evolved through a variety of compositional techniques and ideas. Many of my early works, such as *Balloon Trio* (1990), use timings and text instructions, and employ varieties of sounds. Works such as *Piece for Solo Tenor Balloon* (1996) use special graphic notation and dia-

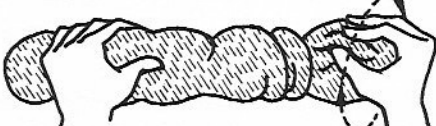
Excerpt from David Bedford's Balloonmusic 1

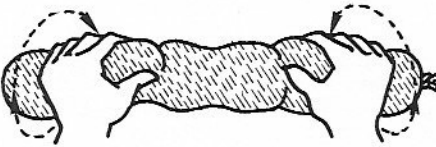
	1	2	3	4
	15 secs.	15 secs.	10	10
Notes for conductor	Both groups should have their balloons blown up before you start the piece.			
GROUP 1	Let air out of your balloon slowly, holding the neck to produce a continuous squealing sound.	Blow up your balloon again	As before, but this time listen to the sound your balloon is making, and try to imitate it with your voice.	Continue as previous section. If your balloon runs out quickly, blow it up; start again.
Notes for conductor				
GROUP 2	SILENT	Try to imitate, with your voice, the sound you have just heard from Group 1.	SILENT	Let air out of balloon slowly, holding the neck to produce a continuous squealing sound. Listen to sound your balloon is making, and try to imitate it with your voice at the same time.


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Excerpt from Mauricio Kagel's Acustica

A  Mit einem, zwei oder mehreren Fingern der gleichen Hand längs des Ballons reiben.

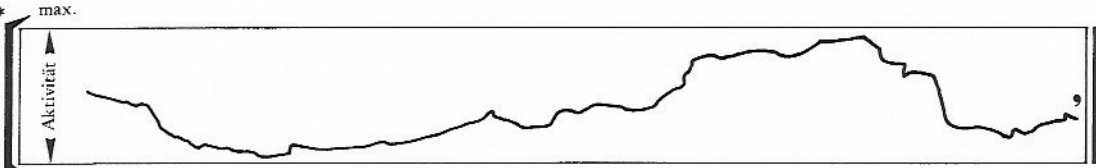
B  Ballon mit einer Hand drehen und mit der anderen leicht berühren.

C  Beide Hände alternierend: Ballon leicht drücken und gleichzeitig etwas drehen.



LUFTBALLON

LUFTBALLON



Aktivität

max.

min.

A, B und C in beliebiger Reihenfolge ausführen

* Ad lib.: während dieser Aktionen ruht der Luftballon auf einem Fellinstrument (z.B. Große Trommel).

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grams to support a more minimalist concept. I have created several electro-acoustic pieces, some with manipulated balloon sounds, as in *Rubber Sampler Quilt* (1997), and others with edited live sounds, as in *Champagne in Mexico City* (1997) (a collaboration with Dan Evans-Farkas). I have made soundscapes, such as "Everybody Loves Somebody Sometimes" for eight balloons (1995), satiric performance pieces, such as *Pop Music* (1999) (a piece about copyright), and sound installations, such as *Balloon Installation for the End of Time* (1999). In my current art-rock project, Shar, with bassist Ilja Komarov and drummer Trixa Arnold, the balloon replaces the electric guitar as an essential component of a rock trio.

My recent work focuses on each sound capacity of the balloon in a singular fashion—as a reed, as an orb-like string, and as a resonator. The next instalment of this article ("My Beautiful Balloon, Part 2," in *Musicworks* 82), will discuss these three sound capacities in detail, as well as orchestration techniques and notational systems developed for the instrument.

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Judy Dunaway's compositions and improvisations for balloons have been presented over the past eleven years throughout Europe and North America, including performances at Lincoln Center Out-of-Doors, The Swiss Institute, The Guelph Jazz Festival, Performance Space 122, Podewil, The Knitting Factory, The Kitchen, ZKM, Experimental Intermedia, The New Museum of Contemporary Art, Roulette, Hear Theatre and The Alternative Museum. Composers Recordings, Inc. (CRI) released a full CD of her works for balloons in 1998. Judy and the Flux Quartet will premiere her new composition, For Balloon and String Quartet, commissioned by the American Composers Forum, at Roulette in New York City on December 5, 2001.

BALLOONS AS SOUND PRODUCERS

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RÉSUMÉ FRANÇAIS

Le ballon de caoutchouc a été fréquemment utilisé dans de nombreuses pratiques musicales expérimentales des quarante dernières années, ce qui témoigne du potentiel extraordinaire de cet objet tout simple. On pourrait presque retracer le développement de la musique expérimentale en suivant l'itinéraire du ballon. Cet article traite de l'emploi des ballons dans les œuvres de John Cage, George Maciunas, Ben Patterson, Mauricio Kagel, Anthony Braxton, David Moss, Eugene Chadbourne, Laurie Anderson, Alvin Lucier, ainsi que de nombreux autres improvisateurs et compositeurs. Il y est également question du travail de l'auteur qui a composé plus d'une trentaine de pièces pour ballon et en a fait son instrument de prédilection pour l'improvisation.