

Nicolas Collins, trombone-propelled electronics, radio, tapes, with:

1. Peter Cusack
acoustic guitar, whistle :41
2. Robert Poss
electric guitar 2:15
3. Ben Neill
Mutantrumpet 1:15
4. Ben Neill
Mutantrumpet 1:32
5. Pippin Barnett
percussion :46
6. Ben Neill
Mutantrumpet :46
7. Peter Zummo
trombone :45
8. Pippin Barnett
percussion 1:14
9. Peter Cusack
Gate Crasher, tapes 1:42
10. Christian Marclay
record players 1:41
11. Robert Poss
electric guitar 2:49
12. John Zorn
alto saxophone :40
13. John Zorn
alto saxophone :46
14. Anthony Coleman
electric organ 1:24
15. John Zorn
alto saxophone :28
16. John Zorn
alto saxophone :39
17. John Zorn
alto saxophone :29
18. Peter Cusack
Gate Crasher, tapes 1:10
19. Christian Marclay
record players 1:20
20. Pippin Barnett
percussion :1:30
21. George Lewis
trombone 5:30
22. Shelley Hirsch
voice 2:29
23. Anthony Coleman
electric organ :36
24. Christian Marclay
record players 1:12
25. Peter Cusack
acoustic guitar 1:07
26. Davey Williams
electric guitar 1:57
27. John Zorn
alto saxophone :53
28. Ned Rothenberg
bass clarinet 1:33
29. Elliott Sharp
bass clarinet :35
30. Elliott Sharp
bass clarinet :39
31. Elliott Sharp
bass clarinet :50
32. Robert Poss
electric guitar 1:55
33. Zeena Parkins
electric and acoustic harps 1:32
34. Davey Williams
electric guitar 1:22
35. Zeena Parkins
acoustic harp 2:50
36. Tom Cora
cello 1:20
37. Peter Cusack
acoustic guitar :46
38. Tom Cora
cello 1:16
39. Peter Cusack
bouzouki 1:27
40. Tom Cora
cello 2:42
41. Peter Cusack
bouzouki, acoustic guitar, tuning forks 1:57
42. Peter Cusack
acoustic guitar, whistle 1:29



Nicolas Collins

100 of the World's Most Beautiful Melodies consists of 42 duets with 15 musicians in which I play an instrument that has no voice.

In the backwash of the Cagean edict that "any sound can be a musical sound," I find that I have no great instinct for originating sounds of my own, and much prefer to recycle existing ones. I love radio, bird songs, feedback, filmstrip soundtracks, fish croaks, scratched records, cheap electronic toys, the confusion and tension of a sound divorced from context -- one moment abstract, the next a recognizable tag. These have been the material and inspiration for my compositions, providing formal ideas as well as sounds: in Pea Soup (1975) feedback elicits melodies from the resonant frequencies of the performance space; a microcomputer in Is She/He Really Going Out With Him/Her/Them? (1982) acts like a 16-armed DJ cutting between multiple channels of found sound material; the players in A Letter From My Uncle (1984) send everyday sounds through "backwards" electric guitars for selective obfuscation in a wash of string overtones; in Devil's Music (1985) radio is shattered, stuttered, and reconstituted through a few hot-wired digital delays.

I never considered myself a "player." I've built dozens of instruments for manipulating found sounds, but each was designed for a specific composition and bound to it by virtue of its limitations. The system of "trombone-propelled electronics" (see Technical Notes) used on this recording is different; it has an adaptability and degree of control that have carried it through a wide range of musical applications. Combining the mechanics and iconography of the trombone with the electronic technology of record production, this gizmo has made me think like a player for the first time. This recording documents a year of that thinking.

For a composer disinclined to initiate a sound, the self-reliant instrumentalist is an invaluable resource. The musicians on this project are all virtuosos whose creativity is not bound by the need for a score. They are also people whose own work I admire, and several of whom I have worked with in the past.

For each of these improvised duets I picked an emblem of the artist's personal style -- not necessarily a "signature" characteristic, but a quirk that linked our sometimes disparate musical inclinations: Poss' perfect guitar tone, the high heterodyning of Zorn's saxophone, the simple ticks and pops of Marclay's records, Cusack's "Gate Crasher" circuitry for cutting up environmental tapes, the rapid

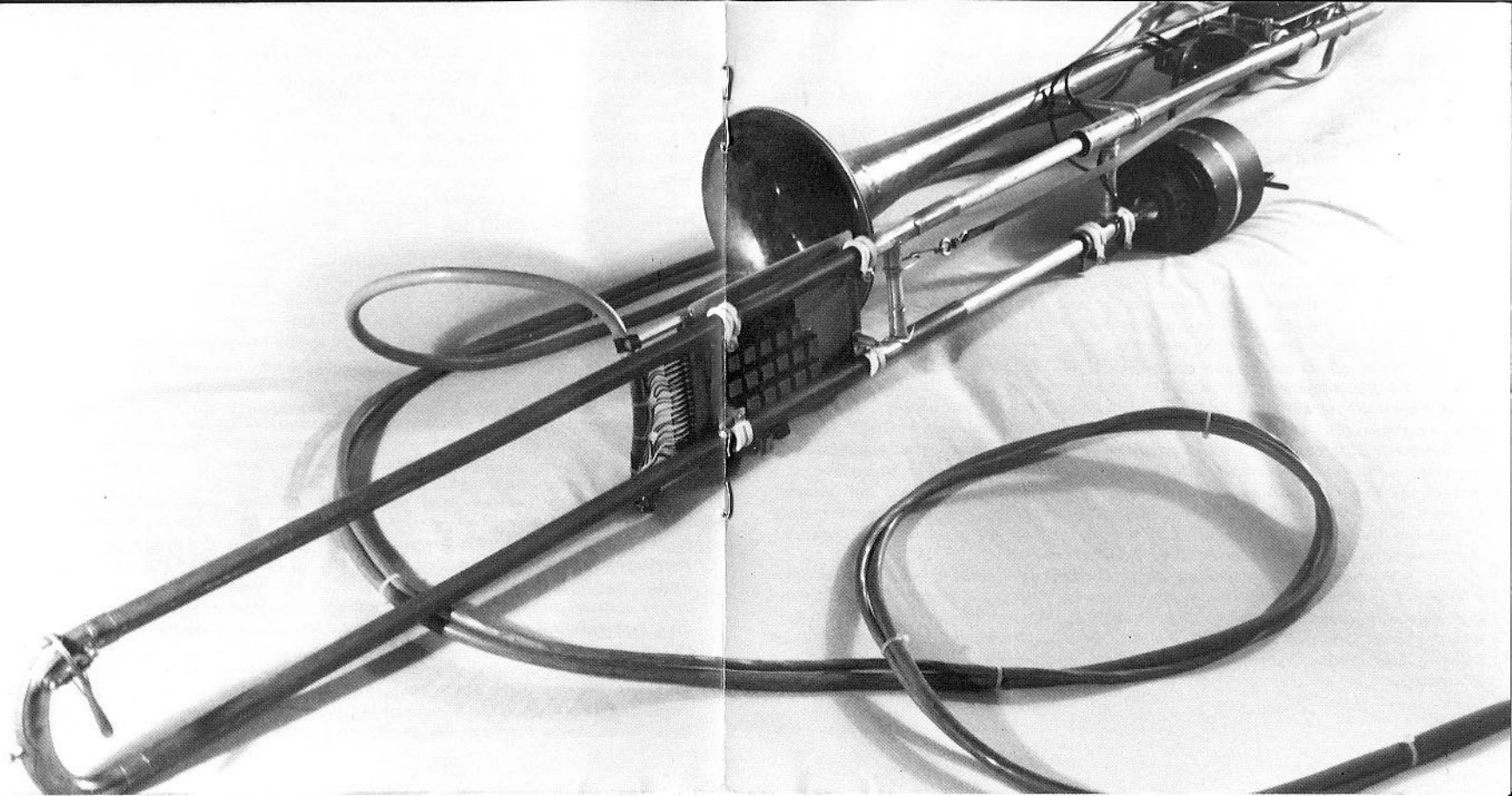
timbral juxtapositions of Neill's triple-belled "Mutant trumpet," Lewis' uncanny affinity for plumbing, the pathetic wheezing of Coleman's aged electric organ, and so on. With my retro-fit trombone I would grab fragments of the musician's performance, and loop, stutter, transpose, and transform them. Upon occasion I used the trombone to introduce snippets of shortwave radio or recordings of birds, fish, brass bands, noisy radiators, sex education dialogues, or other inspirational sound bites.

All the duets are live studio recordings with no overdubs. Their extreme brevity -- most are under two minutes -- encourages attention to sonic detail, and produces a formal clarity often lacking in longer structures. By using an instrument that literally freezes moments of performance, I tried to limit the range of musical development within each duet, and let it evolve instead across the entirety of the CD. Each duet represents a study in shared musical responsibility -- which is, after all, what good improvisation strives for -- while the sequence lies in the domain of composition. In the spirit of Cage's HPSCHD (the Nonesuch recording contained a computer-generated score for the "playing" of stereo controls,) the listener now has the option of involving him or herself in a further level of performance, by using the random access capabilities of the CD player to rearrange the 42 cuts.

Technical Notes

The instrument used in these recordings originated in my desire to combine live sampling and flexible digital signal processing with a controller that would have greater physical presence than the switches and knobs of most electronic instruments. When I began the project in 1986, there was no commercially available device that fit my requirements: real-time signal processing fell into a void between pricey instruments that sampled sounds for storage and retrieval from floppy disk, and simple digital delays for live looping. So I sought equipment I could modify to suit my needs.

For the circuitry I settled on an Ursa Major "Stargate" Digital Reverb. Its hardware design was open enough that I could build in a Commodore 64 microcomputer to provide direct control over a large range of sound parameters -- both those known to its designers, and those of my own discovery. I can



instantaneously catch a sample, make a loop, and change its length, start point, pitch, or loudness; since I have control over the algorithms used to simulate reverberation, I can also perform a wide range of unusual timbral modifications on the sound coming through the system.

For the controller I chose an old trombone I had bought for \$12.00; I never played trombone, but it reminded me of a giant slide pot, such as one might find on a huge mixer, and therefore seemed an excellent candidate for an electronic control. On the crook of the instrument I mounted a shaft encoder that is coupled to the slide via a retractable dog leash; a small keypad is attached to the slide. Pressing one of the 21 keys while moving the slide signals the computer to change a corresponding aspect of the sound. Pushing the slide out increases a value in direct proportion to distance (i.e., lowers the pitch,) while pulling it in decreases it (raises the pitch.) Somewhat like the "mouse" on a computer, the slide is thus used to adjust any of the system's variables. Additional circuitry lets me select which of eight input signals to sample or process -- these can be prepared tapes, microphones picking up players' sounds, a radio whose tuning can be controlled from the slide, etc.

A speaker-driver (from a PA high-frequency horn) is attached to the trombone mouthpiece, transforming the instrument into a loudspeaker. Moving the slide changes the acoustical quality of this speaker by reinforcing different harmonics in different positions; mutes can be used for further acoustic manipulation. A mono output from the Ursa Major is sent to this speaker, while a stereo output is sent to the main amplifiers and speakers; the performer can adjust the balance between these signals from the instrument. Since the trombone-speaker only reproduces frequencies above 800 Hz, the player can think of it as a "tweeter," complementing the extended low-end of the main outputs.

Mounted on the trombone is a standard synthesizer "breath controller," whose output is read by the computer; by blowing into it the performer can control the sample's loudness or tuning. The acoustical presence of the trombone-speaker, and the articulation of sounds by slide and breath, give touch and presence to this Rube Goldbergesque hybrid of modern digital electronics and primordial brass technology.

N.C. June 1989

Recorded at Airshaft Studio (New York City), The Kitchen (New York City), and Stichting STEIM (Amsterdam), January 1988 through May 1989. Engineers: Nicolas Collins, Matthew Covey, Bob Bielecki (Zorn tracks). Zorn tracks recorded directly to digital 2-track; all others recorded on analog 8-track and mixed to digital by Nicolas Collins at Stichting STEIM, May and July 1988, and Airshaft Studio, May 1989. Assembled on AMS AudioFile at Studio Consultants (New York City). Mastered by Michael Sarsfield at Frankford/Wayne (New York City).

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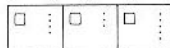
John Zorn appears courtesy Nonesuch Records.

Special thanks to the musicians who made this project possible.

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R E C O R D S

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