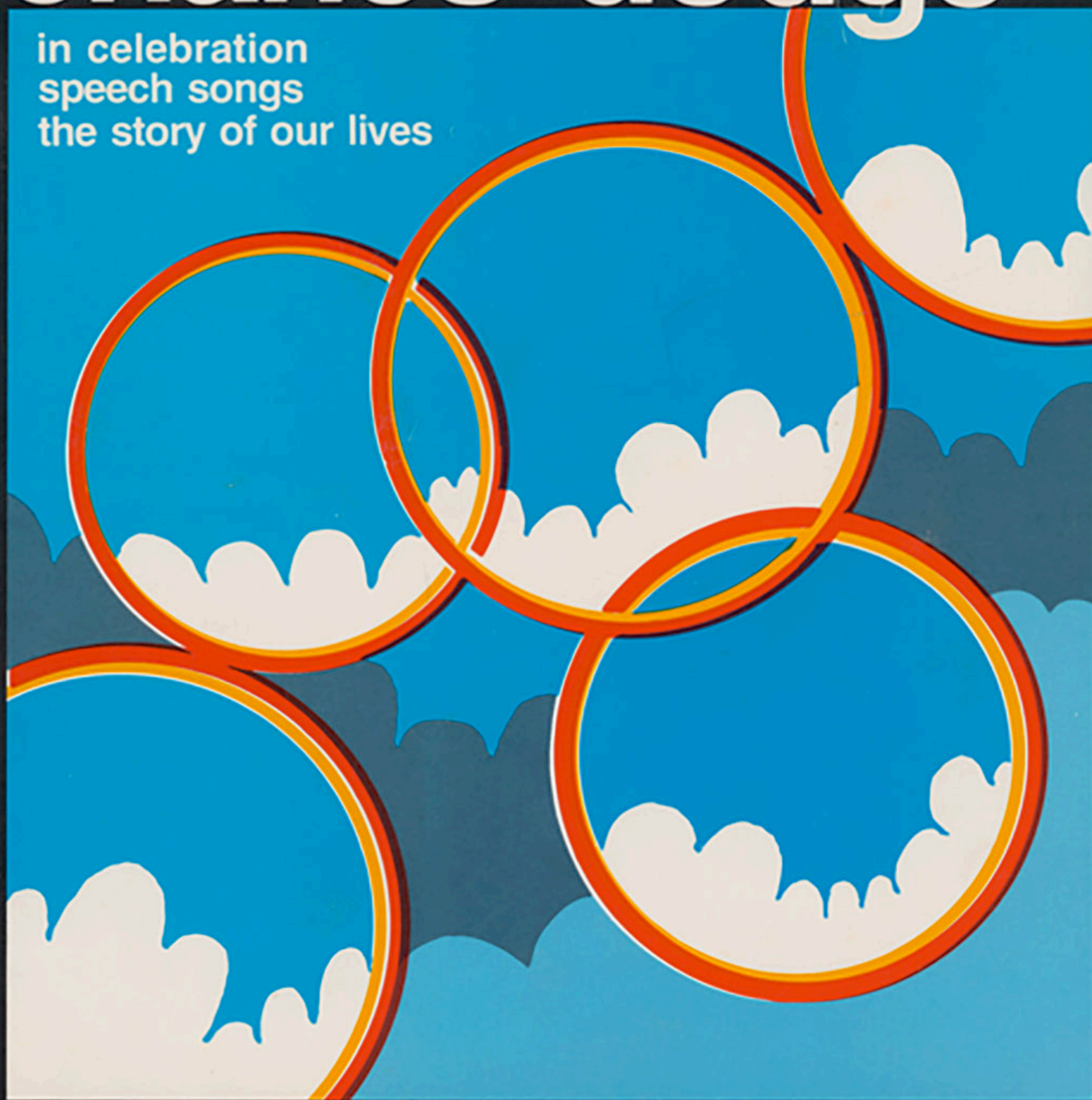


american contemporary charles dodge

CRI
348
STEREO

in celebration
speech songs
the story of our lives



synthesized voices

SYNTHESIZED SPEECH MUSIC by CHARLES DODGE

IN CELEBRATION

Realized at the Columbia University Center for
Computing Activities and the Nevins Laboratories
SPEECH SONGS

Realized at the Bell Telephone Laboratories
THE STORY OF OUR LIVES

Realized at the Columbia University Center for
Computing Activities and the Nevins Laboratories



photo by Sandra Aisa

The compositions recorded here are a product of work with computers in synthetic speech, song and vocal sounds and were created between 1972 and 1975. The music was realized on two different computer music systems and takes advantage of, and attempts to extend and explore their features. The system employed to realize *SPEECH SONGS* was a computer at the Bell Telephone Laboratories for research in synthetic speech and speech communication. Since the system was not designed for musical purposes, its limitations severely affected its musical use (and offered rewarding challenges). The system used in *IN CELEBRATION* and *THE STORY OF OUR LIVES* was designed with the expressed purpose of creating synthetic musical voices, and was therefore much better suited to the task at hand. As with any high technology project, there was extensive collaboration in the production of the works. Thanks go to Joseph Olive, who designed the system at Bell Laboratories and taught me to use it, and to Kenneth Slegitz of Princeton University and Howard Eskin, Richard Garland of Columbia University, who with the late Godfrey Winham and the composer contributed to the system now (1976) operating at the Columbia University Nevins Laboratories.

THE COMPOSITIONS

IN CELEBRATION was composed during the first half of 1975. The composition is an attempt to capture the spirit and structure of the Mark Strand poem and to render it in a musically coherent way. The poem (see insert) has a two-part structure divided by the second occurrence of the phrase "You sit in a chair." The two parts of the poem may be distinguished from each other by the different degrees of passivity attributed to the "you," the person to whom the poem is addressed. In the first part, a completely passive person devoid of both emotion and ability to act is addressed. The second part, while carrying on the tone set in the first part, does mention unalloyed emotions such as "joy" and "celebration" as well as a possible solution to the contradiction, however contradictory the solution might appear.

The setting portrays the change of emphasis between the parts of the poem. In the first part of the composition there is a variety of types of articulation, including spoken, whispered, pitched and glissed phrases, and a variety of textures from solo to choral. There is a rapid succession of types of treatment of words, and a prevalence of textures in which more than one type of articulation is heard together.

In the second part, the increase of definiteness and resolve is represented by isolation on various vocal textures. The listener hears the different and contrasting types of articulation in successive phrases, but not simultaneously.

SPEECH SONGS (1975) is based on poems which are designed to entertain in a light vein. Laughter at new music concepts, especially in New York these days, is a rare thing, and it has been a source of great pleasure to me to hear audiences respond with laughter to places in all four of the *SPEECH SONGS*. Some places which listeners find particularly amusing are: the almost mechanical repetition of the phrase in *Song #1*; the repetition of phrases in *Song #2* where successive repetitions sound unpredictably either human or electronic, as though the voice were not quite sure either; the ambiguous moment in *Song #3* when "Which was take" may be understood either as a question or as modifying the "very ear," and the elaborate chorus of glissing voices in *Song #4* where the text is merely a number.

THE STORY OF OUR LIVES (1974) is an operatic dialogue for male and female synthetic voices. It was the first composition for which the Columbia University computer speech synthesis system was employed.

The dramatic situation may be pictured as one in which a couple is sitting on the couch in their living room reading a book which is the story of the life of the couple. As they read the book, they become obsessed with what they believe is the emptiness of their lives, and as the composition goes on, they fantasize ways of getting out of their predicament.

The characteristic texture for this first stanzas is based on the two voices singing their lines in parallel octaves. The rather loose rhythmic coordination at the syllable level results in heterophony. These passages are interrupted by solos and by choruses which are comprised of multiple copies of the two voices. The obsessive repetitions were intended to convey the feeling that the couple is trapped.

Stanzas two, three and four are sung by the male voice with an occasional answer or comment by the female. His speech is interrupted from time to time by passages from the book which are sounded in an unreal voice-of-the-book. The three final stanzas return to textures similar to the opening stanzas but with continuing interruptions by the book voice which comes to dominate at the end. At certain places near the end, the human voices imitate the book voice. The title suggests soap opera and a bow to the electronic organ chords of the old radio soap is taken with the electronic glissando which separate the two final book speeches.

SPEECH SONGS was completed while on a Guggenheim Fellowship. *IN CELEBRATION* was completed while on a CAPS grant, and *THE STORY OF OUR LIVES* was commissioned by the National Endowment of the Arts.

Notes by Charles Dodge

CHARLES DODGE (b. Ames, Iowa 1942) studied composition at the University of Iowa, Ames, Tanglevood and Columbia University. He numbers among his teachers Richard Herwig, Darius Milhaud, Arthur Berger, Gunther Schuller, Chou Wen-chung, Jack Beeson, and Ottaviano. He studied electronic music with Vladimir Ussachevsky and computer music with Godfrey Winham.

Dodge won his first (of four) BMI Student Composers Awards and his first (of two) Beams Prizes while still an undergraduate. In 1970, with his mastery of computer music already well along, he became assistant composer of music at Columbia University, and the same year his changes and *Earth's Magnetic Field* appeared on Nonus Records. In 1971, he began research in computer-synthesized speech and vocal sounds at the Bell Telephone Laboratories and continued his work there in 1972-73 on a Guggenheim Fellowship. A second Guggenheim, in 1975-76, provided the opportunity to begin creative work in relating vocal syllables and video image synthesis. In the fall of 1975 a color video tape of *THE STORY OF OUR LIVES* was created in which a male and female actor mouth the words to the synthesized speech. A full range of video synthesis techniques was employed to extend the visual images of the actors in ways analogous to the audio extension of the voices. The tape was created at the NET-TV Lab in New York in collaboration with video artists Bill and Louise Etra. The video version of *THE STORY OF OUR LIVES* is distributed by the American Film Institute, 170 West 74th Street, New York City. Dodge's *FOLIA* and *EXTENSIONS* may be heard on CRI SD 300.

THE PROCESS

The works on this disk are called computer music because the sounds were created numerically in a computer before reaching magnetic tape and loudspeakers. The computer did not compose the music. However, it was only used as a sound synthesis and analysis medium. In order to hear the sounds which are represented in the computer as successions of numbers it was necessary to attach a digital-to-analog converter to the computer. The converter transformed the succession of numbers into a fluctuating voltage which was recorded directly on to audio tape.

The technique used to create the synthetic voices is called speech synthesis-by-analysis. For this method of speech synthesis, only those words, phrases and sentences which have been spoken into the computer previously (via an analogue-to-digital converter) may be synthesized. First the digitally-recorded speech is analyzed by programs which extract the attributes (parameters) of the speech for short time segments (0.1 sec.). From these parameters the speech may be recreated in a form which resembles the original recording very closely. But for musical purposes the parameters are most often altered before synthesis.

It is possible, for example, to change the natural pitch contour of the speech into a melodic line or to change the speech speed without altering the natural pitch level. The variety of musical patterns which may be created from the analytic parameters is limited only by the composer's imagination.

Most of the speech sounds on the recording were created by changing the pitch and duration attributes of the original on re-synthesis, but for a few, the resonances (the formants) of the speech were altered as well. The voice of the book in *THE STORY OF OUR LIVES* was created by replacing the program which simulates the sound of the human vocal chords with a program of 64 sine tones glissandoing at different rates. All the textures in which more than one voice is heard were obtained by mixing the synthetic voices together digitally.

I would like to acknowledge my additional gratitude for assistance at various stages of these enterprises to Max Mathews, Cecil Ocker, Sandra Puzosky, Dana Lucia, Mark Strand, and Vladimir Ussachevsky and the Columbia-Princeton Electronic Music Center.

This recording was made possible by a grant from the National Institute/American Academy of Arts and Letters. This organization honors four composers each year for distinguished achievement. Charles Dodge was a 1975 winner and this recording is a part of his award.

Produced and Edited by
Cover by Judith Lerner
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SPEECH SONGS — ACA (BMi): 7'10"
THE STORY OF OUR LIVES — ACA (BMi): 18'15"
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been made using 100%
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SPEECH SONGS

When I am with you, I am two places at once.
When you are with me, you are just arrived
with a suitcase which you pack
with one hand and unpack with the other.

He destroyed her image and thus she was no longer.
When he saw her in the street
he knew he had seen her before,
but couldn't place himself.

A man sitting in a cafeteria
had one enormous ear
and one tiny one.
Which was fake?

The days are ahead
1,926,346 to 1,926,345.
Later the nights will catch up.

Copyright 1973 by Mark Strand

THE STORY OF OUR LIVES

To Howard Moss

1

We are reading the story of our lives
which takes place in a room.
The room looks out on a street.
There is no one there,
no sound of anything.
The trees are heavy with leaves,
the parked cars never move.
We keep turning the pages,
hoping for something,
something like mercy or chance,
a black line that would bind us
or keep us apart.
The way it is, it would seem
the book of our lives is empty.
The furniture in the room is never shifted,
and the rugs become darker each time
our shadows pass over them.
It is almost as if the room were the world.
We sit beside each other on the couch,
reading about the couch.
We say it is ideal.
It is ideal.

2

We are reading the story of our lives
as though we were in it,
as though we had written it.
This comes up again and again.
In one of the chapters
I lean back and push the book aside
because the book says
It's what I am doing.
I lean back and begin to write about the book.
I write that I wish to move beyond the book,
beyond my life into another life.
I put the pen down.
The book says: *He put the pen down
and turned and watched her reading
the part about herself falling in love.*
The book is more accurate than we can imagine.
I lean back and watch you read
about the man across the street.
They built a house there
and one day a man walked out of it.
You fell in love with him
because you knew he would never visit you,
would never know you were waiting.
Night after night you would say
that he was like me.
I lean back and watch you grow older without me.
Sunlight falls on your silver hair.
The rugs, the furniture
seem almost imaginary now.
She continued to read.
She seemed to consider his absence
of no special importance,
as someone on a perfect day will consider
the weather a failure
because it did not change his mind.
You narrow your eyes.

You have the impulse to close the book
which describes my resistance:
how when I lean back I imagine
my life without you, imagine moving
into another life, another book.
It describes your dependence on desire,
how the momentary disclosures
of purpose make you afraid.
The book describes much more than it should.
It wants to divide us.

3

This morning I woke and believed
there was no more to our lives
than the story of our lives.
When you disagreed, I pointed
to the place in the book where you disagreed.
You fell back to sleep and I began to read
those mysterious parts you used to guess at
while they were being written
and lose interest in after they became
part of the story.
In one of them cold dresses of moonlight
are draped over the backs of chairs in a man's room.
He dreams of a woman whose dresses are lost
who sits on a stone bench in a garden
and believes in wonders.
For her love is a sacrifice.
The part describes her death
and she is never named,
which is one of the things
you could not stand about her.
A little later we learn
that the dreaming man lives
in the new house across the street.
This morning after you fell back to sleep
I began to turn pages early in the book.
It was like dreaming of childhood,
so much seemed to vanish,
so much seemed to come to life again.
I did not know what to do.
The book said: *In those moments it was his book.*
A bleak crown rested uneasily on his head.
He was the brief ruler of inner and outer discord,
anxious in his own kingdom.

Before you woke
I read another part that described your absence
and told how you sleep to reverse
the progress of your life.
I was touched by my own loneliness as I read,
knowing that what I feel is often the crude
and unsuccessful form of a story
that may never be told.
I read and was moved by a desire to offer myself
to the house of your sleep.
He wanted to see her naked and vulnerable,
to see her in the refuse, the discarded
plots of old dreams, the costumes and masks
of unstable states.
It was as if he were drawn
irresistably to failure.
It was hard to keep reading.
I was tired and wanted to give up.
The book seemed aware of this.
It bristles at changing the subject.
I waited for you to wake not knowing
how long I waited,
and it seemed that I was no longer reading.
I heard the wind passing
like a stream of signs
and I heard the shiver of leaves
in the trees outside the window.
It would be in the book.
Everything would be there.
I looked at your face
and I read the eyes, the nose, the mouth . . .

5

If only there were a perfect moment in the book;
if only we could live in that moment,
we could begin the book again
as if we had not written it,
as if we were not in it.
But the dark approaches
to any page are too numerous
and the escapes are too narrow.
We read through the day.

Each page turning is like a candle
moving through the mind.
Each moment is like a senseless cause.
If only we could stop reading.
He never wanted to read another book
and she kept staring into the street.
The cars were still there,
the deep shade of trees covered them.
The shades were drawn in the new house.
Maybe the man who lived there,
the man she loved, was reading
the story of another life.
She imagined a dark, heartless parlor,
a cold fireplace, a man sitting
writing a letter to a woman
who has sacrificed her life for love.
If there were a perfect moment in the book,
I would be the last.
The book never discusses the causes of love.
It claims confusion is a necessary good.
It never explains. It only reveals.

6

The day goes on.
We study what we remember.
We look into the mirror across the room.
We cannot bear to be alone.
The book goes on.
They became silent and did not know how to begin
the dialogue which was necessary.
It was words that created divisions in the first place,
that created loneliness.
They waited.
They would turn the pages, hoping
something would happen.
They would patch up their lives in secret:
each defeat forgiven because it could not be tested,
each pain rewarded because it was unreal.
They did nothing.

7

The book will not survive.
We are the living proof of that.
It is dark outside, in the room it is darker.
I hear your breathing.
You are asking me if I am tired,
if I want to keep reading.
Yes, I am tired.
Yes, I want to keep reading.
I say yes to everything.
You cannot hear me.
They sat beside each other on the couch.
They were the copy, the faint phantoms
of something they had been before.
The attitudes they took were faded.
They stared into the book
and were horrified by their innocence,
their reluctance to give up.
They sat beside each other on the couch.
They were determined to accept the truth.
Whatever it was they would accept it.
The book would have to be written
and would have to be read.
They are the book and they are
nothing else.

IN CELEBRATION

You sit in a chair, touched by nothing, feeling
the old self become the other self, imagining
only the patience of water, the boredom of stone.
You think that silence is the extra page.
You think that nothing is good or bad, not even
the darkness that fills the house while you sit watching
it happen. You've seen it happen before. Your friends
move past the window, their faces soiled with regret.
You want to wave but cannot raise your hand.
You sit in a chair. You turn to the nightshade spreading
a poisonous net around the house. You taste
the honey of absence. It is the same wherever
you are, the same if the voice rols before
the body, or the body rols before the voice.
You know that desire leads only to sorrow, that sorrow
leads to achievement which leads to emptiness.
You know that this is only different, that this
is the celebration, the only celebration,
that by giving yourself over to nothing,
you shall be healed. You know there is joy in feeling
your lungs prepare themselves for an ashen future,
so you wait, you stare and you wait, and the dust settles
and the miraculous hours of childhood wander in darkness.

SYNTHESIZED SPEECH MUSIC by CHARLES DODGE

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The characteristic texture for the first stanza is based on the two voices singing their lines in parallel octaves. The rather loose rhythmic coordination at the syllable level results in heterophony. These passages are interrupted by solos and by choruses which are comprised of multiple copies of the two voices. The obsessive repetitions were intended to convey the feeling that the couple is trapped.

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Produced by Carter Harman

THIS IS A COMPOSER-SUPERVISED RECORDING

(Original liner notes from CRI LP jacket)