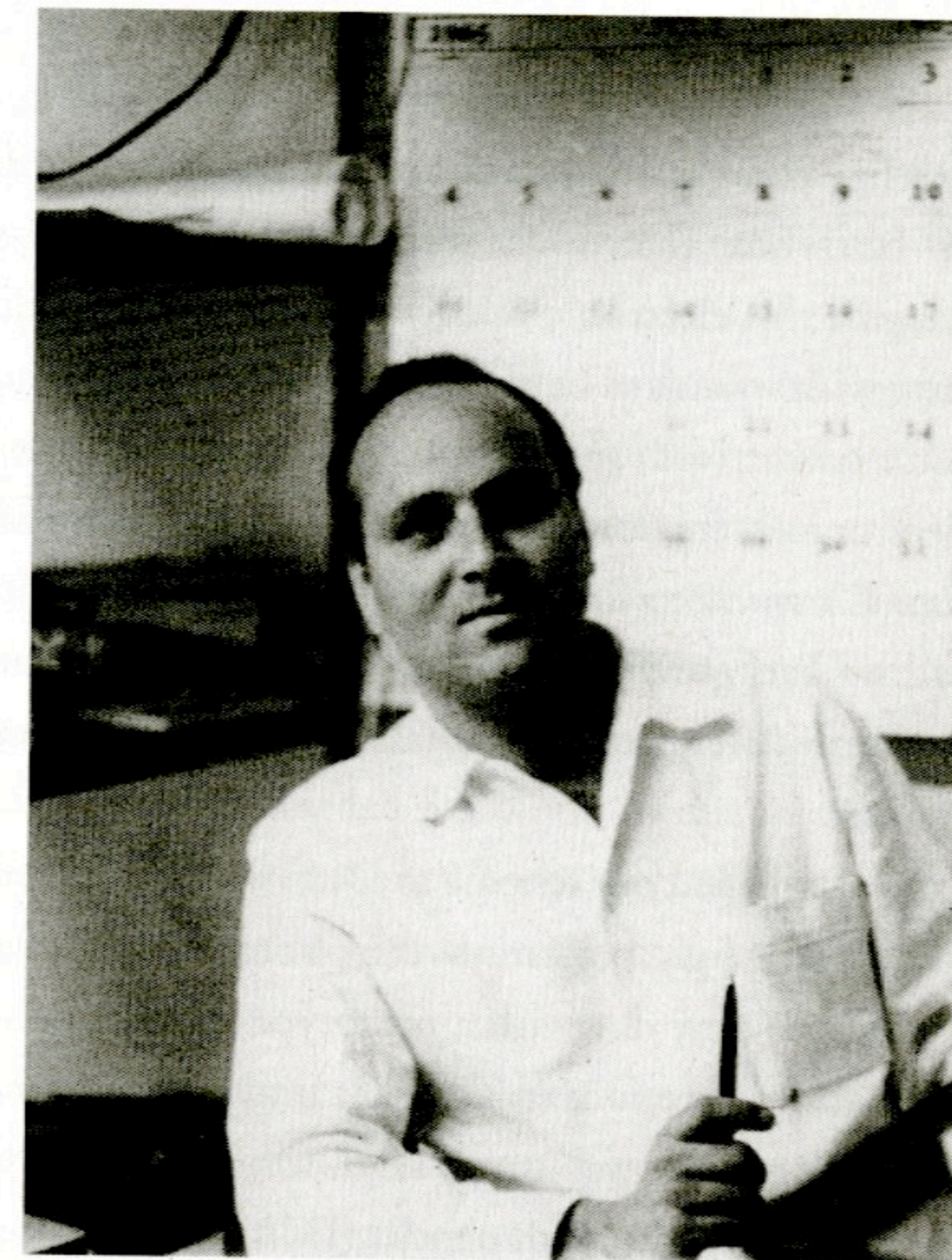


## Music as Studio Art

MORTON SUBOTNICK

After getting out of the army at the end of the Korean War, and after a summer of finishing my BA at Denver University, my wife at the time, my first son, and I ended up in San Francisco, where I attended Mills College as a graduate composition student. During those years (the end of the 1950s), I was a divided person. One side of me was playing regularly as an extra with the San Francisco Symphony and performing with the Mills College Chamber Players, a newly created chamber group, which consisted of Bonnie Hampton (cello), Nate Rubin (violin), Naomi Sparrow (piano), and myself (clarinet). The other side was continuing to compose for traditional instruments. During that time, I was commissioned by Herb Blau, who at that point was the director of Actor's Workshop, to write music for a production of *King Lear*. I accepted. It was while I was thinking about *King Lear* that I decided to create a *musique concrète* / electronic score for the production. It seemed that "music" for a play should come from the sounds of the stage and the demands of the content, rather than a musical background or what had become known as "incidental music." So, with an advance on my commission money, I bought my first tape recorder and began exploring a road that, almost fifty years later, I am still exploring. This road has literally created itself and has taken me through a landscape of technological change, which has come into being at every turn of my head.

The score for *Lear* was based largely on the storm scene. Because I saw the storm as the raging turmoil of *Lear's* mind, I created the storm from the actor's voice through, at first, hours of recording his reading and even more hours, days, and weeks of cutting, pasting, changing, and adding sounds until I had completed a landscape of sound that created the sonic rage that was the storm of *Lear's* view of a world out of control. When I finished, I felt that my life's work was before me. Here was a chance to be both performer and creator. I could get rid of the clarinet and the two sides of me would become one. I could create and perform in my studio, and it would come out as a sound piece, which was at once a musical creation and a performance. It needed no further intervention. It was music as studio art. I was ecstatic and clear



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in my vision of my future. But I was also dejected at the thought of spending my life cutting and pasting together tiny bits of tape. I began to dream and research ways to create a kind of electronic music easel in keeping with the studio art metaphor. And, as it turned out, there were many out there thinking the same thing, one of whom was my new friend Ramon Sender, soon to be my colleague.

Ramon and I had common dreams, and we became close almost immediately. I had created a studio in a garage, made of automobile parts hung from the ceiling and the guts of an old piano. The objects were hung in a way that allowed me to turn the tape recorder on, run through the space playing my "instruments" and back to the tape recorder to turn it off. These would become "phrases" for a longer piece. Ramon had created a small "electronic" studio at the San Francisco Conservatory of Music. We decided to pool our resources, meager as they were, and create a single studio.

Later, we were "loaned" a Victorian mansion on Russian Hill, a building that was to be torn down at some point in the future. There we started the San Francisco Tape Music Center. Since I am trying to keep to a vision of my studio art dream, I shall reluctantly abstain from any description of that year and the events that caused us to leave Russian Hill. Leave, we did. We moved everything to a new space on Di-



visadero Street, where we were joined by the Ann Halprin Dancers' Workshop and a new San Francisco wing of the listener-sponsored Berkeley radio station KPFA 94.1 fm. Shortly after arriving, Ramon and I began to share our dreams of some sort of "black box" that would serve us better for creating tape music. We had begun to imagine this electronic music easel as a tool for any person who wanted to be creative with sound, to be able to afford it, and to have it in his or her home. The transistor had arrived, and most of us knew that the consequences of that foretold that electronics were now destined to be affordable by all. We put an ad in the *San Francisco Chronicle* to find an engineer who could build our music box. Although we had no background in electronics, we had outlined a possible approach to such a machine. After meeting several of these people, a young man named Donald Buchla arrived.

We explained our scheme to Don, which was based on a rotating disc with holes in it passing light patterns over a photocell and translating that into sound. Don returned the next day with a prototype of our device. We were amazed that he had been able to produce it, and that it actually made sound. But Don explained that this was NOT the way to go. And, for the next few months, the three of us began a theoretical journey with pencils (Don is the only person I have ever known to use a no. 1 pencil regularly) and paper. We fed Don musical needs, and he returned with theoretical modules to meet those needs. We finally reached the point that we had a virtual electronic easel. I never thought that we were primarily creating a performance instrument. It was always a personal tool for creating music/art with sound, more of an analog computer than a musical instrument. I think Ramon felt as I did. Don perhaps had a slightly different view, because he has continued through his life to create wonderful alternative musical instruments.<sup>1</sup>

The point came when we felt we were ready to move from a virtual instrument to reality. The tough question was then asked, "Don, how much to build this?" The answer was "\$500." Of course, this wasn't much, even by 1960s standards, but it was way beyond anything we could afford. A short time later, I was in New York for a performance and made an appointment with the Rockefeller Foundation. They were, and remain today, one of the few continuously visionary foundations in the country. Since they had helped to fund the Columbia-Princeton Studio, I presented our dream. We would like funding to do work with electronics and sound in San Francisco. Soon people would be able to create with sound in their living rooms. We had developed a notion, not of an electronic organ, but of a sound easel that was closer to an analog computer, with which people could create with sound in the same way that they have always been able to create with paint and paper. With \$500 for parts

and a little more for some other equipment, we could create a facility centered around this idea.

The response of the Rockefeller Foundation was that, though it appreciated what we were trying to do, its view was that there would never be enough interest in this kind of thing to warrant a second studio in the United States. As I recall, the foundation thought that there would be so few people interested that it would be cheaper to fly people to New York than to build a second studio in the United States. I had asked for too much, and the result was that we did not even get the \$500.

Some time later a Rockefeller representative, Boyd Compton, came on a "hunting and gathering" expedition to the West Coast. He came to see us and had his own epiphany. He called New York, and we had our check for \$500. Within a year or two of that, the Rockefeller Foundation awarded \$200,000 to merge the Tape Music Center with the Mills College Chamber Players. We were not sufficiently "fiscally responsible," it seemed, so we had to unite with an institution that was, and Mills College in Oakland fitted the bill.

All the modules of the first Buchla synthesizer were labeled "San Francisco Tape Music Center, Inc.," but Ramon and I were a bit reluctant to be in business, so we declined to continue having the Tape Music Center be the name of a commercial object. The second generation was to become known as "The Buchla" and the modules were labeled "Buchla and Associates."

The Buchla became a centerpiece for the studio and a kind of underground hit. (Vladimir Ussachevsky immediately ordered a box for Columbia and another for Princeton.) Since we were using lights and images as well as sound, modules were developed to control lights and motors as well.

I left San Francisco in 1966 to join Herb [Blau] and the Actor's Workshop in New York to start the Repertory Theater of Lincoln Center (based in the Vivian Beaumont Theater). As part of the package, I was offered a position as artist-in-residence at the then new Tisch School of the Arts at New York University. NYU gave me a studio on Bleecker Street and, at my request, a "Buchla" with full sound and light capability.

Within my first year at the new studio on Bleecker Street, change, literally, kept knocking at my door. Two entrepreneurs visited me with the idea of creating a multimedia discothèque called the Electric Circus. I demonstrated what that might mean with my Buchla, and after months of working with them, I was hired to develop and be the artistic director of the new facility. At my request, Tony Martin was invited out, and Don Buchla was hired to develop the equipment. NYU expanded its artist-in-residence program and invited Tony to join the artist-in-residence faculty. An ad-



ministrator was hired to try to create a new media program (Boyd Compton, who left the Rockefeller Foundation to join us). A young man named Serge Tcherepnin (creator of the "Serge" synthesizer) came to work with me. I was commissioned to create a work for Nonesuch Records (*Silver Apples of the Moon*). By the end of 1967, two years after I left San Francisco and the Tape Music Center was transferred to Mills College, I was living in a world quite different from the one I had inhabited a few years earlier, in which it had been supposed that there would "be so little interest that it would be cheaper to fly people to New York from all over the world than to build a second studio."

Now, with the computer as the tool, I am still pursuing music as studio art (with a few major side trips along the way). That view of "my life's work" formulated in the late 1950s and intensely pursued through the Tape Music Center years has evolved, grown, and matured.

Over the past fifteen years, I have been developing ways for young children to be able to experience the empowerment of being composer, performer, and listener. Things have changed; the Rockefeller Foundation has generously offered to help me with the task of expanding a major series of CD-ROMS for children. For years, homes had been filled with electronic tools for creating music, but they were mostly standard instrumental devices (notably keyboards), rather than what Ramon and I had imagined. Now, however, there is a generation of young people creating soundscapes with electronics in the home studio (largely facilitated by Macintosh computers), as well as creating music in clubs and concert halls. Even though we knew it had to happen, there was no way to have anticipated the magnitude of the numbers of people and the social as well as aesthetic impact of what the studio art metaphor would become. The past, present, and future of this still thrills me as I write!

#### NOTE

1. For more on Buchla's instruments, see [www.buchla.com](http://www.buchla.com) (accessed September 2, 2007).

## Morton Subotnick

INTERVIEWED BY DAVID W. BERNSTEIN AND MAGGI PAYNE

Reading through Morton Subotnick's interview, one quickly encounters the fact that Subotnick had an artistic vision from early on, which he has pursued throughout his compositional career. This agenda involves two key components. The first entails a commitment to combining music with other media. As a young composer, Subotnick quickly demonstrated a talent for working with artists from other disciplines. During his collaborations with the Ann Halprin Dancers' Workshop, for example, he had a certain natural affinity with the dance that allowed him to work, not merely as a composer providing music for a dance, but as a contributor to a unified artistic conception. Similarly, in his work with the San Francisco Actor's Workshop, he did not compose incidental music but rather sought to create music approaching the essence of the theatrical action. Subotnick also applied his integrated approach to media in his own compositions, beginning with *Sound Blocks* (1961), followed by his classic multimedia works created at the San Francisco Tape Music Center, such as *Mandolin* (1963) and *Play! no. 1* (1964), to his most recent works employing interactive computer music systems.

Subotnick began his musical career as a virtuoso performer, but he quickly sought to reconcile this aspect of his musical life with his work as a composer. He committed himself to a search for ways to combine the performative dimension of music with the compositional, a project that was the second component of his artistic vision, what he termed "music as studio art." Electronic music was clearly the means to this end, but Subotnick was not satisfied with the technical limitations of the classical electronic music studio, especially the laborious cutting and splicing of magnetic tape. His search ultimately led him to Don Buchla, with whom he created the Buchla 100 series Modular Electronic Music System. Composers could now compose and create electronic music alone in their own studios. Subotnick's dream of "music as studio art" had become a reality. This interview covers his efforts toward realizing the goals he set for himself, starting with the period before the official es-