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Constraints and Freedom: A Conversation with **Georg Katzer**

Abstract: This interview sheds light both on a composer and on a hitherto overlooked field, the evolution of electroacoustic music in the former German Democratic Republic (GDR, commonly called East Germany). This latter focus is vital insofar as little of it, if anything at all, is included in established histories of electroacoustic music. These typically take Cologne, Paris, or New York, together with the associated institutions and composers, as starting points, with nary a word for the GDR or elsewhere.

The composer Georg Katzer was a key personality in this era. In this conversation he discusses the genesis of electroacoustic music in the GDR, the influences of studios from other countries, the development of the electronic musical instrument known as the Subharchord, establishing a studio (under conditions which, despite adversity, also gave rise to results of a distinctive charm), formal affiliations with international organizations, and much more.

Georg Katzer (see Figure 1) was born in 1935 in Habelschwerdt, Silesia (then part of Germany, now belonging to Poland). He studied composition with Rudolf Wagner-Regeny and Ruth Zechlin, as well as piano, at the Deutsche Hochschule für Musik in East Berlin (now the Hochschule für Musik "Hanns Eisler") and then at the Academy of Performing Arts in Prague. This was followed by studies with composer Hanns Eisler in his master class at the Academy of the Arts (Akademie der Künste, AdK) in East Berlin. In 1978 Katzer was elected to membership of the AdK, and two years later he was appointed professor and led a master class for composition there. In 1980 he also held a guest professorship at Michigan State University. In 1982 he founded the Studio for Experimental (Electroacoustic) Music at the AdK, and he is still active as the Studio's artistic director.

Katzer has received composition awards from both the former German Democratic Republic (GDR, i.e., East Germany) and the Federal Republic of Germany (the former West Germany and now the reunified nation), including the prestigious *Bundesverdienstkreuz* (Federal Cross of Merit). He has also won prizes from Groupe de musique expérimentale de Bourges (GMEB) and the Reine Marie José prize in composition, and he was guest of honor at the Villa Massimo in Rome. Alongside his compositional output, which includes works for orchestra, solo concertos, chamber music, three

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operas, two ballets, and electroacoustic works, Katzer is involved with multimedia projects and improvised music. He has toured Europe playing with Johannes Bauer, Wolfgang Fuchs, Paul Lytten, Radu Malfatti, Phil Wachsman, Phil Minton, and Tony Oxley among others.

Katzer lives outside Berlin as an independent composer. He is a member of the Academy of the Arts (Berlin-Brandenburg) and of the Institut international de musique électroacoustique de Bourges.

By way of context, it may be worth adding that there was an "official" historiography of German electroacoustic music, familiar to anyone who, like me, grew up in West Germany and had an interest in music using technology. This history was always linked to certain names and institutions: Werner Meyer-Eppler, Robert Beyer, Herbert Eimert, Karlheinz Stockhausen, Gottfried Michael Koenig, Westdeutscher Rundfunk Köln (WDR, West German Radio in Cologne), and so on. The year in which this history began may have varied: 1949 saw book titles by Werner Meyer-Eppler, 1951 and 1953 the early activities at WDR, and so on. East Germany, the GDR, was hardly mentioned at all, if ever, in this telling. There is documentation to be found in East German technical journals, but it is often difficult to access—see, for instance, the reports by Kai-Erik Ziegenrücker (1987) or by André Ruschkowski (1993). This part of the history—more precisely, the relevant activities—in East Germany was one that I only gradually came to be aware of: From 1972 onwards, living in West Berlin, it was possible to attend concerts in the eastern part of the partitioned

Figure 1. Georg Katzer in Zeuthen, Germany. (Photograph by Angelika Katzer.)

Figure 2. The Subharchord used in the Bratislava Studio, now located in Vienna. (Photograph by Andrew Garton.) For further details, see the articles by Ernst Schreiber

(1964), Gerhard Steinke (1966), Tatjana Böhme-Mehner (2011), and the overview available at www.adk.de/en/academy /studio-for-electroacoustic -music/subharchord.htm.





city. Likewise, there were the nighttime broadcasts from Radio DDR II (one of the East German state broadcasters). Here I came to know, be it through radio broadcasts or live concerts, of numerous East German composers producing, to varying degrees, electroacoustic music. Concerts were mostly held in the Palace of the Republic, home both to the parliament of the GDR and also a showcase for cultural activities. There were also workshops on electroacoustic music held in the AdK of the GDR. In a manner of speaking, I already came to view as a key personality in all of these activities the composer Georg Katzer.

This interview took place on 18 April 2018 at the composer's home in Zeuthen, Germany. It was conducted in German and subsequently edited and translated, in consultation with the interviewee.

Beginnings of Early Electroacoustic Music in East Germany: Adlershof and the Subharchord

Martin Supper: What were the beginnings of electroacoustic music in the GDR, and how did it develop?

Georg Katzer: Well, I need to go back a bit further into the past to give an improvised history of electroacoustic music in the GDR. We should really go back to the 1950s and the years immediately following. But by the start of the 1960s, there was an initiative at the RFZ [Rundfunk- und Fernsehtechnisches Zentralamt, or Radio and Television Central Office]

to develop a new musical instrument called the Subharchord, which generated sounds electronically (see Figure 2). This instrument was actually built, and it formed the center of a working studio. That was a laboratory for research and development.

[Author's Note: This was the Laboratory for Acoustic/Musical Boundary Problems, founded 1956 in the Adlershof district of Berlin as a research and development laboratory. Headed by Gerhard Steinke, it was part of the Operations Laboratory for Broadcasting and Television department of the East German Postal Service, later renamed as Radio and Television Central Office and abbreviated RFZ.]

So there were plenty of technicians and enthusiasts there for whom soldering together a ring modulator from scratch was no problem. Filters were available, as would be the case in any broadcasting studio. So this studio started its work, and some composers came to work there. For example, Siegfried Matthus [b. 1934] realized a piece for voice and tape, Galilei (1966), based on a text by Berthold Brecht. A number of other composers also worked there. Unfortunately, I arrived a bit too late. By the time I was interested and wanted to work there. the studio had been closed . . . there were reasons of cultural politics, of course. The reasoning was simple: If they were doing things like this in West Germany, in Cologne, then obviously that sort of thing wasn't going to be done in the GDR.

The Subharchord was actually conceived for "Mickey Mouse" effects and the like, for use in soundtracks of animated cartoons. But it was a real working instrument with a playable keyboard. Aside from that, there were some similarities with the trautonium, but it was based on frequency dividers. So you didn't work with the overtone series but with subharmonics, and naturally with common waveforms. But what was extraordinary, I have to say, were the filters, a filter bank, so-called Mel filters. These were band-pass filters following the sensitivity of the human ear. They had such extremely steep cutoffs that you could filter out a single sound in the middle of white noise. And because the device had an external input, you could make really wild sound edits. What was particularly nice was that you could "play" the filters directly from the keyboard.

After the first prototype Subharchord, seven or eight further units were built, and one of them ended up in the studio in Bratislava [Electroacoustic Studio of the Slovak Radio]. But all of this development was forgotten in Berlin once the studio in Adlershof was closed. The development continued until just before 1968. But there had not been any production of electroacoustic music for a long time. The Subharchord was still used for scoring animated cartoons and commercials, which had probably been its original *raison d'être*. But nothing other than that. And for a while that was the end of electroacoustic music in the GDR—it was as quiet as a graveyard.

Academy of the Arts and Parallel Developments

Supper: And the studio at the Academy?

Katzer: Paul Dessau [1894–1979] worked actively for the founding of a studio for electronic music at the AdK. He was a respected member of the Academy of long standing but he was not able to get the necessary support. Around the same time, I had been fortunate enough to be granted a scholarship by the German Ministry of Culture allowing me to realize a piece at the studio in Bratislava, so it was remarkable—on the one hand, efforts to support electronic music were kept well locked away, on the

other hand they gave me a scholarship to produce a work of electronic music.

Later, Lothar Voigtländer [b. 1943] also worked at the studio in Bratislava. And Peter Kolman [b. 1937], director of the studio, sent my work *Bevor Ariadne kommt* (1976) to the festival in Bourges. To my surprise, I was awarded a prize for the piece there, and I was even granted a visa allowing me to go to France to receive the prize. That trip allowed me to make contact with the studios in Stockholm, Belgrade, and Warsaw, and also with Michigan State University. Thus the gates had been opened, so to speak, for me to work in this direction. But, as I indicated, there was no possibility to realize electroacoustic music in the GDR, except—somewhat later—in TiP

[TiP was the Theater in the Palace of the Republic. The building was conceived as a "House for the People," based on ideas championed in the 19th century, notably by the socialist labor movement. These ideas were also behind several buildings in Belgium, France (Centre Georges Pompidou), the Netherlands, and Sweden (Kulturhuset in Stockholm). In the GDR, the idea of a "Palace of Culture" became an autonomous direction in architectural theory].

Supper: So TiP also had a studio?

Katzer: Yes, exactly! And the background to this was that the director of TiP, a woman with an open mind towards electronic music, happened to be married to the leader of the Berlin branch of the SED [Socialist Unity Party, the Communist party in the GDR]. So she had a bit of Narrenfreiheit jester's privilege, you might say. It was at TiP that I heard Stockhausen live for the first time. And in the tiny studio there was a highly capable recording engineer, Eckhard Rödger [later professor for electroacoustic music at the Hochschule für Musik und Theater "Felix Mendelssohn-Bartholdy" in Leipzig]. Rödger tinkered a bit, building many small devices for working with audio. I was able to realize two pieces here. This tiny studio, which was actually conceived for the demands of live theater production, was geared to working a bit like a sampler, using three tape recorders with a couple of filters and a ring modulator—so, mixing and editing and a bit of tape manipulation.

Work Abroad and at the Academy of the Arts

Supper: Back to Bratislava: When exactly were you there and how did the idea of opening a studio for electroacoustic music at the Academy of the Arts come about?

Katzer: It was in 1976 that I worked in Bratislava. After I completed my first two pieces in Bourges, I decided we needed to somehow put together a studio at the Academy in Berlin.

At the start there was resistance in terms of cultural politics; then there were arguments that the money needed wasn't available, since all the equipment would ultimately need to be paid for in Western currency. But I came back with the argument that we could just start small. For instance, we could obtain three professional tape machines manufactured in Hungary from the state radio broadcaster. It would be possible to find a few filters somehow or another. Further, we had the very capable recording engineer Georg Morawietz, who could solder together a bit of this and that that we might need. And so we did, as well as getting a Subharchord from the Post Museum in Berlin, which Morawietz put back into shape and made playable. Finally, Ralf Hoyer [b. 1950], who was my student at the time, produced the first piece made in the studio, Study No. 4 (1980) for double bass and tape. On that basis we can consider 1980 to be the actual beginning of the studio. Not that there was any kind of official opening.

The Party and the state leadership was, up to the last, deeply skeptical of-not to say downright hostile to—what was then called electronic music. The music was considered "formalistic," alien to the people, and—to make matters worse—the sort of music produced at the West German WDR in Cologne. That alone was reason enough to demonize the music. So, of course, public performances of such works were "audience magnets," attracting quite a crowd. At the concerts in the Academy, which we put on from the 1980s onwards, many also featuring guest studios—for example, those in Bourges, Stockholm, and Illinois (with Herbert Brün)—well, we had enormous audiences. The reason was also a kind of cultural politics: A small window was opened with a free view of something that was

forbidden, or almost forbidden. Of course, there was also the aspect that this was a form of opposition to "official" policies. It was possible to do this at the Academy, because they had a little more leeway than other venues. The director of TiP had more latitude in what she could get away with, thanks to her proximity to the Party leadership.

Supper: But in which year was the studio established?

Katzer: Officially not until 1986; at that point the opening ceremony was even attended by the Minister of Culture, so you could say the winds had shifted a bit.

In the meantime I had been gathering a circle of people interested in electroacoustic music for quite a while, and we had what you might call "dry-land swim training." We would listen to music and try to analyze what a studio would need to realize those works. The circle extended to perhaps 15 or 20 people—including, by the way, André Ruschkowski and Armin Köhler; the latter went on to become artistic director of the Donaueschingen Festival [from 1992 to 2015].

To broaden our technical basis we followed the market for electronic equipment, and there were sometimes secondhand offers of electroacoustic devices. Rock bands that were allowed to perform in the West sometimes brought equipment back, only to discover quickly that the equipment wasn't quite the right thing. So the gear was sold in a shop on Strausberger Platz [a prominent plaza in the Friedrichshain district of East Berlin]. We went window-shopping there regularly, and at the end of the year there was always some spare money left in our budget and the coffers had to be cleared. So we managed to pick up this and that . . . mostly effects units. The Cuban cultural attaché was a personal friend of mine, and he helped us by purchasing a Yamaha DX7 on our behalf in West Berlin (highly illegal at the time, of course, and quite dangerous). Those were the conditions under which we worked.

The technology was almost always analog. I myself bought a second-hand Sinclair as my first computer, then later a Commodore, which I loved dearly. Eckhard Rödger from TiP taught me to program. And with those modest tools it was already possible to do some wonderful things. I

used that lovely little thing for two pieces, and the slightly gruff sounds that come out of it had a definite appeal.

Supper: Which pieces were these?

Katzer: There was, for example, *La Mécanique* (1985) for tape. At one point the Commodore, with its imperfect sounds, can be heard, and I set these against sounds from the DX7, which was quite appealing.

The Academy itself only got its first computer, an Atari, around 1988. But as I said, most of the studio was analog. It was only after *die Wende* [the political changes of 1988–1989], and with enough money, that it was possible, bit by bit, to digitize the studio.

Supper: You were a member of the Academy of the Arts since 1978, and by virtue of having been appointed professor of composition, leading a master class, can you say that you were also artistic director of the studio?

Katzer: I called myself "Advisor." As a member of the Academy, I did not receive a salary for the work, but I was able to steer the studio in a certain direction. Things became more difficult when a new studio manager came on board. He did things and let things happen that I could not approve of, so I eventually stepped down.

The history of electroacoustic music in the whole GDR is a history of analog sound generation with a few tape recorders, filters, distortion, ring modulators, and the Subharchord. There was lot of "tinkering" in this, but we also had some great results. For example, Lutz Glandien [b. 1954] composed a piece with enormous technical imagination that I still love to this day—*Cut* (1988).

I must admit, I miss the analog days a bit. There was something haptic in working with analog equipment that is just not the same as typing in numbers on a keyboard, as much work today seems to be. I already mentioned my colleague Lothar Voigtländer: He too was concerned about public recognition of electronic music, and it was actually through his initiative that we were able to hold a course running for several days each summer in Gera, in Thuringia. The course covered new music as a whole, but it had a focus on electroacoustic music.

In Weimar there was a circle of musicians around Michael von Hintzenstern [b. 1956], called "Intuitive Music." Hans Tutschku [b. 1966] also belonged to the group. They used electronic sounds in their performances, especially turning to pieces by Stockhausen.

Supper: When was this?

Katzer: That was in the 1980s. After 1989 many initiatives and groups flittered apart. After reunification, all of a sudden people could go here and there freely. But the summer courses in Gera had been really important to many young composers.

I should also mention that, a bit later than at the Academy, but also in the early 1980s, there was something happening in a similar direction at the conservatory in Dresden [the "Carl Maria von Weber" College of Music]. They had established a chair for electronic sound production, held by Friedbert Wissmann.

Supper: I remember meeting him at one of the TiP concerts. As I recall, at the time he developed his own sequencer software running on Amiga computers.

Katzer: That's right. And he was quite clever, in that he was able to organize another position at the conservatory: a research position. So they developed equipment, such as synthesizers, that never went into series production but were there as prototypes.

That also came to an end with *die Wende* in 1989; after that there were—as I said—other options. People no longer needed to rely on home-brew hardware. I think Wissmann himself has now gone into commercial and advertising work.

I also had a student at the Academy, Friedhelm Hartmann [b. 1963], a conscientious objector who developed a concept for a modular synthesizer. Remarkably, I had several conscientious objectors among my students. Helmut Zapf [b. 1956], Helmut Oehring [b. 1961] . . .

Supper: Wait . . . I had no idea that there were conscientious objectors in the GDR.

Katzer: Oh yes, there were. They served as what were called "construction soldiers." I don't think it was exactly a pleasant alternative service. Anyway, as I was saying, one of them was Hartmann, who lives today in Tel Aviv and who had, back

then, designed a synthesizer that could literally do anything . . . but it was never completed.

So, there were a few other enthusiasts tinkering away. I already mentioned Eckhard Rödger at TiP and Georg Morawietz at the Academy. Morawietz was very capable; for instance, he was brought to Rome years ago to repair Giacinto Scelsi's tape recorder. He succeeded and the thing really plays again! Morawietz had basically grown up in a radio outside-broadcasting van, where you always had a soldering iron in hand. The development of electroacoustic music in the GDR would certainly have been different if the research lab in Adlershof hadn't been shut down when it was.

Principles at the Academy of the Arts

Supper: Just one question about the Academy of the Arts, for clarification. The Academy, which was originally founded in 1696, was split into two parallel institutes during the division of Germany: one in West Berlin, the other in East Berlin. The Academy in the West was made up of elected members and functioned as an exhibition space and venue for concerts, lectures, etc., as well as maintaining an enormous archive. Was this something specific to the East, that membership in the Academy also entailed teaching?

Katzer: Yes, that was a distinctive aspect. This was a result of the history of the forerunner Prussian Academy of the Arts. So, for example, Nikolaus von Reznicek [1860–1945] was a member of the Academy of Arts and was my first teacher. And Reznicek's student at the academy Rudolf Wagner-Regeny [1903–1969] later became a member and taught there. In his time, Arnold Schönberg had also had a master class at the Academy. The Academy had had painting classes since the end of the 17th century. The Prussian royalty, who funded the original academy, wanted to be depicted favorably. Later there came classes in architecture, then literature, later still music, and finally, of course, film.

The main requirement for admission to a master class at the Academy was that a member was willing to take on the student. The mentor could then recommend the student for a master class scholarship. Scholarships were granted for two years, with the possibility of being extended to a third year. I myself had been granted a scholarship while studying with Hanns Eisler. The scholarships came with a monthly stipend of 500 marks, which was enough to live comfortably and carefree. That was really excellent. There were no other prerequisites for study, no need to have already completed a degree. So, for example, my student Helmut Oehring had no formal qualifications at all—he hadn't even qualified to enter university after leaving school. But he submitted a portfolio of his work, and a majority voted in his favor. It was similar with Helmut Zapf. He had completed studies of church music, so he had at least better formal qualifications than Oehring. It could be very different from case to case, but there were great opportunities for those wanting to change career

Supper: Apparently talent was the primary prerequisite. Such newcomers are often the more interesting people, in contrast to those who come from a "standard" university career path.

Katzer: That was a distinctive feature of the East Academy. Unfortunately, this kind of support came to an end in 1989. It ostensibly didn't fit in with the concept of the unified Academy.

Supper: German reunification took place under the premise that the East would adapt to the West, rather than the other way around.

Katzer: Well, there wasn't much choice. There are still, at least, scholarships offered by the current Academy of the Arts—for example, grants for residencies in the Villa Serpentara in Rome. But that can't compare to the model from before reunification. Still, better than nothing.

Electroacoustic Music as an Aesthetic Stance . . . or Not?

Supper: As mentioned at the beginning of our interview, in the West the founding time of electroacoustic music is not just associated with a certain historiography, there were also certain attitudes. In Cologne there was the "struggle" between serial

and nonserial music. There were multiple rewrites of the definition of what "electronic music" is—in a sense revising history so that Cologne would be considered the first, and setting it off from *musique concrète*.

In the field of electroacoustic music in the GDR, was there also a fundamental idea or aesthetic around the music, or was it simply saying that there was a new technology and you just wanted to see what you could make with it?

Katzer: The approach was rather naive. With me I suppose it went back to 1963 when I was in hospital for several months as a result of a skiing accident. A woman who worked as a camera operator for the GDR state television—and is now my wife—had access to a "restricted section" of their libraryliterature that was normally kept under lock and key. So she was able to take out some hard-tocome-by books that I read while confined to bed, including something about electronic music—it might have been Meyer-Eppler's book (Meyer-Eppler 1949)—in any case, I found it inspiring. But shortly thereafter—before I could do any work there—the studio in Adlershof was closed for compositional projects. A few years later, I was able, through the same unofficial channel, to read Herbert Brün's book Über Musik und zum Computer (Brün 1971) shortly after its release. This retriggered my desire to work with electroacoustic music myself. There were just so many innovative things coming together: a sense of playfulness, research into sound, new technology . . . but it wasn't until 1976 that I had a chance to put ideas into practice, with the grant to work in Bratislava that I spoke about earlier. And the amazing thing was that it was financed by the Ministry of Culture. So sometimes the State was not quite the monolith it appeared to be.

I think this naive attitude was also typical for other composers. As chance would have it, I have stayed at it, at least as a part of my work. But I never considered myself to be someone working purely with electronic music.

Supper: Exactly. You also have instrumental works—for instance, Kurt Masur and the New York Philharmonic have performed an orchestral piece of yours.

Katzer: Yes, *Sound-House*, after Francis Bacon's *New Atlantis*. The piece has a part for tape, by the way.

Supper: Back to what may have influenced your music: Did the French notion of acousmatic music have an impact?

Katzer: When I first read Brün, I knew nothing about what was going on at Bourges or the like. It was only through my first contacts when I went to the festival there that new influences arose. It's too bad that the GMEB no longer exists. There were also meetings of the Bourges academy [Académie internationale de musique électroacoustique de Bourges, where there were many discussions about acousmatic music. Christian Clozier, codirector with Françoise Barrière of the GMEB studios, used an erudite French spoken fast and indistinctly. Not only did I find it very difficult to follow these rather academic debates, I frankly wasn't all that interested. The Académie was never formally dissolved when GMEB was closed down, but to all intents and purposes it no longer exists.

Connections to International Organizations

Supper: When I think back on electroacoustic music in the GDR, I associate it with the International Confederation of Electroacoustic Music (ICEM/CIME), founded in 1981 in Bourges. The organization was a member of both the International Music Council and UNESCO. The GDR became a member of CIME. How did that come about?

Katzer: That remains to this day an interesting question. Lothar Voigtländer and I had the idea to found a Deutsche CIME, or DecimE [a pun on the German word for the musical interval of a tenth]. We wrote up some documentation and sent it to the Ministry of Culture. The proposal was to create a nongovernmental organization, with the name DecimE for the promotion of electroacoustic music. I was absolutely flabbergasted when our proposal was approved. We were even given our own office with a secretary. We started out as an association with about 20 members, and I was allowed to call myself "president" [laughs] and Voigtländer was vice-president. This also allowed

me to travel to Toronto to participate in the CIME annual general meeting. This was marvelous for us, especially because it was almost impossible to get "out" otherwise. As a member of the AdK I had some privileges, of course, so I might be granted permission to travel if I had a major performance somewhere. The conditions were always difficult, though. I was not allowed to take any money with me and I could not buy a ticket for train or bus or plane. For that I would have needed foreign currency, but it was illegal in the GDR to possess any. So I had to drive my car with 60 to 80 liters of gas in canisters—feeling like a bomb ready to go off any minute!—just to get to France, the Netherlands, or wherever.

Post-Reunification

Supper: A result of reunification was that the German section of CIME had to be put under a new legal basis. In 1991 it was re-established as the "German Section of the Society for Electroacoustic Music e.V., DecimE." In 1994, after withdrawing from CIME, the association was renamed as Deutsche Gesellschaft für Elektroakustische Musik (DEGEM).

Katzer: And with that, having merged into what was now a single German musical landscape, the history of electroacoustic music in the GDR—as adventuresome as it may appear—came to an end.

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References

Böhme-Mehner, T. 2011. "Introduction: Electroacoustics in the GDR?" *Contemporary Music Review* 30(1):1–3. Available online at www.tandfonline.com/doi/abs/10.1080/07494467.2011.624267 (subscription required). Accessed July 2018.

Brün, H. 1971. Über Musik und zum Computer. Karlsruhe: G. Braun.

Meyer-Eppler, W. 1949. *Elektrische Klangerzeugung: Elektronische Musik und synthetische Sprache*. Bonn:
Dümmler.

Ruschkowski, A. 1993. "Elektronische Musik und Musikelektronik in der ehemaligen DDR." In B. Enders, ed. *Neue Musiktechnologien*. Mainz: Schott, pp. 59–74.

Schreiber, E. 1964. "Ein neuartiger elektronischer Klangund Geräuscherzeuger." OIRT-Zeitschrift Rundfunk und Fernsehen 2:33–35.

Steinke, G. 1966. "Experimental Music with the 'Subhar-chord' Subharmonic Sound Generator." *Journal of the Audio Engineering Society* 14(2):140–144.

Ziegenrücker, K.-E. 1987. "Studios für elektronische Musik in Berlin und Dresden." *Bulletin: Musikrat der DDR* 24(2):31–35.

Appendix: Selected Works

A complete list of works by Georg Katzer, including three string quartets, three operas, chamber music, and ten works for orchestra, is available online at www.georgkatzer.de.

Bevor Ariadne kommt (1976) Stimmen der toten Dichter (1977)

De musica (1977)

Stille, doch manchmal spürest du noch einen Hauch (1977)

Sound-House (1979)

Rondo, composition for tape. Studio Bratislava.

Soprano, piano, and tape. On texts by García Lorca, Hernandez, and Neruda.

Twelve vocalists, piano, and noises. Texts by the composer. Edition Peters.

Tape.

Orchestra, organ, and tape. Edition Peters.

Dialog imaginär I (1982) Radioscopie (1982) Aide-memoire (1983) Steinelied (1984) La Mécanique (1985)

Lieder und Kommentare zu Ovid (1985)

heiter, ma non troppo (1986)

Räume (1987)

Dialog imaginär II (1987)

Mon 1789 (1989) Mein 1989 (1990)

Dialog imaginär III (1990) Dialog imaginär IV (1991)

Landschaft mit steigender Flut (1991) Dialog imaginär V "Essai sur . . ." (1993)

Dialog imaginär VI (1994)

L'Oracle de la dive bouteille (1994) Les Paysages fleurissants (2001) Fukujamas Kiste (2002)

Dialog imaginär VII (2004)

Preußisch Blau (Tagtraum/Erinnerung) (2008)

Für Tuba mit Hegel (2009) Steinelied II (2010) Incontro (2013) Pandoras Kiste (2016) Flute and tape. Deutscher Verlag für Musik.

Tape. Studio Belgrade.

Tape.

Computer-generated tape.

Tape.

Two oboes and tape.

Two guitars with live electronics. Tape. With slides by Rose Schulze.

Piano and tape.

Tape composition for radio.
Tape composition for radio.
Guitar, tape, and live electronics.

Bass clarinet and tape. Orchestra and tape.

Accordion and tape. Publisher: nota vita.

Tenor saxophone, tape, and actor. Verlag Neue Musik.

Tape and actor.

Prerecorded material (CD). Prerecorded material (CD).

Cello and tape.

Tape.

Tuba with live electronics. Edition Gravis.

Tape.

Chamber orchestra and tape.

Speaking double bassist and tape. On texts by the

composer.