## San Jose State University SJSU ScholarWorks

## Master's Theses

Master's Theses and Graduate Research

1995

# An oral history of electro-acoustic music of the Czech and Slovak republics

Libor Zajicek San Jose State University

## **Recommended** Citation

Zajicek, Libor, "An oral history of electro-acoustic music of the Czech and Slovak republics" (1995). *Master's Theses*. Paper 1108. http://scholarworks.sjsu.edu/etd\_theses/1108

This Thesis is brought to you for free and open access by the Master's Theses and Graduate Research at SJSU ScholarWorks. It has been accepted for inclusion in Master's Theses by an authorized administrator of SJSU ScholarWorks. For more information, please contact Library-scholarworks-group@sjsu.edu.

## **INFORMATION TO USERS**

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

# UMI

A Bell & Howell Information Company 300 North Zeeb Road. Ann Arbor. MI 48106-1346 USA 313/761-4700 800/521-0600

·

. .

## AN ORAL HISTORY OF ELECTRO-ACOUSTIC MUSIC OF THE CZECH AND SLOVAK REPUBLICS

A Thesis

Presented to

The Faculty of the Department of Music

San Jose State University

In Partial Fulfillment of the Requirements for the Degree Master of Arts

> by Libor Zajicek August 1995

**UMI Number: 1375732** 

Copyright 1995 by Zajicek, Libor All rights reserved.

UMI Microform 1375732 Copyright 1995, by UMI Company. All rights reserved.

This microform edition is protected against unauthorized copying under Title 17, United States Code.

## UMI

300 North Zeeb Road Ann Arbor, MI 48103

© 1995

Libor Zajicek

ALL RIGHTS RESERVED

FOR THE PEPARTMENT OF MUSIC APPROVE AUG Prof. Allen Strange

the I la lamba

Dr. Robert H. Cowden

Bia Belat Dr. Briar. Belet

APPROVED FOR BY THE UNIVERSITY

M. Jon Sewandowski

## ABSTRACT

## AN ORAL HISTORY OF ELECTRO-ACOUSTIC MUSIC OF THE CZECH AND SLOVAK REPUBLICS

## by Libor Zajicek

This thesis documents an oral history of electro-acoustic music of the Czech and Slovak Republics. Recorded interviews with people who are pertinent to this history provide the basis of this thesis. The history of electro-acoustic music of the Czech and Slovak Republics was shaped by the histories of government-controlled studios located in four cities: Plzeň, Bratislava, Brno, and Prague.

## TABLE OF CONTENTS

LIST	OF TABLES	viii
Chapt	er	
1.	INTRODUCTION	1
	Method of Research	2
2.	ORIGINS AND PLZEŇ	6
	Origins	7
	Experimental Studio at the Czech Radio Broadcast Station in Plzeň	10
	<ul> <li>Transcribed Interviews</li></ul>	14 21 36 38 40 46 49 56 68 69 69 70 71
3.	BRATISLAVA	73
	Private Experiments	73
	Audio Studio at the Television Station in Bratislava	74
	Triková režie (Sound Effects Studio)/Experimental Studio at the Radio Broadcast Station in Bratislava	76
	Transcribed Interviews Roman Berger Ing. Ján Backstuber Dipl. Ing. Juraj Ďuriš and Dipl. Ing. Andrej Zmeček RNDr. Miro Bázlik	91 95

	Jozef Malovec	. 109
	List of Instruments	116
	Audio Studio at the Television Station	112
	Evancimental Studie in 1065	. 110
	Experimental Studio in 1965	. 11/
	Experimental Studio Today	. 118
4.	BRNO	. 120
	Brno's Electronic Studio	. 120
	Audio-Visual Studio at the Janáček Academy of Musical Art	. 121
	Transcribed Interviews	123
	Prof. Rudolf Růžička	172
	Ing. Alois Piňos	. 130
	Doc. Mag. Arnošt Parsch	. 139
	Doc. Michal Košut	141
	Ing. Ivo Medek	. 143
	Daniel Forró	. 149
	Written Communication	156
	Libor Zajicek, 31 October, 1993	157
		. 157
	Jiří Hanousek, 15 November, 1993	. 158
	List of Instruments	159
	Brno's Electronic Studio	150
		1.07
	JAMU's Room # 1-11	. 100
5.	PRAGUE	. 161
	Electronic Studio at the Research Institute of the Radio and Television	. 161
	R-52 and the Audiostudio at the Czechoslovakian Radio	
	Broadcast Station in Prague	162
	The Audio Studio at the Academy of Musical Art	164
	Transcribed Interviews	164
	Mgr. Jan Jirásek PhDr. Milan Slavický	104
	PhDr. Milan Slavický	. 169
	Vlastislav Matoušek	173
	Doc. Ing. Václav Syrový, CSc.	180
	Doc. Ivan Kurz	189
	Written Communication	195
	Libor Zajicek, 4 September, 1993	195
	Doc. Ing. Václav Syrový, CSc., 20 November, 1993	104
	Libor Zajicek, October 28, 1994	178
	G. M. Koenig, November 19, 1994	199
	Stan Tempelaars, 25 January, 1995	200
	vi	

Frits Weiland, 19 November, 1994	201
List of Instruments Electronic Studio at VÚRT	
Electronic Studio at VÚRT	201
Audiostudio at the Czechoslovakian Radio	201
Broadcast Station in Prague	202
BIBLIOGRAPHY	

.

## LIST OF TABLES

.

Table	P	Page
1.	List of Interviewees, Summers 1993 and 1994	4

、

## CHAPTER 1

## INTRODUCTION

The histories of electro-acoustic music of the Czech and Slovak Republics are greatly dependent upon the political situations of the countries. Each change in the political regime directly influenced the state of electro-acoustic music. The political protests by Hungarians in 1956 brought forth a demise of Communism in Eastern Europe towards the end of the 1950s. This favorable political climate, in turn, allowed for electro-acoustic music to be introduced into the Czechoslovakian music culture. This introduction was made official with the First Seminar of Electronic Music at the studios of the Czechoslovakian Radio Broadcast Station in Plzeň in May, 1964.<sup>1</sup> With the invasion of the Warsaw Pact Armies on August 21, 1968, electro-acoustic music was officially denounced by the government as an "anti-state" activity. Only after the turn of the 1980s did more politically tolerant conditions return, enabling Czechoslovakian composers and musicians to resume ties with the Western mainstream artform.

As was disclosed by all the interviewees and is verified by the literature, Czechoslovakian electro-acoustic music was only realized in studios of four cities: Plzeň, Bratislava, Brno, and Prague. All electro-acoustic music was and could only be produced in studios that were housed in government-operated institutions. Thus, the history of electro-acoustic music of Czechoslovakia is a history of the electro-acoustic studios in four cities. These studios are (1) the Experimental Studio at the Czechoslovakian Radio Broadcast Station in Plzeň, (2) the Audio Studio at the Television Station in Bratislava, the Sound Effects Studio/Experimental Studio at the Czechoslovakian Radio Broadcast Station in Bratislava, (3) Brno's Electronic Studio (BES) at the Czechoslovakian Radio Broadcast

<sup>&</sup>lt;sup>1</sup> Miloš Bláha and Miroslav Mandík, "I. seminář elektronické hudby v ČSSR" (First Seminar of Electronic Music in ČSSR), Rozhlasová a televizní technika 5, no. 4 (1964): 89-100.

Station in Brno, the Audio-Visual Studio at Brno's university, Janáček Academy of Musical Art (JAMÚ), and (4) the Electronic Studio at the Research Institute of the Radio and Television (VÚRT) in Prague, the Audiovisual Studio at the Czechoslovakian Radio Broadcast Station in Prague, and the Audio Studio at Prague's university, Academy of Musical Art (AMU).

#### Method of Research

Two methods of research were used to compile the data. The first method was oral interviews of and written communication with Czech and Slovakian composers, sound engineers, and musicologists, and other important contributors living outside of the two countries. A standard questionnaire guide, in English, was always shown beforehand to each interviewee, and was used during all interviews. The questionnaire, as shown here, has not been edited in any way, and consists of the following questions:

1. Why does this studio exist? What forces stimulated its existence? What are the sources of support?

2. What is the administrative set-up? Is there a director, etc.? Is there technical support? Are there operating budgets, and if there are, what are they?

3. What is the history of the technical resources of the studio? What equipment was added and when?

4. Continue with Hugh Davies format,<sup>2</sup> and add "Technical Acquisition," and what equipment that they had at the time.

5. Was/is there a formal way to disseminate the music? How was/is the music distributed?6. What is the archive procedure?

<sup>&</sup>lt;sup>2</sup> The format used by Hugh Davies in his compilation, *Repertoire International des Musiques Electroacoustiques* (International Electronic Music Catalog) (M.I.T. Press, 1968).

#### 7. Get as much music as possible!

8. Get addresses of composers, studios, etc. ...

9. Get/make photographs of the studios, composers!

10. Get any technical printouts, technical layouts, room set-ups, etc. Get studio manuals.11. Is there a conscious aesthetic? What is it? Is there an environment that motivates the aesthetic? In other words, is there a reason behind the aesthetic?

12. And, any questions that may "arise" from the answers given to the above questions.

The interviews were undertaken during the summers of 1993 and 1994, while the written communication has been continual up to the time of the writing of the thesis. The interviews were administered in each person's native language, Czech or Slovakian. Each person's interview was recorded on cassette tapes using a Sony TCS-430 stereo cassette recorder. In interviews with people regarding the history of a particular studio, as many questions as possible were asked and answered. Interviews with composers who could not provide any further information about a particular studio consisted primarily of questions relating to their electro-acoustic compositions, such as what their names are, where they were realized, what instrumentation was used, etc.

Table 1 lists all interviewees. The format is such that the downward column, Interviewee, is arranged according to the chronological order of the time of the interview. Numbers not only indicate the placement of an interview in a chapter, but also the chronological order in regards to the history. In addition, the use of a number designates the interviewee's primary affiliation with that particular city and/or studio. Xs represent that an interviewee has also provided information about that given city and/or studio, but not enough to render the interview to be included in that chapter. Due to the affiliation of several people of Prague's institutions with the Experimental Studio in Plzeň, their interviews were necessary to be included in CHAPTER 2.

Interviewee		CHAPTER 3	CHAPTER 4	CHAPTER 5
Spáčil	8	x	x	x
Kadlec	7			
Růžička	x		1	
Piños	x	x	2	x
Parsch	x		3	
Ďuriš Zmeček		3		
Backstuber		2		
Berger		1		
Bázlik		4		
Malovec	x	5		
Košut		x	4	
Medek			5	
Forró			6	
Slavický		x		2
Jirásek	x		x	1
Matoušek				3
Herzog	1		x	x
Odstrčil	6		x	x
Kučera	2			x
Syrový	x			4
Kurz	x			5
Krumphanzl	3			x
Mandík	4	x		x
Bláha	5			x

Table 1---List of Interviewees, Summers 1993 and 1994

There were several purposes why written communication, letters, was also used. One, any people who I could not visit to interview were sent a letter. Two, any people who

significantly contributed to this history were contacted. Finally, any person who was in a position to answer and explicate any questions during my research was written to. Letters were sent to and received from Tomáš Svoboda, Jiří Hanousek, Václav Syrový, G. M. Koenig, Stan Tempelaars, and Frits Weiland. Letters were sent to but not received from Karlheinz Stockhausen, Pierre Schaeffer, and Petr Kotík.

The second method was researching published and unpublished documentation for the purpose of verification of a person's chronicle of data. Research of published and unpublished sources was made both in Europe and domestically. In the Czech and Slovak Republic, documentation was collected from interviewees, studios' archives, and the libraries of AMU and Charles University. Domestically, sources were obtained through San Jose State University's Inter Library Loan (ILL) service.

Although the majority of electro-acoustic music history occurred during the existence of Czechoslovakia, the newly formed Czech and Slovak Republics require that a documentation of the two countries' histories be written. However, I will often make use of 'Czechoslovakia' or 'Czechoslovakian,' which refers to the period of time before the breakup of Czechoslovakia in January, 1993. Czechoslovakia had an internet of government-owned radio stations throughout the country. The headquarters are located in Prague, and may be referred to as the Czechoslovakian Radio or the Czech Radio. Also, the headquarters in Prague not only serve this function, but are also the Czechoslovakian Radio Broadcast Station in Prague. This station, divided among several buildings, houses the Audiostudio in one of the buildings in the suburb of Karlín. All usage of the Czech and Slovakian languages follows their grammar. In the transcribed interviews, any information in brackets, e.g., [], is additional and provided by me. The purposes of this format are to grammatically correct the sentence, to clarify a word(s) adjacent to the brackets, and/or to provide additional information about a particular statement.

5

### **CHAPTER 2**

## ORIGINS AND PLZEŇ

This chapter documents (1) the early history of the foundation of electro-acoustic music in Czechoslovakia, and (2) the consequent establishment of the Experimental Studio at the Radio Broadcast Station in the city of Plzeň. The participants whose interviews provided pertinent information about the early history of the foundation of electro-acoustic music in Czechoslovakia are Dr. Eduard Herzog (musicologist), Prof. Dr. Václav Kučera (composer, pedagogue at AMU), Ing. Aleš Krumphanzl (engineer, VÚRT), Ing. Miroslav Mandík (technical engineer, VÚRT), Ing. Miloš Bláha (technical engineer at VÚRT and Ústav pro hudební vědu [Institute of Musicology], ÚHV, in Prague), Ing. Karel Odstrčil (composer, Chairman of Společnost pro elektroakustickou hudbu, SEAH [Society of Electro-Acoustic Music], in Prague), Prof. Rudolf Růžička (composer, pedagogue at JAMU, Brno), Ing. Alois Piňos (composer, pedagogue at JAMU), Doc. Mag. Arnošt Parsch (pedagogue at JAMU), Mgr. Jan Jirásek (sound engineer at the Audiostudio at the Czech Radio Broadcast Station, Prague), Jozef Malovec (composer, former sound engineer at the Experimental Studio at the Radio Broadcast Station, Bratislava), Doc. Ing. Václav Syrový, CSc. (pedagogue at AMU), Doc. Ivan Kurz (composer, pedagogue at AMU), and two letters from Tomáš Svoboda. The people whose interviews provided pertinent information about the establishment of the Experimental Studio at the Radio Broadcast Station in Plzeň are Čestmír Kadlec (Tonmeister at the Experimental Studio at the Czechoslovakian Broadcast Station, Plzeň), and Eduard Spáčil (composer). Some information about both topics will be provided by all interviewees.

Due to the fact that some individuals did not provide a great amount of information about the two subjects of this chapter, their transcribed interviews will be listed in subsequent chapters. Those interviewees are: Rudolf Růžička, Alois Piňos, and Arnošt Parsch in CHAPTER 4, Jozef Malovec in CHAPTER 3, and Jan Jirásek, Václav Syrový, and Ivan Kurz in CHAPTER 5.

### Origins

The origins of electro-acoustic music in Czechoslovakia date from the cybernetician Dr. Antonín Svoboda's early experiments undertaken shortly after World War II in the 1940s.<sup>1</sup> Having lived in the United States for some time, Dr. Svoboda realized the potential of uniting computers with the compositional process of music. Specifically, he was interested in compositions like the one composed by Mozart for a keyboard instrument, in which every measure can be interchanged and still be musically logical.<sup>2</sup> After his return to Czechoslovakia after the war, he proposed this idea to the Český hudební fond (Czech Music Fund) in 1956 or 1957, but was rejected.<sup>3</sup> Furthermore, Dr. Svoboda, already an employee of Aritma, a Czechoslovakian company that built early calculating machines, wanted to create a company that would build computers. Again, no officials of any governmental Ministry had an understanding for his visionary ideas. During this time Dr. Svoboda was already a friend of the composer Miloslav Kabeláč, who was also interested in the newly established genre of electro-acoustic music. The importance of this friendship was that Dr. Vladimír Lébl and Ján Rychlík joined Kabeláč and Svoboda in their pursuit of learning about electro-acoustic music.<sup>4</sup> An interview with these musicians was published in

<sup>&</sup>lt;sup>1</sup> Dr. Eduard Herzog only specified the period as 'in the 1940s, right after the war.'

<sup>&</sup>lt;sup>2</sup> The composition that Tomáš Svoboda is referring to in his letter dated 15 May, 1994, is Mozart's Musikalisches Würfelspiel (Musical Dice Game), K. 516f.

<sup>&</sup>lt;sup>3</sup> Prof. Dr. Kučera was not quite sure of the year. In *Baker's Biographical Dictionary of Musicians*, 8th ed., s.v. "Svoboda, Tomáš," the return of Dr. Antonín Svoboda to Czechoslovakia is listed as 1946.

<sup>&</sup>lt;sup>4</sup> Dr. Herzog could only recall these two names. However, Vladimír Lébl and Ladislav Mokrý—in their bibliography of the article, "O současném stavu nových skladebných směrů u nás" (About the Current State of New Compositional Directions Here by Us) in *Nové cesty hudby* (New Paths in Music) (Prague: Státní hudební vydavatelství, 1964), 30—list other participants' names in their annotation to Ivan Polednák's article, "Hudba, která se rodí v laboratoři" (Music which is born in the Laboratory): Jarmil

the *Lidových novinách*.<sup>5</sup> The publication of the interview was an indication of Czechoslovakian composers' strong desire to educate themselves with this new media. In addition to the experiments undertaken by Dr. Svoboda, composers such as Vladimír Srámek and Tomáš Svoboda experimented with primitive tape recorders.<sup>6</sup> Tomáš Svoboda, the son of Dr. Svoboda, composed a five-minute long composition, *Ballade of Destroyed Church* in 1960.<sup>7</sup> Using a Grundig tape recorder, Svoboda experimented with the sounds of the piano. Lejaren Hiller's lectures dealing with the current state of electro-acoustic music given at the Czechoslovakian record company, Supraphon, in Prague around 1960 were extremely inspirational to aspiring Czechoslovakian electro-acoustic composers.

Miloslav Kabeláč's efforts, such as his visits to Pierre Schaeffer's studios in Paris during the beginning of the 1960s and to the newly established electronic studio in Warsaw, had the most direct effect upon the establishment of electro-acoustic music in Czechoslovakia.<sup>8</sup> As a result, during one of the meetings of the Society of Czechoslovakian Composers, a Cybernetic Commission was formed which consisted of Kabeláč, Lébl, Rychlík, Dr. Eduard Herzog, Václav Kučera, and Milan Meninger.<sup>9</sup> The reason for the

Burghauser, Svatopluk Havelka, Vladimír Šrámek, and Václav Trojan.

<sup>7</sup> Tomáš Svoboda only provides the title of the composition in English, and not in Czech.

<sup>8</sup> In fact, Rudolf Růžička credits Kabeláč for introducing electro-acoustic music into Czechoslovakia.

<sup>&</sup>lt;sup>5</sup> Dr. Herzog must have made a mistake with the name of the newspaper. The only article that fits Dr. Herzog's desription is the one published in the *Literární noviny* on November 18, 1961, which I have found listed in numerous bibliographies.

<sup>&</sup>lt;sup>6</sup> In Lébl and Mokrý's article, "O současném stavu," Lébl documents additional composers on page 24 whose names Dr. Herzog could not remember: Tomáš Svoboda, Wiliam Bukov, and Václav Kašlík. Although Lébl also does not give any specific dates when these experiments were made, he does, however, write that they date from the period of the published article in the *Literární noviny* of November 18, 1961. Dr. Herzog's seclusion of Tomáš Svoboda being one of the first to experiment in this genre is contradicted in Lébl and Mokrý's article!

<sup>&</sup>lt;sup>9</sup> In the article, "Komise pro elektronickou hudbu" (Commission for Electronic Music) in *Rozhlasová a televizní technika* 6, no. 4, (1965): 128, Milan Meninger not only discloses that the members

formation of this commission was that its members realized that a studio needed to be established in order that Czechoslovakian composers have the means to compose electroacoustic music. Therefore, Kabeláč, an employee of the Czechoslovakian Radio before and shortly after World War II, took advantage of his friend, engineer Ladislav Janík's offer to give lectures at the facilities of the Radio Broadcast Station in Plzeň about electro-acoustic music.<sup>10</sup> Janík was an employee of the Výzkumný ústav rozhlasu a televize, VÚRT (Research Department of the Radio and Television), and conducted experiments with stereophony at the Czechoslovakian Radio Broadcast Station in Plzeň.<sup>11</sup>

The Cybernetic Commission, under the leadership of Kabeláč, organized these lectures in the early part of May, 1964 at the Radio Broadcast Station in Plzeň titled, First Seminar of Electronic Music. The purpose of this seminar was to give Czechoslovakian composers the opportunity to familiarize themselves with instruments required to compose electro-acoustic music. The Electronic Studio's engineers at VÚRT had the responsibility of providing instruments for this seminar, and had two weeks for this task. Over fifty people, ranging in professions from composers to technicians to musicologists, attended this First Seminar.<sup>12</sup>

of the commission had changed their name from 'Cybernetic' to 'Electronic' Commission in January, 1963, but also the members' names: Bohumil Cipera, Ladislav Janík, Karel Rissinger, Bohumír Samek, Antonín Špelda, Antonín Sychra, and Jaroslav Volek. Although Dr. Herzog said that Jan Rychlík was also the commission's member, the article by Meninger does not verify this claim.

<sup>&</sup>lt;sup>10</sup> In the article, "Životopis Miloslava Kabeláče" (Biography of Miloslav Kabeláč) in *Hudební věda* 25, no. 1 (1988): 16-9, Lébl writes that Kabeláč was the first Musical Director of the Czechoslovakian Radio from 1932 to 1941, and 1945 to 1954, and Head Musical Producer from 1954 to 1955.

<sup>&</sup>lt;sup>11</sup> Meninger's article, "Komise," shows that Janík was an engineer at VÚRT. The activities of VÚRT will be documented in more detail in CHAPTER 5.

<sup>&</sup>lt;sup>12</sup> In the article, "I. seminář" on page 99, Bláha and Mandík write that there were fifty-seven participants. The range of professions was: producers, composers, technicians, musicologists, sound engineers, and others.

### Experimental Studio at the Radio Broadcast Station in Plzeň

The Experimental Studio at the Radio Broadcast Station in Plzeň was established in 1967 as a direct result of the First Seminar of Electronic Music. The studio was equipped by the engineers at the Electronic Studio at VÚRT in Prague, which was Czechoslovakia's leading builder of custom-built electronic instruments. The selection of Plzeň, as opposed to Prague, was due to several reasons. For one, Plzeň's seclusion as opposed to Prague provided a composer with uninterrupted working conditions. Two, the facilities of the Radio Broadcast Station in Prague were inadequate and divided among several buildings. The Radio Broadcast Station in Plzeň, on the other hand, consisted of only one new building constructed for the specific purposes of broadcasting. The chance of establishing an electro-acoustic studio in Plzeň, as opposed to Prague, was therefore far greater. Three, VURT's research of stereophony at the Radio Broadcast Station in Plzeň provided for state-of-the-art facilities and an atmosphere required for the establishment of a studio of this new music. Finally, unlike studios at the Radio Broadcast Station in Plzeň, studios in various facilities in Prague were primarily used for recording purposes. Thus, the possibility to set aside a studio for the purposes of realizing electro-acoustic music in the Radio in Plzeň was far better than in studios in Prague.

Two sound engineers, Čestmír Kadlec and Václav Ježek, were hired by the Radio Broadcast Station in Plzeň for the Experimental Studio. Today, Ježek has left and has established a private radio station. The studio's finances fall under those of the entire Radio Broadcast Station. The acquisition of the Experimental Studio's instruments was always secondary to that of recording studios in the Radio Broadcast Station. Only after the needs of recording studios were met, were funds allocated for the purchasing of instruments for the Experimental Studio. Unfortunately, there were no 'outside' sponsors who could provide finances for the acquisition of instruments for the Experimental Studio. Due to

10

these factors, the technical progress of electro-acoustic music created at the Experimental Studio was slower than, for example, the technical progress of pop music realized in recording studios.

The Experimental Studio was and is part of the technical facilities of the Radio Broadcast Station. This means that the Experimental Studio, as long as there are not any electro-acoustic compositions realized there, is at the disposal of sound engineers of recording studios for the production of their projects, such as Hörspiele or pop music. On the other hand, sounds needed for an electro-acoustic compositions are recorded in one of the recording studios, and then processed/edited in the Experimental Studio. The Experimental Studio does not have its own director. Instead, the technical director of the entire Radio Broadcast Station is also the director of the Experimental Studio. Specifically, engineer Kadlec supervises all of the studio's activities. Today, the number of compositions realized at the studio per year has declined to two, while fifteen years ago the rate was about fifteen compositions. The reason for the decline of compositions realized is due to the dissipation of funds for commissions. As recently as 1992, funds specifically set aside for commissions ranged from 50,000 to 100,000 Crowns (\$1,800 to \$3,600), but for 1993 the funds were not been appropriated. Compositions were created upon a composer's invitation by the Radio Broadcast Station, or upon the composition's submission to a particular competition of the Radio Broadcast Station. Composers were discouraged to produce more than one project per year at the Experimental Studio in order that rumors of enticing profits would not surface.

The instruments of the Experimental Studio have been acquired throughout the years.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> Kadlec and Spáčil provided the following instrumentation. Unfortunately, Kadlec was not able to remember when all of the instruments were obtained; hence, question marks represent this uncertainty.

- 1967-mono mixer
- late 1960s-12-tone generator
- 1969-stereo mixer, 4-track tape reorder
- 1968/69-2 octave-filters (Peekel)
- 1974— Brüel & Kjaer 1/3-octave filter
- 1975 or end of the 1970s-8-track tape recorder (currently upgraded to 16-track)
- before 1985/86/87—1 sampler (the first one by Korg)
- 1989—1 Roland S-50 sampler
- 1989/90-2 Yamaha equalizers (31 wavebands per channel)
- summer 1993—Apple Quadra 950, Interface, ProTools
- ?—2 Yamaha EMP 100 reverberators<sup>14</sup>
- ?-1 Yamaha REV 7 reverberator<sup>15</sup>
- ?-1 Peavey Addverb digital sound-delay processor
- ?—1 Dynacord DRP 16 digital reverberator
- 1978/79—1 Eventide Digital Delay 1745 M digital delay
- ?---1 Atari, C-Lab Notator

The realized compositions were primarily disseminated through radio broadcasts. Up to now, the Radio Broadcast Station has not been able to produce a CD of the Experimental Studio's electro-acoustic compositions due to financial difficulties. Each composition has been broadcast about five times throughout the studio's existence. In addition, concerts were given to small audiences in various studios of the Radio Broadcast

<sup>&</sup>lt;sup>14</sup> Kadlec does not state that the instruments are reverberators made by Yamaha. However, the invoice of instruments that I documented with his help proves that the instruments in question indeed are reverberators made by Yamaha.

<sup>&</sup>lt;sup>15</sup> Although Kadlec says Rev '5', my invoice shows that it is a Rev '7'.

Station or in venues in Plzeň. These concerts consisted of 'music for tape.' However, when the formats of compositions consisted of a live performer together with tape, which happened rarely, they were very popular with audiences.

Master tapes of the compositions, archived consecutively in the Radio Broadcast Station in Plzeň, are labeled with the acronym, "EH," which stands for "Elektronická hudba" (Electronic Music), plus a number. Copies of these compositions are also archived at the Czechoslovakian Radio in Prague, but are labelled differently. In addition to Plzeň's label, the copies in Prague are identified with another label, and, unlike the chronological system employed in Plzeň, are stored according to the composer's last name. The compositions were, and are, owned by the Radio Broadcast Station in Plzeň and were sometimes even released on gramophone records.

The overall aesthetic behind the Experimental Studio's "sound" was the processing of recorded acoustic sounds as a result of the studio's insufficient state-of-the-art instrumentation.<sup>16</sup> Primarily used was the piano due to its spectrum of sound. Thus, for live performances, the combination of live performer plus tape was frequently used. Essentially, Czech composers realized compositions in the Experimental Studio. In esence, no Slovakian composers used this studio because they had superb facilities in Bratislava.<sup>17</sup> Among the foreign composers to compose at the Experimental Studio were two Rumanians, Liviu Dandara and A. Hrisanide, two Yugoslavians, Lida Fraijt and Josip Kalčič, and a German, Dieter Salbert.<sup>18</sup>

<sup>&</sup>lt;sup>16</sup> Kadlec believes that one can indeed talk about a "sound" of the Experimental Studio.

<sup>&</sup>lt;sup>17</sup> The studios in Bratislava will be considered in CHAPTER 3.

<sup>&</sup>lt;sup>18</sup> In the list, "Skladby realizované ve studiu pro experimentální hudbu v Plzni" (Compositions Realized in the Studio for Experimental Music In Plzeň), most likely compiled by Kadlec, only the first initial of Hrisanide's first name is given.

#### **Transcribed Interviews**

The interview of Dr. Eduard Herzog was taped in his apartment in Prague on

Monday, August 9, 1993, at 9 A.M.

EH: ... [Nové] cesty hudby—

LZ: Kolman [I am telling myself that he is talking about Peter Kolman].

EH: ... Broadcast Station of the electronic studio, in the Broadcast station; and the overall situation.

LZ: Yes, yes, I know of him. They [people in Bratislava] spoke of him.

EH: To Mr. Malovec he was very close.

LZ: Yes, yes. I know all of that.

EH: So about that [history of the Experimental Studio at the Radio Broadcast Station in Bratislava] he can also somehow tell-

LZ: I know all of that.

EH: ... he can also give you certain information.

LZ: Who? Mr?--

EH: Kolman.

LZ: Yes, but to Austria [Peter Kolman emmigrated to Austria] I was not able to go.

EH: You do not have, do not have a trip [planned]?

LZ: No, there [unfortunately] no. But I know of him and everybody told me of him.

EH: Well yes, Backstuber knows him, Janík and these, they are [were] close co-workers with him, and so on. He [Kolman] was the Director there [Experimental Studio in Bratislava].

LZ: Yes.

EH: So this [he does not complete the sentence].

LZ: Hmmm, can I already record you? I am already recording you.

EH: Yes, you can record already!

LZ: Great, great. Can I quickly interrupt you, hmmm ...?

EH: As long as you have—

[Turned off tape recorder for sound check.]

EH: . . . start it up, so that it—

LZ: Yes, it is already continuing to record.

EH: Now I will look not to look at the tape recorder, if it is recording [he laughs].

LZ: So can you tell me about the history? What you know? What you can remember?

EH: I think that it would be better, if you would ask me some of your questions so that you will lead me to what you actually need to know, because during the history [of electro-acoustic music] here [Czechoslovakia] so many things happened, so that I do not needlessly repeat something that you already know.

LZ: So can you tell me about the first electro-acoustic composition? Just what you told me, that it was done at home?! [Before the taped interview, Dr. Herzog had briefly discussed the early experiments.]

EH: I would start this way!

LZ: OK, great!

EH: A certain person here in Prague who was one of the leading founders of cybernetics, was in America during World War II. Then he returned, and was here [Czechoslovakia] the first [person] who began to work with early computers, etc. That was, I do not know whether or not you have heard of him, Prof. Antonín Svoboda. His son, Tomáš Svoboda, lives in America; I do not know whether or not you will be able to hear about him in the future [if you will find out any information about him during your research]. And this

person [Prof. Antonín Svoboda]—music to him was close [was dear to him], he was also in personal contact with Bohuslav Martinu in America-came here [Czechoslovakia] with such various ideas of uniting computers [back then, computing machines] with music. And he had various initiatives. He himself was a good friend here [Czechoslovakia] with musicians, for example, conductor [Václav] Smetácek, and so on, and his son [Tomáš Svoboda] was a very talented musician—he studied composition, and somewhere in America is professor of music; I do not know exactly where, but you can find out about it here [Lébl, Vladimír and Ladislav Mokrý. "O současném stavu nových skladebných směrů u nás" (About the Current State of New Compositional Directions Here by Us), Nové cesty hudby]. And he [Prof. Antonín Svoboda], not the son Tomáš—he [Tomáš] was more conservatively oriented in music—but this Prof. Antonín Svoboda also had very close friendly contacts with Prof. [Miloslav] Kabeláč, who was [back] then the teacher of his son for a long time. And he [Prof. Antonín Svoboda] already had back then, that means in the 1940s immediately after the war, different [various] ideas to take advantage of [to exploit] computers [back then, computing machines] with music and the like—he also proposed something in the [Czech Music] Fund [Český hudební fond], and the like, which more or less did not reach [attain] some realization; it was developed into another direction. But what was important was the fact that somehow then, via Kabeláč and Prof. Antonín Svoboda, several people became befriended: Kabeláč, Svoboda, [Dr.] Vladimír Lébl, Jan Rychlik. And back then, we wrote an article [the interview which he will discuss] about this friendship; that is, [about] the new directions and indeed the possibilities and the like in the Lidových novinách [People's Newspaper]. And in the Lidových novinách came out, back then, a certain "interview" [he says 'interview' in English] of us. The interview was planned and arranged about the [was about the planned and arranged] possibility of new music, by using machines, etc. And at that time already, as far as I can remember, Vladimír Srámek, who was also among us, already somehow [somewhat] with magnetic recorders did certain first sound-experiments [made early experiments of electro-acoustic music] and such attempts [trials]. But, he was not alone! There were here [Czechoslovakia] others who did this [early experimentation]. So these were the first attempts of which I know.

Officially, it began like this. After these [attempts]-that of which I am telling you about now, the "interview" in the Lidových novinách—this came about in the time of the first "loosening-up-period" [in terms of the political situation], probably around the beginning of the 1960s. And these attempts did not stop, especially Kabelač [was a big proponent] . . . Ahhh Kabeláč was very agile [active]; he drove to Warsaw [Polskie Radio Experimental Studio (ExpSt Warsaw)], to the festivals in Warsaw, and there he also established many personal contacts. And there was established here [Czechoslovakia] a kind of [a] commission at the Society of Czechoslovakian Composers [Svaz československých skladatelů (SCS)]. Their Secretary [Chairman] was Vladimír Lébl. And it was named—I do not know exactly—Commission for Cybernetics and Music, or something like that. In this Cybernetic Commission, the Secretary was Lébl, but the main members were Rychlik, Kabeláč; I too participated in it. And our kind of a goal [objective(s)] was mainly somewhere to establish some studio where one could work, and also to create an interest among composers to establish this studio [and the music]. One of the persons [who] was also there was ... OK, it was like this. Kabeláč before the war [WWII] and also during the first years after the war was an employee [first Musical Director of the Czechoslovakian Radio from 1932 to 1941, and 1945 to 1954, and Head Musical Producer from 1954 to 1955] at the [Czechoslovakian] Radio [(Československy rozhlas) whose headquarters were in Praguel. And at the Radio at that time, after 1945, was [employed] one of the leading employees in technology, Ing. [Engineer] Ladislav Janík—but not related to the one [Peter Janík] in Bratislava. This is an entirely different Janik. And this Ing. [Ladislav] Janik was then-I do not know from what date, but I do

15

know that it was already at the end of the 1950s and the beginning of the 1960s--intensively preoccupied with stereophony and the installment of stereophony into the Radio [into all the radio stations of Czechoslovakia]. And for this he had at his disposal in Plzeň, at the Plzeň Radio Broadcast Station, a special kind of working laboratory with a listening [audio] studio, etc.

LZ: At the Radio Station?

EH: [Yes] at the Radio Station. And this Ing. Janik, as a friend of Kabeláč-because he [Kabeláč] had an interest in electro-acoustic music-made him [Kabeláč] an offer, if he should need it, the disposal of the working studio and the audio studio at the Plzeň Radio Broadcast Station, and so on. And he [Janík] also helped ... At the time he [Janík] was actually an employee of the Research Institute of the Radio and Television [Výzkumný ustav rozhlasu a televize], VURT it was called; [stereophony] was also developed and experimented there [VURT]. So then, out of this research from the Research Institute of the Radio and Television, where they also had various instruments and the like, a back-up [enforcement, a parallel research] to the Plzeň studio existed. And due to the cooperation of the Commission in the Society of Czechoslovakian Composers and this here Ing. Janik from the research facilities [VURT] was more or less a possibility created that sometime during the beginning of the 1960s a course [seminar (First Seminar of Electronic Music)] be held among young composers. It was lead by Kabeláč. It was also attended by Antonín Svoboda, who I told you about-the cybernetician-Janík, and others. And we had [gave] presentations of what we [Czechoslovakian composers] could do at the time. That [Seminar] was [held] in Plzeň, at Janík's laboratory, and it was sometime during the beginning of the 1960s. The exact year I cannot tell you. There also came [attended] colleagues from Bratislava. And I must say that in Bratislava, because there existed in the 1950s more free circumstances than here [the Czech state of Czechoslovakia], they were basically ahead of us [in electro-acoustic music]. There already in the Radio Broadcast Station, and Television [studio], they produced something. Jan Stadrucker introduced [his composition or the experiments made at the Television studio]... At Stadrucker's [Television Station's studios]—I do not know whether or not at that time he was still at the Radio Broadcast Station [in Bratislava] or already at the Television [studio]—there worked [Jozef] Malovec, [Peter] Kolman, [Ilja] Zeljenka, [Roman] Berger-they already joined him then; and Bázlik, also yes [worked there]! So they had a lead [advantage]. I think it was in 1960 or [19]61. You will maybe read about it here [Lébl, Vladimír and Ladislav Mokrý. "O současném stavu nových skladebných směrů u nás" (About the Current State of New Compositional Directions Here by Us), in Nové cesty hudby]. They were also here [Seminar] and showed us what they already knew, and so on. There were a whole number of composers here [Seminar]: Piños was also at the Seminar, ... well, and so on. So out of this Seminar emerged certain impulses; in any case the practical work [the ability to create electro-acoustic compositions] was at a minimum. I will even tell you exactly when it was! It was in 1964. Of course, the preparations took some years for this [Seminar]. And the year, 1964, I remember, because one of the most important initiators and enthusiastic proponents was Jan Rychlik, and this Rychlik did not partake in it [Seminar]; he was dead. He died at the beginning of 1964 [January 20, 1964] and he was not there [Seminar] then. Well, the preparations and attempts went with heavy difficulty, because there were always many administrative obstacles and so on, that not until sometime in the second half of the 1960s an electronic studio in Plzeň was established. Its equipment was the responsibility of the Research Institute of the Radio and Television. And at the [Prague] Radio Broadcast Station back then was established a kind of department for electronic music, of whose management and equipment I was externally [part-time] put in charge. The studio in Plzeň provided for the first opportunities, and it [provided] for the best overall technical [compositions] that were possible to do [produced] here [Czechoslovakia] at the time,

because the studio was equipped by VURT, allowing for any availability of equipment [in Czechoslovakia at that time]. But, it [the studio in Plzeň] had one disadvantage. The studio in Plzeň was under the management of the regional Radio Broadcast Station in Plzeň. Therefore, I only had more or less indirect access. [In other words, he provides his case as an example of the disadvantage of the studio: everybody who did not work directly at the Plzeň Radio Broadcast Station only had indirect access to its electronic studio!] And that was why I had a desire that electronic music be created elsewhere. And despite the fact that there was not an officially established studio in Prague and Brno, there was "half blacklike" [semi-illegally] one could say, produced [electro-acoustic compositions] in Prague and especially in Brno-in Brno there was the greatest background [concentration of composers who had the greatest interest in electro-acoustic music]. There were composers such as [Alois] Piňos, [Miloslav] Ištvan, who today is deceased, and others. The studio [Brnenské elektronické studio (BES), Brno's Electronic Studio] there was directed by Jiří Hanousek. Jiří Hanousek is today in West Germany [Germany] somewhere near Hanau, I think there somewhere, [and teaches] at a musical school. So he directed it [BES]; he was responsible for it, where pretty intense work took place, which was during the second half of the 1960s.

In the meantime, mainly due to the impetus of Kabeláč, we [Czechoslovakian composers] tried to establish contacts with foreigners [mainly those from the West]—it is stated in there [the article by Lébl]—especially through Warsaw [Warsaw already had an electro-acoustic studio in the 1950s], and others. Kabeláč had close personal contacts with Paris, with Pierre Schaeffer; then later also with Utrecht, with [Gottfried Michael] Koenig, and so on. And thus larger seminars were established here [Czechoslovakia] with foreign developers giving presentations, which gave us opportunities to learn.

[End of tape. Turned side of cassette.]

LZ: You may proceed!

EH: I think that it was in 1966, when Pierre Schaeffer with his associates François Bayle and Guy Reibel were here [Czechoslovakia]. They worked back then in Paris in Groupe de Recherche at Pierre Schaeffer. And basically, these three were here. They organized seminars and courses for about a week-mostly here in Prague, sometimes also in Plzeňwhich were extremely important for the encouragement of our people [composers, musicians, etc.]. At that time [1966] in Plzeň, we already almost had a completed studio. At this studio were employed permanent employees—they were Ing. [Cestmír] Kadlec and [Václav] Ježek; he [Ježek] does something different now [after the Revolution of 1989 he opened his own radio station]. On the basis of this seminar [Schaeffer's seminar(s)], I was also a year later, I think in 1967, in Paris, where I familiarized myself with all [equipment] that they had there in their studio [Groupe de Recherche]. I received from them all kinds of materials, tapes [recordings of electro-acoustic music], and so on, with which I returned here [Czechoslovakia] and promoted them during my presentations and seminars. We had another seminar [like the one given by Schaeffer]-I believe two years later [1969]-with employees of Utrecht University. They were Gottfried Michael Koenig, Frits Weiland; and there was also an outstanding engineer and technician, Stan Tempelaars. Those two [Koenig and Weiland] are famous. Tempelaars was mainly the technician responsible of technical development, and was in charge of the equipment. As you know, it was on a high technical level and was owned by Utrecht University. So those were the three, and we had with them additional good contacts.

So this is [the information] about the development of the official line [direction] and so on, as long as there were here [Czechoslovakia] composers [interested in electroacoustic music]. The composers who at that time worked [composed] in Plzeň were [Karel] Odstrčil; [Václav] Kučera also worked there, [Miroslav] Hlaváč—Ing. Hlaváč—and many others. And these were among the first [composers] who worked there. And the second kind of "center" was [located in] Brno, based around [Jiří] Hanousek. They [composers who composed there] were [Alois] Piňos, [Miloslav] Ištvan, [Arnošt] Parsch, [Rudolf] Růžička, and so on. Work was created there [the likes of Plzeň].

And apart from this, composers also worked sporadically in Prague. For example, and this is his only electronic composition, Jan Kuksák's Sacrum Convilium I would [describe] it for you . . . Basically, it is very interesting. It is made out of Gregorian [chant], made out of singing material—a very interesting thing [composition]. And then there was Zbyněk Vostřák [who worked in Prague]. Zbyněk Vostřák [June 10, 1920-August 4, 1985] was one of the main leading initiators and proponents of all new music here in Czechoslovakia. Overall as a composer, he was very interesting. And I would like to say that he, among all of the composers interested in this music [electro-acoustic], was most precise and most industrious. This Zbyněk Vostřák created a whole number of compositions here in Prague [in various studios]—some of them are also on gramophone records—and later he also worked in Plzeň. Maybe this would also interest you. Would you have a chance to dub it here in Prague?

LZ: To dub it?

EH: I do not know how the recordings are available in the [Prague] Radio Broadcast Station's archives. He had everything at home in his meticulous archive, now under the supervision of his widow. Do you know anything about *Nevěstka Raab* [Bride Ruth]? Or do you know anything about it, or Jaroslav Krček?

LZ: No, but I have heard of that name [Krček], but do not know [anything about Nevěstka Raab].

EH: Jaroslav Krek's Nevěstka Raab was sort of a unique composition. Jaroslav Krček back then-I was an employee of Supraphon [a Czechoslovakian record company], [which was located] near Rudolfinum [Czech Philharmonic's symphony hall in Prague], as editor of gramophone production—was the Music Director at the [Prague] Radio Broadcast Station; hmmm [I was employed] at Supraphon. We, at Supraphon, had more precise and better technical equipment than [that which] was at the [Prague] Radio Broadcast Station. At the Radio Broadcast Station was [equipment] only the kind that "existed" [no sophisticated equipment, nothing special]. And we also had there [Supraphon] good technicians. So back then, I did the following "thing," [which was] that— Krček was responsible for electronic music at the [Prague] Radio Broadcast Station—I made a kind of an agreement with Supraphon for the creation of compositions by Jaroslav Krček. He came to me [approached me] at that time with an interesting proposal. In Switzerland existed some sort of an operatic competition, [competition] of opera with electro-acoustic means and the like, and he wanted to participate. And he had a colleague at the time, a poet in Plzeň, who wrote him a libretto-in a kind of precise prose-based upon a Biblical subject [Book of Ruth, Old Testament], Nevěstka Raab. And because it was a big project, it would be made at Supraphon for the [Prague] Radio Broadcast Station. That means that the Radio Broadcast Station financed it, and Krček did [realized] it together with Ing. Sýkora at Supraphon. They did [realized] it. He [Krček] even received there [at the opera competition] in Switzerland some sort of prize—it was successful [in Switzerland]—and here [Czechoslovakia] in the meantime, the [political] times got so bad that it [Nevěstka Raab was not accepted [by the political regime, art censor]. Here it was completely surpressed [denied performances] in that time, and in the meantime, it was released somewhere in England on a gramophone record. So the record is not available [on the Czechoslovakian market]. Should I dub it for you?

LZ: Yes.

EH: I will make you a copy. It [the production of the record] was done back then at Supraphon. Here at that time, it [the record] was totally surpressed until, I think, after 1989 [Revolution] when it was re-released. So this Krček is also a member of the

[Czechoslovakian electro-acoustic music] history. But as you can see, although [the opera was produced] in the frame of the [Prague] Radio Broadcast Station, but [it was] not directly produced/made in the Radio Broadcast Station. At the Radio Broadcast Station—that was in the time during the beginning of the 1970s up to the end of the 1980s—it [Nevěstka Raab] was not broadcast and "touched" at all. To the contrary, there were many administrative inconveniences with it [Nevěstka Raab].

This is probably the overall description of the production [of] how it [electroacoustic music] "looked" [what it was like] in the 1960s and 1970s. One such overall significant [important Czechoslovakian electro-acoustic composition] composition which was "born" in Plzeň —its beginning was still before the establishment of the studio [Experimental Studio] in Plzeň, but still at VÚRT [in other words, in Prague], OK?—was Kabeláč's *E fontibus bohemicis*. It is a fairly big matter [a large composition], in five movements, probably about half an hour [long]. And Kabeláč, who was an initiator, had overall the biggest credit that it [electro-acoustic music] was even promoted here [Czechoslovakia] back then in the 1960s; that it [electro-acoustic music] came into practice [that electro-acoustic music became accepted in Czechoslovakia as artistically valid music by composers, etc.]. Like I told you, on the one hand, the cooperation with Ing. Ladislav Janík of VÚRT, on the other hand, the arrangements and connection with the French Groupe de la Recherche, and with the Utrecht studio were actually all his initiatives. So basically the result of his interest of this music was this composition, *E fontibus bohemicis*.

So this was the [overall] production [of electro-acoustic music in Czechoslovakia] up to 1971. After 1968—not directly after 1968, but evidently at the beginning of the 1970s—arrived, of course, a turn of events [which were specifically detrimental to electroacoustic music] as a result of the domestic political situation, which was not reflective of the fact that they [Communists] would officially, completely close electro-acoustic studios —it would not be advantageous propaganda of the Communists to "officially" close the studios [the closure of studios would show the public that the Communists would not be interested in the development and promotion of the arts, in general]—but overall evident in the internal administrative ways was the entire activity [music and studios] dimmed, supressed, controlled, made impossible a lot.

LZ: Yes, of course. Everybody told me that.

EH: For me practically, it meant this, for example, among other things. We were somehow -after the seminar [1969] with the Dutch studio in Utrecht—in good contacts with them. We established exchanges and the like. Frits Weiland was here [Czechoslovakia], and in Plzeň sometimes listened to some of the productions which we had [realized]. We negotiated that I would send him some compositions, which would be broadcast from Hilversum [Nederlandsche Radio Unie (NRU) Hilversum], and so we made up a list of compositions [that Mr. Herzog would send him], and I put all the paperwork [a list of compositions with detailed description, application for permission to mail this music to the West, etc.] together. And when I brought all the paperwork to the International Department of Supraphon [this department checked the paperwork and music]—this department mailed it-then began complications of 'To Netherlands?', 'What?', and 'How?', and 'What?', and 'What would I gain from this?' and 'What would I not gain from this?', and 'What political consequences will it [the mailing] have?'. In the end, I could not send it out at all, because it was during a time of the "Mozcara" [slang for Soviet rule]; the Communists would look upon us [Supraphon] very unfriendly, and politically it would not be acceptable. And so 'No.' So the entire thing which was agreed to and negotiated upon [between Dr. Herzog and Weiland], I was told that I was not allowed to do that or what else. And these kinds of embarrassments I encountered on a daily basis, and I did not have any opportunity to work there [Supraphon], because of an absolutely unprofessional nontechnical understanding [by the management]. Therefore in the end, I left there and stopped to work there. The studio [in Plzeň] was not closed, but struggled somehow to stay operational. Odstrčil, I believe, sometime went to Plzeň [Experimental Studio], as well as others with permission. But I then stopped to have interest in it [Experimental Studio, Plzeň], because it was unsustainable and without leadership. I also believe that since that time [beginning of the 1970s], any relationships and contacts with any foreign studios died and were broken up. So the situation in the 1970s was very surpressed, and what happened afterwards [at the Experimental Studio, Plzeň] I do not know; I was no longer preocuppied with electro-acoustic music afterwards. I was involved with electro-acoustic music up to the beginning of the 1970s.

In addition as far as I know, then originated the studio at the Academy of Musical Art [Akademie muzických umění (AMU)] with Ing. Syrový of course, with whom we [Supraphon] were in contact. We were closely located [geographically]—Supraphon had a studio near Rudolfinum—for he was only a few steps away, back then at the Academy of Musical Art. I was also by him [I also visited his studio] and saw what he was doing [in electro-acoustic music], and the like. So this was the general outline. And I can also tell you in addition about whatever detailed things, but you must rather ask me what you would like to know!

LZ: Who were the people who cooperated with Kabeláč at the beginning? EH: Vladimir Lébl, Bohuslav Cipera, who was an employee at the [Prague] Radio Broadcast Station, was the Musical Director and had technical input. So these three who, one could say, "pulled" with me [these three men, together with Dr. Herzog, instigated the beginnings of electro-acoustic music in Czechoslovakia] are not alive today anymore. And the others, more or less, they did not participate in the organized work of this group except to have the opportunity to visit the studio [Experimental Studio, Plzeň] and work there. [In other words, these four men were being taken advantage of.] So among the living organizers in the development of electro-acoustic music of that time here [Czechoslovakia] is also [Peter] Kolman in Vienna, and [Jiřf] Hanousek near Frankfurt. And otherwise, there is not anything else.

LZ: With this "big" history you have helped me. I thank you.

EH: If anything came out written [published], then it is here in Nové cesty hudby [its bibliography]. There is also something in Hudební rozhledy [journal], but today I do not know what [was published in it]. Then, the translation from Supraphon of Pierre Schaeffer about musique concrète was realeased; that was a book [Konkrétní hudba (Musique Concrète) Prague: Supraphon, 1971] that I translated. In the end, I could not use my [real] name, because there were certain differences [among him and the Communist-controlled publisher]; I did not achieve any agreements, but that does not matter. And [there was also published] a book by Vladimir Lébl about electronic music [Elektronická hudba (Electronic Music) Prague: Statní hudební vydavatelství, 1966]]. These are, somewhat, the main "things" that existed here. The Schaeffer [translation] is not important [as far as your research of Czechoslovakian electro-acoustic music history is concerned], because it is purely a translation. I only state this fact to point out the fact that it even existed here. In addition, there came out a second volume of this Nové cesty hudby, but in it practically is not anything about electronic music.

Also, one more interesting fact was that Lejaren Hiller was on a visit here in Prague around the year of 1960. With him we also got together. Back then, Jan Rychlík was still alive. And I [met him] at [the residence of] Mrs. Herberta Masaryk. Mrs. Herberta Masaryk has, namely, a daughter who is married to Petr Kotík. Does this name tell you anything?

LZ: No.

EH: Petr Kotik is a composer. He studied the flute here [Czechoslovakia] at a conservatory [in Prague] and who now also lives in America [U.S.A.]. He was very excited about John

Cage, and the like. He was the founder of, one could say, the first ensemble here [Czechoslovakia] that fostered new music, Musica Viva Pragensis, and sometime during the 1970s—I do not know exactly when—he emigrated, and lives in America. And this Hiller, back then, also had a presentation here [Czechoslovakia]—that was at Supraphon about all kinds of things, and it was interesting and substantial. This [visit] was also one of the first impulses that helped in the creation of the electro-acoustic music movement in Czechoslovakia. He was then very successful with contacts with Warsaw [ExpSt Warsaw]. To Warsaw he went more frequently [than studios in Czechoslovakia]. I met with him for one more time in Darmstadt [Darmstadt courses] sometime in the 1960s. LZ: Great.

[End of conversation.]

The interview of Prof. Dr. Václav Kučera was taped at his home in Prague on

Tuesday, June 21, 1994, at 9:30 A.M.

VK: ... which begins with electronic music.

LZ: Ah, ha! Well then, you know of Mario Davidovsky?

VK: Of course.

LZ: Ah ha, great; you know him. He visited us [San Jose State University] for a whole week like for, like for . . . just one concert was music of his—

VK: Really?

LZ: ... and he talked with students, and things like that.

VK: Yes. Well, and a number of others. For example Wuorinen, for example, is a composer who—

LZ: Ah ha, you also know him?!

VK: ... has excellent flute compositions. Then also, Milton Babbitt.

LZ: You know Milton Babbitt?

VK: Milton Babbitt I know him personally very well, because he is a mathematician ...

LZ: Of course.

VK: Look out!---

LZ: Very serialistic.

VK: Between you and I, he is not a very good composer according to me,-

LZ: That is fine. I do not like serialism.

VK: ... but he is an incredible combinationalist; and he especially thinks mathematically. He is a mathematician ... There is not a better theoritician of issues of permutations, and so on, than Milton Babbitt.

LZ: Yes. And then of course there is Xenakis.

VK: Yes of course, but he, of course, is European. That is not America anymore. [We were talking about American composers whom Kučera knew or knew of.]

LZ: Do you know John Chowning from Stanford?

VK: Probably not.

LZ: He who invented FM Synthesis?

VK: Hmmm, ah ha. Well, no. I do not know that [name].

LZ: Well, this Allen Strange, he is the President of ICMA-

VK: Ah ha!

LZ: Internatinal Computer Music Association.

VK: That is superb.

LZ: And it is like this. This year the conference will be in Denmark, Aarhus. VK: Aarhus.

LZ: Aarhus.

VK: Aarhus [uses correct Dutch pronunciation]. They pronounce it Aarhus. There is a little circle above the 'A'. Do you know why I know this? Because my wife was in Denmark for two years—

LZ: Ah ha.

VK: . . . where she worked.

LZ: So Syrový is trying to get him [Strange] here [Prague] for a couple of days for a concert, and so on.

VK: That would be great. That would be great.

LZ: So I would let you know.

VK: Yes of course, for certain. Jesus, I would very happily like to meet him! LZ: Certainly.

VK: Well, I hope that in that time I will already be healthy [he had a torn Achilles tendon].

It is awful. I am barely walking. You can see what the leg looks like. It is always swolen. LZ: Yes, yes.

VK: But now I have to make a "short process" with it [a cliché that suggests that he has had enough]. Well, it is beginning to stop entertaining me.

LZ: Yes, I believe it.

VK: It is awful. Well, so---

LZ: OK, great.

VK: So you got your Bachelor degree in composition?!

LZ: [Yes] I received my Bachelor degree in composition and now I am getting my Master degree in-

VK: Who is your main professor?

LZ: Allen Strange.

VK: Him, ah ha! So back then you were already oriented towards electronic music?

LZ: Yes, yes, more or less.

VK: And also towards 'computer composition' [he says 'computer composition' in English]?

LZ: Hmmm, no. More towards just electro-acoustic music.

VK: Because look out: a person needs to have a normal compositional base [background].

LZ: Yes, of course.

VK: To write normal [standard] notes-

LZ: I did that.

VK: ... and only then build, basically, unto that with the aid of the machines [computers, synthesizers, etc.].

LZ: That is exactly how I did it.

VK: In that case, that is the best way.

LZ: That is how I did it.

VK: That is the best way.

LZ: And now the Master degree, I am getting it in musicology-

VK: Superb.

LZ: ... and also my Ph.D. I will get it in that [musicology].

VK: Superb. Where will you do that?

LZ: Probably my Ph.D. in San Diego; at the University of California-

VK: In San Diego. But perhaps in that time, we will have the opportunity to have [provide] a Ph.D.,---

LZ: Yes.

VK: ... and so then you could even do it here by us [AMU].

LZ: Yes, I would come. I have already talked about that with Syrový.

VK: Yes, for sure.

LZ: He told me that it already exists at FAMU [Filmová akademie muzických umění (Film Academy of Musical Art)], but-

VK: But that 'ain't the real thing'?!

LZ: Ah ha.

VK: You see, there it is sound production, but to accompany a visual signal.

LZ: Yes.

VK: If you were oriented in this way-music to accompany films, for television productions and so on-then please, it is at FAMU. But genuine composition,-LZ: Yes, I thought that, too.

VK: ... the authentic [composition], authentic music creation [he says 'authentic music creation' in English], then in that case that is by us [AMU] ...

LZ: Yes, yes.

VK: ... then it would be better.

LZ: Yes, of course.

VK: And were are now waiting . . . we already have for it [the Ph.D. program in musicology] a grant. We have prepared the foundations for the doctoral studies, and from the beginning of next [school] year [fall 1995], it should be already under way. So, so,---LZ: Only this year [to finish my Master] and then I could immediately begin here in September?!

VK: Yes, yes. As soon as you will have your Master degree, then-

LZ: Yes, for sure.

VK: ... then you can do your Doctorate.

LZ: For sure, for sure.

VK: Right?

LZ: You know, we are looking here for a little apartment in case that something like this should come about.

VK: Ah ha, you see? Ah ha, that would be worth it, would it not?

LZ: Yes.

VK: Do you have a family [he incorrectly assumed that I was married]?

LZ: Yes, now they [I thought that he meant my parents] are about to fly in on Wednesday,

the 29th. So I have to drive to Frankfurt to pick them up.

VK: And the madam is an American or a Czech?

LZ: No. no.

VK: Czech?

LZ: We are all-

VK: You are all Czechs?

LZ: Yes, of course. VK: That is wonderful.

LZ: I am from Plan by Marienbad. That is where I am from.

VK: Jesus, that is beautiful. That is beautiful country. My grandmother was from near there.

LZ: Ah ha.

VK: Near there, not exactly in Marienbad, but close.

LZ: Well, from Plan. We are from Plan.

VK: That is great. And now I want to ask if you maybe know Karel Husa, or perhaps you have heard of him?

LZ: Well, I have heard of him, of course.

VK: Last year, he received the enormous "Glowmeier Prize" [he says 'Glowmeier Prize' in English] which is big: \$150,000. That is a big prize. And he received it for a violoncello concerto. He is preparing now . . . in the fall will be the premiere here in the Czech Republic. He is Czech—Karel Husa, he is a composer—and he does it [composes,

teaches]... where does he do it? Well, at some university where he does conducting as well as composing. I will probably remember in a moment; great, fine [he says 'fine' in English].

LZ: So may we [proceed with the interview of talking about his electro-acoustic compositions]?

VK: We may!

LZ: Hold on, I have to quickly check if it works.

[Turned off tape recorder.]

LZ: We can begin immediately [if you like].

VK: Yes; so, here is 'Prof. Dr. Václav Kučera, Prague' [he is reading this off the business card that is glued to his biographical career brochure], and we are talking about [my] electro-acoustic compositions. I will cover it chronologically in the way that the compositions were composed, because I belong to those who actually founded the [Experimental] studio in Plzeň. I was present at the very beginning with Prof. Špelda, with Ing. Kadlec, Václav Ježek, and so on. There were a number of us there [First Seminar of Electronic Music]. So to that [First Seminar of Electronic Music and the founding of the studio] I count myself as one [of the founding members]. So the first [electro-acoustic] composition composed was *Kinetický balet* [A Kinetic Ballet (1968)]; you will find everything here in this brochure.

LZ: Of course.

VK: It is a composition which is composed essentially from a specific method of Pierre Schaeffer, in which the majority is concrète material-recorded acoustically-and then through the means of analysis of sound evolve acoustical objects, with which I then work. So, the main "road" was the method of analysis of acoustical materials, which were recorded as existing naturally or artificially created sounds. OK? The ballet was indeed performed by the ensemble Syntesa, and exactly in 1968, the year of its creation, in the Music Theater [in Prague]. There were even visual objects which moved on stage there. This was done by Ing. Cáp who was the Director of Scenography at the National Theater. He was a superb person. Well, and it has three sections [movements, acts]: Labyrint, Pastorale, and Spirála [Labyrinth, Pastorale, and Spiral]. Well, back then, if I am allowed to say so, this composition had a fairly big success; there were very good reviews about it and so on. So this was the first [electro-acoustic] composition, Kinetický balet. It is altogether twenty-eight minutes long, all of the three movements together. In addition to this, I will briefly add [comment] to the individual movements. In the movement Labyrint, I am working with [the] synthetically produced sound of the human heart. It appears as if it were a natural sound—the pulsation of a person's heart: pamp, pamp, ... pamp, pamp, ... . pamp, pamp [he vocally reproduces the sound of a heart beat]; about seventy-six on the metronome, there about. But no, careful [watch out]! It is synthetically produced. So this is the only sound that is produced synthetically through the way of synthesis, but everything else is [done using] the analysis of acoustical objects. In Pastorale, there I edit the sound of a pastoral [shepherd] flute, which I however, very many-sidedly edited in the studio. That is why it [the sound of the flute] sounds sometimes almost like breathing, and sometimes like a contrabass, sometimes like a song, and so on. You see? It is a pastoral [shepherd] flute, a blockflute, OK? In Spirála, there again are used such unique recordings [recorded sounds] of when people react in sport stadiums basically to some event. And now the pressure of the sound of the crowd is used here as one of the acoustical objects. So this is a bit of an unusual material. But again, it is *concrète*, acoustical material—that is to say, in the spirit of *musique concrète*, that is to say, like *concrète* music—with which it is composed.

So now the next composition. [Turned off tape recorder.]

#### LZ: OK.

VK: So a year later after Kinetický balet-which means in 1969-was composed Kinechromie. This is a composition which combines both methods, both the method of synthesis of sound and the method of analysis of sound. Synthesis of sound is essentially created on the basis of certain optical pulses of an acoustical signal which are layered through various ways. This was the equipment that was available at the Plzeň studio back then. And according to which way one shadows [covers, masks] the photocell which controls-through the use of voltage control [he says 'voltage control' in English]-the acoustical signal, so either the height and color are the two paramters concerned. And basically we are talking about a sine-wave which is controlled by the photocell. So this is a certain rarity which I made use of only in this composition. But in addition to this, there are sounds of a piano, sounds of wind and percussion instruments which are however very much edited, especially through means of transformation of [tape] speed and through means of filtering, and so on. 'Kinechromie' is a word that I created myself, out of the Greek 'kine' which means movement, and 'chromos' means color. So "the movement of color"—'Kinechromie.' It is similar to the Kinetický balet. Even Kinechromie came out on record. Here in the brochure you have all of the numbers, where you will find all of the numbers of the records. The first [Kinetický balet] was released by Supraphon, and the second [Kinechromie] was released by Panton.

LZ: Well, excuse me. I called Supraphon and Panton whether or not they have something in their archives, and they openly told me 'No.'

VK: That they do not? Jesus, I hope that they at least have their archives. They were not allowed to sell it [archive of master tapes].

LZ: I, during the course of this past year, wrote them, and my dad even called them from work: 'we have nothing.'

VK: That is awful!

LZ: You know, of course, that I knew for sure that something had to have been released here [Czechoslovakia] on records.

VK: Certainly, certainly. Now even another composition [of mine] was released on record, and that is a relatively major composition which also received an international "echo" and award, and this composition is named Lidice. I call it a "Broadcasting, musical, dramatical fresco for a recitator, two reporters, announcer, solo soprano, and mixed choir, instrumental ensemble, and electro-acoustic sounds." So this is an enormous "apparatus" which is here [made use of]. So this composition, *Lidice*, was actually composed for the anniversary, for the thirty-year anniversary of the liquidation of Lidic [a town in Czechoslovakia that was completely liquidated, including all of its residents, by the Germans during WWII, June 1942], the Czech village Lidic. It was composed directly at the Plzeň studio [Experimental Studio] and was also released on record by Supraphon. Here, there is also the number of it [record] in the brochure. It is a composition which actually combines something between a [radio news] report, ... because [radio news] report, an audio [radio news] report is a broadcasting genre, it is a typical broadcasting genre: when somebody comes with a microphone and interviews or records, for example, the sounds of animals or something like that, and so on, the songs of birds. So the form of the [radio news] report is performed through the reconstruction of the tragic event, like when the SS battalions came and poured houses with gasoline and shot all of the men, and so on. Well, it is an awful, awful event, and the composition has a shocking effect. But it is a tragedy, because the event was indeed a tragedy in our history during the war. I will also tell you about a little detail, that the first performance took place in a factory among people were there were about 2,500 people at Škoda [Czechoslovakia's largest mechanical company], at Škoda in Plzeň. Back then it [the concert] was organized by Cestmír Kadlec with Václav Ježek in order that completely ordinary people would be addressed; completely ordinary [people], because in Lidic those people who were shot were miners. So we basically wanted to turn to these ordinary people, workers with this composition. When it finished, the composition, all of the people were completely silent for about twenty seconds. I did not know whether it [Lidice] failed or what had happened. And then I heard that a number of people were crying; . . . that it [Lidice] affects very strongly emotionally. I am only saying this as a small detail from the premiere. Later, the Broadcast Station [Czechoslovakia's Radio] sent [and entered] it to Italy to an international competition of the radio broadcast stations, and there it won the big prize, *Prix d'Italia*, about which I was very happy, of course.

LZ: What year was that about?

VK: That was composed in 1972,---

LZ: And that in Italy?

VK:... and that was, I think, still during the fall of 1972, because it was composed during the spring, and in the fall of 1972 it was...

LZ: That is OK.

VK: We may find it here [brochure] somewhere. 'Prix d'Italia, 1972', yes. You see? LZ: Ah ha.

VK: Everything is here in the brochure.

LZ: Great, great.

VK: So that was *Lidice*. It is a composition that was a significant chapter in my life. As far as the technical side is concerned, so of course it was also necessary to use the semantics of speech, because the text had to be understandable. So on one hand, I used the reporters and the announcers as a text that had to be understandable for the listener, because it describes what was going on. But then in addition is also used, for example, [the] text of Hitler's command for the liquidadtion of Lidic in German, of course. Well, the text was, because it was a historic event, read by Káha [Karl] Frank who was the German Vice-Protector here [during WWII], and was read in the square of Lidic to all the people, saying that they are basically convicted to their deaths, and so on. Well, and I worked with this [text]. The sound of German, . . . Hitler's command is deformed as if out of people's voices there emerges howling of hyenas, and some monster that is here for the purpose to destroy lifelife of the people. So in this sense the voice is used [edited] two ways. This is the vocal element. Then there is also a soprano, which although I use normally as it sounds, but I layer out of it a sixteen-channels montage. So everything out of one soprano goes on top of each other, and I create a sort of polyphonic plain [area] which in essence creates the introduction. And actually in the voice of the soprano is expressed the entire tragedy which then will follow. So there is a choir, there are instruments, and so on. It is a normal work [processing] with these acoustical objects in the studio, especially through the way of analysis, because the acoustical objects that we recorded in the studio . . . Notice, already these acoustical objects were stereophonic! So we worked with a normal stereo-with two-, three-, four-stereo-because everything was, even the most fundamental acoustical objects were already recorded using stereo, ... because the overall atmosphere had to have a certain acoustical unity. The acoustical atmosphere of the composition [had to have an acoustical unity]. That was why it was not possible to mix it down from mono recordings, and thus it was necessary to work with the stereophonic original material. So that was Lidice.

Then there is another composition—also a bit on the bigger side—twenty minutes long, and that is *Spartakus* [*Spartacus*]. In fact, I was inspired by the American movie, which was made exquisitely.

LZ: Yes, with Kirk Douglas.

VK: Yes, exactly, yes. And the actor is [gave] such a superb performance that it completely ravished me. And here I began to work for the first time with a kinetic space—kinetic

space—[and] that is why the composition is quadrophonic. And the listener has to sit in the middle and the speakers have to be around him. And it is also a composition that was recorded at the Plzeň studio, again with Čestmír Kadlec and Václav Ježek, and it was also released on record by Supraphon. It should be available; it is not that old. It is a composition from 1976. Well and, of course, on the record it is reduced to stereo, not quadro because unfortunately for the time being there still are not available quadrophonic decoders for records and so on. Here I mainly worked with vocal and instrumental material again, but with that in mind that there are here a male, female, and mixed choir which create a certain polyphony, not only in the sense of leading of voices—as in, for example, Bach's or simply Baroque polyphony, but modern of course [in this composition the polyphony is modern] polyphony of the leading of voices—but also space polyphony. So I know exactly when which voice enters, where in space, how it moves in this space. So it is indeed possible to talk about a kinetic sound whose [one of all the components] component is a spacial polyphony. Do you understand?

#### LZ: Yes.

VK: So this is a bit of a uniqueness. And, of course, a person will hear this only when he hears it quadrophonically, because how the choirs gradually come and go-some from the right from the back, some from the left from the front, then one is directly behind you, and so on-so we were very precise about the fact that the "spacing" be very identifiable; that it be audible during a performance. So this was Spartakus. So these were electro-acoustic compositions [the last four that he described] that originated as autonomous music created in a studio. But in addition to this, you will find here in this brochure compositions in which electronics is a part of together with something else. So for example, in the ballet, Srdce a sen [Heart and Dream (1973)], there is used a somewhat of a stereophonic montage, again made out of human voice, instruments, *concrète* sounds, plus the sound of a normal orchestra. So I envision it that during a theatrical performance-the ballet, unfortunately, has not yet been performed, because it was an impossible technical difficulty -the orchestra plays live and that the Tonmeister, always upon the direction of the conductor, play back the tape which would be a good recording presented during the performance of the ballet. Srdce a sen-I myself wrote the libretto-deals with the question of a difficult heart operation of a person who is heavily sedated before the operation, and now during the course of the operation when one does not know whether he will or will not live and so on, a dream reveals itself to him, and now his whole life is flashing in front of him. Well, it is not long. It is only a thirty-minutes long ballet; only half an evening. And in the end everything turns out well. The operation was successful and the person lives on. But the threat of death presents itself several times.

Now, I like a composition very much which was performed in London at the ISCM festival, and back then it was critically acclaimed there as the most interesting composition of the entire ISCM festival, ISCM [he says 'ISCM' in English]. You know what it is? International Society for Contemporary Music [he says 'International Society for Contemporary Music [he says 'International Society for Contemporary Music] he says 'International Society for Contemporary Music] in English]. U.S.A. is also a member of it, so that . . . And it was there that I familiarized myself with Brian Fennelly, because he came as the American delegate representing American composers. So this is the composition, *Invariant* [1969], music for bass clarinet, piano and stereo tape recorder. It is actually composed for two of our [Czech] superb musicians, Due Boemi [Due Boemi di Praga], which consists of Josef Horák, bass clarinet, and Emma Kovárnová, piano. It is a world famous duo. Josef Horák is actually the Honorable Chairman of The Clarinet Clinics [he says 'The Clarinet Clinics' in English], hmmm Clarinet Clinics which is an American organization, hmmm no Bass Clarinet Clinics . . . . Bass Clarinet [he says 'Bass Clarinet' in English]. And he basically induced me to gradually compose four or perhaps even five compositions for them, for Due Boemi. Well, and one of the early [compositions that I wrote for them] was this

composition, *Invariant*. 'Invariant'—it is a term from cybernetics—it is basically some kind of a phenomenon, or quantity, or number which remains constant even if it undergoes certain permutations, transformations, and so on. 'Invariant,' that it is invariant[-able], do you understand me?

LZ: Yes, yes.

VK: And the invariant[-ness] is the sound of the bass clarinet and of the piano, despite the fact that in the acoustical objects which I made in the studio out of the recorded sounds [of the two instruments]-despite the fact that one works with the very grandiose sound, one transforms them [sounds] and changes them in which ever way: for color, rhythmically, pitch-wise, and so on-so again, it is a work basically with concrète material. Here is no synthetically-created sound. It is only the sound of the bass clarinet and piano. And notice, in addition there are several words which the two musicians say to each other during rehearsal. This is fairly amusing, because they say for example, I will try it one more time,' or 'I allow myself to be advised.' And now out of their speech I make fragments: 'sit down, sit down' [he says 'sit down, sit down' in English], 'let's go,' 'hold on, hold on! I will try it again, ... one more time, again, again, one more time.' And basically jokes like that. So this is a composition that back then ... I simply could not believe that it ... not only the English who were the majority there, but also the composers, that they would accept it so tremendously. Basically, it had an enormous success back then in London. It was actually the world premiere. So this is *Invariant*. It was also released on record. We will later come to an agreement, ... do you know what? That what you could not somehow, somewhere [buy], or what you do not have [recorded] yet from Plzeň, ... I unfortunately always only have one record, because all that I had I gave away. But I will make some tapes for you!

LZ: Whatever you want. Great.

VK: And, do you understand? So that you have it available.

[Turned off tape recorder.]

VK: Now, . . . may I?

LZ: Yes, yes.

VK: The next [electro-acoustic] composition is *Horizonty* [*Horizons*]. And this is a composition that I actually composed for a Finnish ensemble, FREQ—Finnish Radio Experimental Quintet [he says 'Finnish Radio Experimental Quintet' in English]. And it is still lead by Jarmo Sermilä, who is an excellent composer, friend. You could also familiarize yourself with him. He is a splendid person. By the way, he is the Chairman of the Janáček Association of Finnland. He is a great person. He is a big friend. He has his own publishing company.

LZ: Excuse me. I visited Eduard Spáčil. He knows him also.

VK: Yes, certainly; they all do. They all know him here, [I was unable to identify his first name] Stivin, [I was unable to identify his first name] Dasek, and so on. The musicians know him. But actually I can say that I am the one who "brought" him here [Czech Republic]. Great! And it [Horizonty] was also released on record, on Panton. You will have it all available.

LZ: Great.

VK: *Horizonty*, and it is a composition which makes use of—which for the first time, actually—a synthesizer as existed [at that time]. It is a composition in which five performers play directly, which are a flute, contrabass, trumpet—he [trumpet player] changes to a cornet—piano, and the keyboards [synthesizer]. So five performers. With 'keyboards' I mean synthesizers. Well, and there are several, so to speak "pictures" created which actually are supposed to always create a certain feeling of a horizon; a horizon that "runs off" somewhere into the distance. But you know, during this time, the horizon ruffles in all sort of ways, rises like waves. But then again, it calms down and in the end it

28

ends with something that a listener can associate with, or I think that he can associate with. Do you know what is a Czech "umíráček?" When a bell rings [he demonstrates it vocally], a rather high pitched bell in the tower of a church in a village [signaling] that somebody has died.

## LZ: Yes, I understand.

VK: So this is the last impression, the last horizon of man when he is actually laid down into earth. So this is how it is intended. It is a rather serious composition. White noise is frequently worked with there—with white noise [he says 'white noise' in English]—and a segment of the white noise and so on. And with certain sounds that are very colorful which are synthesized on the synthesizer as percussion sounds; and besides that also regular percussion sounds, a couple of temple blocks, and things like that. Well, you will hear all of that. It is a composition, Horizonty, from 1978. It ... hold on! How exactly was it? Ah yes, the electronic material of the composition I also did in Plzeň [Experimental Studio]. It [electronic material] was actually a segment of the entire composition, because it was determined that it be realized there in Finnland; and they then also recorded it in Finnland. Besides that, our [Czech] ensemble also performed it here, the Barock Jazz Quintet, which is [comprised of] Jirka [Jiří] Hlaváč, and so on. And as a matter of fact, back then Ted Curson, the American jazz trumpeter, a frail African-American who plays superbly, recorded it with them. Perhaps I could make you both recordings? They are very different, because graphical elements are used in the score. So Ted Curson recorded this composition together with the Barock Jazz Quintet here in Prague. Well, that was that!

And now notice. The last composition of which I would like to talk about is the composition Goghův autoportrét [Gogh's Self-Portrait (1985)], van Gogh's autoportret, music for bass clarinet and stereophonic tape recorder. In this composition, a piano is not used anymore, but it is only for bass clarinet [and tape recorder]. And it was composed for Harry Sparnai, who is a Dutch bass clarinetist, a superb [bass clarinetist]. He and Horák are always a bit competitive; but both are basically superb. Of course, Horák was historically the first who emancipated the bass clarinet as a solo concert instrument. Well, and it is based on the ... van Gogh has several self-portraits, and this is [Goghuv autoportrét makes use of actually the last self-portrait before his suicide which he committed. And the name of it [portrait] is Portrait with a Grey Hat. It is, when one stares at it--because I was in the Gogh's Museum in Amsterdam where I studied all of thistragic picture: what the eyes tell [communicate], the eyes of the painter who painted himself. It is an unbelievable drama of man's life, ... because he had already before that received nervous [psychological] treatment in France, and so on. Well, we all know the tragedy of van Gogh's life. So with it [Goghuv autoportrét] I want to express the gradual, the arrival of madness, whose outcome was the suicide of van Gogh. So it is a very dramatic composition. And it is true that it was not recorded on record, but it even exists on video tape; it was recorded on video tape with Harry Sparnai. It would be perhaps possible to make a copy of it somewhere, ... because it was done [recorded] by my son who worked at the TV as a producer, a film producer, but now he does not work there anymore. So I do not know whether or not it would be possible to do [make a dub]. Well, we will see. We will try it perhaps. But in any case, I will dub the music for you, too, ... because I recorded the sound objects in Geneva. Back then—it was in 1985—when a totally new "thing" among synthesizers [came out, existed] which was the Prophet 2000, which was a phantastic machine for that time, of course. Today it is all outdated. But it fascinated me so that I basically recorded the [sound] objects there at the studio of Jacques Giullionet where this instrument was at my disposal for several days; where I prepared things, but put things together in Plzeň [Experimental Studio], the final shape [the final montage of the composition]. I recorded the raw material in Geneva. Well, and of course together with it is composed the voice [part] of the bass clarinet which is written in traditional notation. So

again it [Goghův autoportrét] is a combination, and it is a combination of pure electronics and of the pure instrument's sound. So it is indeed . . . I have always oscillated between the worlds of concrète music and that of electronic [music]. And in the end, in essence, both spheres evened out by the fact that in several compositions as for example in *Lidice*, or in *Spartakus*, they integrate. And in *Gohův autoportrét* they remain independently by themselves, but only combine within themselves. Do you understand? They do not integrate among themselves; not to interweave together as sometimes occurs. But the electronic sound remains the electronic and the concrète, instrumental sound of the bass clarinet, remains as its own, also. So now I would like to come to the question of my aesthetics.

#### LZ: Please!

VK: I am convinced that the entire sphere of the entire electro-acoustic, I would say, technical base that the composer has at his disposal in the electronic studio is actually supposed to help him, to broaden the palette of sound possibilities as from a point of view of the instruments of the sound; as from a point of view of the methods of editing [processing, working with] the sounds in the studio, and I would say, in the transformation of the sound, the final shape [of the sound] that the composer needs. That is why I think that electro-acoustic composing is capable of significantly enriching the possibilities of [all] compositional creations and several of their restrictions. He who understands it [composing] as that to a certain time period one composed for the human voice and instruments, and then one ends [with composing for the voice and instruments] and one will compose only for electronics, he is according to me very much mistaken. Because if you look at it only from a point of view of acoustics—take for example the sound of the violin, or the sound of a human voice, some beautiful mezzo soprano or a human, male tenor and so on-[so] they are such complicated sound objects, that should a person create them in a studio, then it is something as if a chemicist should create milk. And the chemist until today is unable to accomplish this, even though we have organic chemistry and inorganic chemistry, and I do not know whatelse at our disposal. We are not able to create milk!!! So it is true that we are able to produce protein by the chemist, but milk he is unable to create. And the composer needs to have the human voice and the entire instrumentation of a symphonic orchestra-a jazz orchestra and I do not know whatelse, everything—all of the instrumental sounds at his disposal, so that he can jointly with this sound palette attain actually an almost unending [infinite] richness of sounds in an electronic studio, while he is adding to it [the sound palette] electronic sounds, concrète sounds, of concrète origins which he analyzes of course; sounds that do not exist anywhere which he himself synthesizes out of certain elementary elements. So according to me, the contemporary composer is in a good position, but at the same time also in a bad position, because he has at his disposal such a richness of sounds of the like that the composers have never had before in the past. But in order that he not "drown" himself in the "sea" of sounds, in order that he "swim" in them and in fact know where he is "swimming" to, so he has to achieve [demonstrate] what I call "restriction of variety." The [a] sound is infinitely variable. The variety is without "shores" [borders], ... 'variety of sounds,' again a cybernetic term. Hmmm, the composer must have an intention [plan] to which he elects—he must have a certain project/vision, of course, a thought—and to that he elects the means. Everything that is nonfunctional he should gradually tear down [omit], even if he tries out, confirms and so on a number of [sound] combinations. To this [trying out of sounds] he has at his disposal for one thing the knowledges of vocal and instrumental music, and for another the disposal of the studio [studio's possibilities]. There he can try out everything. The advantage is that everything that he imagines he can hear immediately. And today the additional advantage with the help of the computer [is that] everything that he hears and what he decides [that he likes and will use], the computer will at the same time

30

notate it for him. So this is the enormous laboratory, the [enormous] advantage that composers did not have earlier. When one imagines how Mozart composed those roughly 500 opuses, or how Bach managed to only graphically write everything down in only one human lifetime-and of course in Mozart's case it was short, thirty-five years-so that is unbelievable. Today the composer has the way made easier. But the difficulty lies in the fact not to allow oneself to, I would say, intoxicate [oneself] with the material to the extent that I begin to end to compose with it, ... that the material begins to control me. So the fundamental element of aesthetics is —of my aesthetics —to control the sound material in such a way that it serves me, and not that I serve it; because the real composer who is a creator in the real sense of the word—the shaper, creator [he says 'creator' in English]—is he who proves [demonstrates] his idea and realizes it in sound [as opposed to, for example, with paint], because sound is a natural material with which—in which music exists—music acoustical or auditive material works with. Without sound music cannot exist, of course. And a composer is he who must submit the material with his own intentions; otherwise the composer is not ... Oh, but notice that I do not exclude the possibility of chance, possibility of surprise, and so on, in the way that Lutoslawski beautifully wrote about it. He says that I welcome every idea that surprises me; one that surprises me that I myself have thought of already.' Well of course, this is the correct creator's work, because in inspiration lies also a big moment of surprise. I discover, but I can even discover it [inspiration/idea] in vocal and instrumental material. I dwell over a piece of sheet paper, and all of a sudden I can think of combinations that have never before been thought of by anybody else. And the same [can happen] in the studio. I can arrive at combinations of various ways of edited sounds that have actually never before existed. So the moment of surprise, even for the creator himself, is welcome. Not that it [moment of surprise] is admitted [into himself]. On the contrary, I would do everything that I could so that there would be as many moments of surprise as possible. But during the moment when I realize that-

[End of tape.]

LZ: Yes, we can continue.

VK: So I talked about the moment of surprise, which like a number of [composers] ... I talked about Lutoslawski, but I can talk about Cage, for example, who on the contrary creates everything in order—I would say it like this—that he dispense [regulate] the emergence of chance; that he make possible through a certain objective process, acoustical-oh, I do not know-work even with text and so on, [so] that chance can come about. That is in essence Cage's method—probability [he says 'probability' in English]. So he indeed works with probability, with chance. Somebody else works with chance and probability to a lesser extent, for example, Witold Lutoslawski. I "lean" towards him fairly a lot, because for me Lutoslawski is one of many big models [heroes]; he is a great composer of the twentieth century, even if he unfortunately did not work with electroacoustics. He was loyal only to vocal and instrumental compositions. In these spheres however, he created great creations; great creations indeed. Well, I add to it [the philosophy] the enormous riches of the sound palette via new instruments: concrète, electronic, and so on. That is to say, via analysis of sound as well as synthesis of sound. According to me, today's composer must decisively not defend himself from the moment of surprise. On the contrary, he should, and in this lies the question of inspiration, because when he arrives at—and now I use psychological terms—when one thinks about something for an extended period of time, about some thought, you have an idea, the idea can be visual, it can be very concrete. I will be now a bit of a Romantic, and will say: I imagine the blossoming of a rose.' What can be more beautiful than when a beautiful blossom blossoms, and now in the light of sunshine and in clean air, it [the rose] shows itself in beautiful colors and fragrance. What can be more beautiful? And now you think

about it, about this idea, and all of a sudden you think up sounds [as a result of this idea, imagination], combinations of sound, sound possibilities. And now you try it out in a studio, using mutii-channels, and you program various things, and now you find out 'Jesus, there are other possibilities!' So this moment of surprise is the moment of creation, and this [moment] I would never cast away. On the contrary, it [moment] has to be a part of aesthetics, because without inspiration there is not a genuine creation. By the way, Messiaen wrote beautifully about this, who made experiments with rhythm and with a bird's song, and so on. So with this I agree, with these great models [Lutoslawski and Messiaen]. And my aesthetic actually comes out of the entire sum of knowledge which was brought about by the existing evolution of music, plus the 'new' as in material of sound as well as in manner of work with this sound; method of work in the studio with this sound, which was brought over by both *concrète* and electronic music, or what we today call collectively 'electro-acoustic.' Against nothing must a composer protect himself [the composer must not "wear" blinders], because he never knows what sound he could need. And in fact, these are verified things from the history of music. Already in the 1920s, Luigi Russolo, the Italian—when he came out with his Rumori, and so on, mechanically amplified sound, very primitive but it was something new-so he said the following: 'sound, that was up to then considered as nonmusical, was becoming an organic part of music as soon as the composer's fantasy will empower [seize] it [the sound].' And this is what I say [I agree with this]. I however alter the quotation of Russolo a bit, because I add my thoughts to it. So nonmusical sounds become—and that is on an everyday basis musical sounds as soon as the composer's creative fantasy empowers [seizes] them [sounds]. So that is basically my aesthetics in a chunk, OK? LZ: Great.

VK: Not to close up oneself to anything. On the contrary, to open up [oneself to anything]. To be like a very sensitive resonating plate. A bumble bee may perhaps bring you the sound, or a bee that flies around you, or a bird that sings on top of a roof. But it can also be a sound of, oh I do not know, a Boeing 777 that flies over you. And all of a sudden it evokes a certain feeling in you and with this feeling there already is a [certain] connected sound. So the aesthetic that considers sound not only as an acoustic phenomenon, but the carrier of thoughts and emotions—so this is actually what Schoenberg called that 'sound is the microcosmos of emotions'—so with this I agree, because sound has its own certain meaning. Not only that sound is only sound, but that I as a composer have to, of course, inclose myself into it in order that I address the listener with the help of the sound—its entire sounding structure, of course. And that is the meaning of music, actually: to address the listener with music, and actually to convince him that I am correct and that what I want and what I am doing is good that. So that is about it.

# LZ: OK, great.

### [Turned off tape recorder.]

LZ: Can you please quickly tell me what here in Czechoslovakia 'analysis of sound' refers to as you used this technical term, 'analysis of sound?'

VK: Yes, yes. 'Analysis of sound' is first and foremost to submit the sound to a so-called "time-loop." This means slowing down, or on the other hand accelerating the sound [various tape speeds], which is from a point of view of timbre and color, and from a point of color [only] namely the work with filters. So 'analysis' includes the speed of tape over the head, and at the same time the possibility of using filters. There, of course, exist countless abundances of possibilities of, depending upon how sensitive of a filter one has, how one can make segments out of that sound; how one can isolate certain elements out of a certain acoustical complex. Now, the question is that one can analyze the sound in such a way that one can amputate its attack, which means the attack of a sound [of the sound's envelope], or the so-called formant region of the sound. And out of each sound one

32

actually creates something on the basis [principle] of a sine-wave tone. You take a recorded clarinet, take away the attack where actually the timbre gets manifested, . . . in the formant section of the sound actually the timbre gets manifested. When one cuts the attack off, then one does not recognize what it [sound] is. It is the same thing with a piano: you only use sustain and decay, let us say. Or one cuts off the entire sustain and only leaves the decay. For example, one takes a chord, a big chord on the piano. One cuts off its sustain and only leave the decay, and one will not recognize from where it [sound] originated. Is it some sort of, 'hhhhaaaa,' breathing or what exactly is it?! So this work is actually considered as analysis. Of course, one could talk about it even more in detail, but in essence this is it. LZ: Yes, yes.

[Turned off tape recorder.]

LZ: The question is, why in Prague did electro-acoustic music, that is to say, why did the studio emerge in Plzeň and why was not anything done here in Prague? That is to say, why is not Prague famous [for electro-acoustic music] in Czechoslovakia?

VK: Yes. I will tell you this very exactly, because I was indeed involved with the beginnings [of electro-acoustic music in Czechoslovakia and the establishment of the Experimental Studio in Plzeň].

LZ: Great! That is what I want to know.

VK: For this [electro-acoustic music and the establishment of the Experimental Studio in Plzeň] was actually credited Prof. Kabeláč. And due to reasons of, I would say, practical working, practical and workable reasons [was a studio in Plzeň established instead of in Prague]. Prof. Kabeláč was here [in Czechoslovakia] actually the first director, musical director of the Czech Radio [Czechoslovakian Radio]. He, as the first [composer], founded [established] this profession [Music Director] in the Czech Radio [Czechoslovakian Radio]. For years, he worked in the Radio [Czechoslovakian Radio], and because he in Prague learned the goings-on of the Radio, how a person is constantly unrelaxed, how the phones are ringing there and so on and they do not quit [ringing], so that is why he proposed that Plzeň house the studio. And there was another reason [why Plzeň instead of Prague housed a studio], because the Plzeň studio was constructed like a [one] broadcasting studio, the building is indeed a broadcasting building. For the time being, the Radio Broadcast Station in Prague was built [put together] out of various buildings and so on. So he saw that the possibility of establishing a studio was far better in Plzeň, besides the fact that when one goes there [Plzeň Broadcast Station] then nobody will bother him. He can work there for three days, a week, ten days, fourteen days and so on. So they [reasons] were working and practical reasons. And there was another reason, I would say "researched" [another reason was that of research]. And this was the fact that in Plzeň lived our [in Czechoslovakia] best acoustician, actually the founder of this subject here [in Czechoslovakia], who was Prof. Antonín Špelda; Špelda, who was basically a natural expert par excellence, a true acoustician. His Uvod do akustiky pro hudebniky [Introduction to Acoustics for Musicians], had it been released in English, then it would have been an acoustical "best seller" [he says 'best seller' in English]. I am convinced of that. It is a superb book on acoustics.

And this was the reason, because Prof. Spelda was [present] from the immediate beginning at the origins of the studio in Plzeň. And that is why already the so-called seminars of electro-acoustic music [First Seminar of Electronic Music]—we back then called [electro-acoustic] electronic music—the seminars were convened to Plzeň, because VÚZORT [Výzkumný ústav zvukové, obrazové a reprodukční techniky (Research Institute of Sound, Visual, and Reproduction Technology)] also worked on these seminars [courses]. Well, so these were the reasons. In Prague, it is true, also emerged a small studio [he is not suggesting that the studio in Plzeň was small, but that *a* studio emerged], but that was not nearly as well equipped as the one in Plzeň. LZ: And that was where?

VK: And that was in Karlín [suburb of Prague], at the Radio Broadcast Station in Karlín. LZ: Oh yes, of course.

VK: But it burned down.

LZ: I heard about that [from Odstrčil].

VK: [Yes] you heard about that. It burned down. There worked excellent radio Tonmeisters such as Václav Zamazal, for example. There also worked Dr. Herzog who was also present at the origins of the Plzeň studio.

LZ: I already talked to him.

VK: Dr. Herzog, by the way, is a superb theorist. He was the person-I do not know whether or not you heard about it—who was the *first* on earth who mathematically calculated the so-called "all-interval, dodecaphonic" rows; all intervallic rows. All intervals in each row must be comprehensive. He calculated these without having a computer at his disposal. He calculated these just by using his head. And that is extremely complicated, because that is the so-called calculation of Markov's chains, and so on. He calculated these as the first person on earth, Dr. Herzog. I always introduce his name when I lecture about contemporary compositional principles. So this [fact] I introduce, because when Herbert von Eimert's book was released, Grundlagen der Zwölfton Technik [Fundamentals of Twelve-Tone Music], so in it—it must be acknowledged that this was a person, an acknowledged expert, this Herbert von Eimert-he writes that 'earlier than I with the help of the computer, was the theory of all-intervallic rows calculated by the Czech composer and theorist, Dr. Eduard Herzog.' He has this kind of a note in the book. So he acknowledged the primacy. So I mention this [fact], because these were the sort of people who were present at the origins of the studio in Plzeň. And in addition, there [at the origins of the Experimental Studio] was also present our Czechoslovakian musicologist Dr. Vladimír Lébl, who wrote the book *Elektronická hudba* [Electronic Music]. So this is how it [Plzeň and Prague] originated. So they [reasons] were practical reasons why it [Experimental Studio] originated there. It is true that it was far [fifty miles between Prague and Plzeň]; we all had to drive to the studio. But in the end we were glad, because a person could work there in peace. And the Plzeň team [he says 'team' in English, referring to the two Tonmeisters working there]-the two realizers, which means Ing. Kadlec and Václav Ježek—is a unique team which managed, when it was necessary, to work all night long, for example, with the composers all through the night, durch [he says 'durch' in German, meaning 'durch' through]. I remember that the composition Kinechromie of which we talked about, we did it, I got there in the morning one day, we did it all day, all night, the next day, and in addition up to 5 A.M. of the fourth day. So the sacrifice of those people [Kadlec and Ježek] was fantastic.

LZ: Can I ask you whether or not the reason was political that nothing [electro-acoustic music and studio] came about in Prague?

VK: No, no, no. It was not, because even though it [electro-acoustic music] was difficult to "push through"—[very] *difficult* was it "pushed through"—all in all, at the "top" of the Radio [Czechoslovakian Radio] was it [electro-acoustic music] difficult to "push through." LZ: Electro-acoustic music?

VK: [Yes] electro-acoustic music. It [electro-acoustic music] was untrusted, and 'Why indeed?', and 'Why do we have it?' and so on, 'And only the Devil knows what they will do there [electro-acoustic music], those formalists' [precisionists]. But then it was like this. The Director or the Chief Program Director of electro-acoustic music [at Supraphon] was Dr. Herzog, and his office was here in Prague. [I think that he is inferring that Dr. Herzog was the leader of electro-acoustic music of all of Czechoslovakia.] So there [by the virtue of this act] was a guarantee that this thing [electro-acoustic music] would develop into the right direction. And here [Prague] was an electro-acoustic committee [Electronic

Committee] of which I too was a member. There were Prof. Kabeláč, Eduard Herzog, Vladimír Lébl, and who else was there? Well, basically a number of people who worked in the field, Ing. Menninger for example, and so on. *Maybe* there was a certain tactic from the point of view of the Electronic Committee [for having the studio be established in Plzeň instead of Prague] back then. I even remember that we talked about [the fact] that rather than have it go via the "dictatorship" here in Prague—to go via these "generals" here—that it would be established in Plzeň, because the Director of the Plzeň studio [Radio Broadcast Station] was inclined towards it [electro-acoustic music]. So there it was easier. But 'no,' I would not say that the reasons were political or persecutive, that definitely 'no.' But, the reasons were practical: so that one could work there in peace. And in addition, there was an advantage that when a person needed to sleep there, then he could directly sleep there upstairs in the building of the Radio Station.

[Turned off tape recorder.]

LZ: Now we will talk about Dr. Svoboda.

VK: Yes, Prof. [Antonín] Svoboda, whom we [Czechoslovakian composers] appreciated very much, and who came [back to Czechoslovakia] from America after the war [WWII] and wanted here [Czechoslovakia] to begin to manufacture computers. In fact, he even wanted to establish a factory. Well, that was right after the war, but not immediately after the war. It was about in 1956, [19]57, in these years. But unfortunately, no ministry nor ruling regime [of Czechoslovakia] had any understanding for it, and after some years, he returned back to the United States, because he was absolutely unused [unappreciated, etc.] here [Czechoslovakia]. And he is a person who was able to give us an awful lot. He was a member of the Electronic, we later called it Cybernetic Committee [Cybernetic Commission]. Dr. Svoboda was an extremely valuable person. I still see him as if he were

Commission]. Dr. Svoboda was an extremely valuable person. I still see him as if he were alive today.

LZ: Where could he have done those first experiments?

VK: He probably did it [his first experiments of electro-acoustic music] in Karlín [Radio Broadcast Station, Prague located in the suburb of Karlín] back then.

[Turned off tape recorder.]

LZ: Was there an overall motive for the development of electro-acoustic music due to Futurism?

VK: If one should talk about this, then it would be a very distant influence. The direct connection here does not exist for sure, because one of the main representatives of Futurism was Luigi Russolo in the realm of music.

LZ: Yes, of course.

VK: So we [Czechoslovakian composers] began to admire him with the fact that we began to realize his historic significance, what he exactly did: he broke through the barrier between the musical and non-musical sound. That was the contribution. And in this vain, but very far in the distance—only as certain distant historic elements—do we

[Czechoslovakian composers] of course agree with this legacy. But not [directly] to the philosophy of Futurism and so on, because later on the Futurists actually ideologically were favorable with Fascism, unfortunately.

LZ: Ah ha, of course. Even with architecture and everything [is this fact evident]. VK: Yes, Martinotti and so on. Unfortunately . . . so this definitely 'no' [there was not a connection with Futurism and the development of electro-acoustic music in Czechoslovakia].

LZ: OK, great. Šo may I turn it off? VK: Yes.

[End of conversation.]

The interview of Ing. Ales Krumphanzl was taped in his office at Orbis, former

VÚRT, in Prague on Monday, June 27, 1994, at 10:30 A.M.

LZ: [Today is] Monday, [and I am here] with Mr. Krumphanzl at VÚRT. AK: So in essence the history in Plzeň [Radio Broadcast Station in Plzeň] began shortly after the liberation [during WWII]. Plzeň was liberated by the American Army who built themselves a station [probably only a temporary radio station], AFN [American Forces Network]. After its [American Army] departure, in essence the technical equipment was left behind, and that was basically the foundation to build a radio broadcast building. So up to almost recent times or up to that point in time, all broadcasting studios in all of Czechoslovakia were basically built in provisional buildings. And this Plzeň Broadcast Station] was the first station that originated and [was] built [for the purposes] as a broadcasting station. So the most modern things [equipment] of that time were used back then, new scientific knowledge in regards to the building of the broadcasting studios, so that the building was equipped like a house, which means, including the technical knowhow that is necessary for [building] it. Due to the fact, however, [that] the production [recording of any music and its broadcasting] in Plzeň there was not so great-there did not exist an adequate foundation, not even an orchestra, there was only a dramatical theater thus, there existed a lot of capacity for creativity, and that is why Plzeň [Radio Broadcast Station] was selected for experimental work [music, stereophony, etc.]. So that was why the first stereophonic broadcasting was done there, and there was also developed stereophony for the entire Czechoslovakia [for all Czechoslovakian Radio and probably also TV stations]. That is also why experiments of electronic music were brought over there into this facility, because there was calmness [calmness to work and compose] to do this. There were adequate, free, productive capacities.

Well, what else could I tell you about Plzeň? It was begun being built during the 1950s, and was finished being built probably in 1956; there was also designed a big concert studio which up to today has not, in essence, been successful to be finished being built due to financial reasons. There is a fairly large music studio; there are two large drama studios. In addition, there is a studio for the experimental, electronic music [Experimental Studio]. So these things were created there in Plzeň. Then later on also in Plzeň, there were created, or planned on being created, several professional seminars [First Seminar of Electronic Music] for composers, in order that they, basically, familiarize themselves with the new, creative means [instruments] that electronic music offers. It [organization of the First Seminar of Electronic Music] was back then under the auspices of Prof. Svoboda [and] Prof. Kabeláč. It [First Seminar of Electronic Music] had two levels of presentation ['level' refers to the teaching/learning complexity of electro-acoustic music]. On the one hand, there were musical professionals from colleges, and on the other hand, there were also physicists. There was [attended] a so-called representative of physics and acoustics, Prof. Spelda. Well, and there were also composers who expressed their interest in the genre, so that there were a number of young-today of course respected-composers, who on the one hand, demonstrated their own first "small steps," their own first compositions, and [on the other hand], they also familiarized themselves basically with what a synthesizer is, what possibilities it has, and things like that.

The working studio [Experimental Studio] that was created there, under the direction of engineer Kadlec and Mr. Ježek, realized a number of compositions. I do not, of course, have an exact overview of how many [compositions were realized there]— LZ: Oh, I already have all that!

AK: ... but it would probably be good to talk to them [technicians at the Radio Broadcast Station, Plzeň] about this.

LZ: I already have all that. I need to know about the connection [between the Radio Broadcast Station, Plzeň] with VÚRT?!

AK: Yes. VÚRT actually, during the first [Seminar of Electronic Music] . . . Well, it [VÚRT] actually "got into" Plzeň through such a path, that it actually built for Plzeň the technical background [equipment], the first synthesizers. And because it [VÚRT] had those close ties from those experiments of the studio stereophony [with Plzeň Radio Broadcast Station], so [thus] it was logical that we [VÚRT] also transferred the experiments with electronic music over there. So that is about all very briefly that I could tell you about Plzeň [and the ties with VÚRT].

LZ: Hmmm, great.

[Turned off tape recorder.]

LZ: [I probably asked him to tell me the history of VURT.]

AK: Výzkumný ústav rozhlasu a televize [Research Institute of the Radio and Television], VURT, originated in 1948, sometime during January, and [was named as such] due to the fact that it was in contact in the work in the realm of television technology, but [and] also in broadcasting [technology] which proceeded in the back then laboratories of the Czechoslovakian Radio. So in short, after World War II was created in the Czechoslovakian Radio somewhat of a group of technicians which began experiments in the realm of television technology. In essence, they continued on the basis of what [the] Germans pursued here during the course of World War II in Tannwald [Northern Czechoslovakia]: there was a [German] group which built a television chain [a number of TV stations] for warfare goals [purposes]. After the end of the war, in regards to this material and these experiences—[which] were simply taken over by the Czechoslovakian Radio-they [material and these experiences] were taken into the [Czechoslovakian] laboratories, [and] there emerged a group of young enthusiasts who began to expand the television technology. At first, it [the new technology] was presented in the realm of the Czechoslovakian Radio at the International Radio Expo, NEVRO. Well, and later on out of this group of people was created the Výzkumný ústav rozhlasu a televize. It underwent several reforms. At first, it [VURT] belonged to or fell under the Czechoslovakian Radio. Later on—it was under—it was transferred to Czechoslovakian Telecommunication [Ministry of Postal Services and Telecommunication] as a division of Research and Development of Telecommunication. And only later on was it divided as Research Department of Radio Communications, and then later on as Výzkumný ústav rozhlasu a televize. After the creation of the Czechoslovakian Television as an organization, the Výzkumný ústav rozhlasu a televize was later on under its [Czechoslovakian Television's] subordination. The section of the sound technology was smaller; it had, let us say, around 30% of the capacity. The rest, of course, the bigger section-probably the remaining 70%—was devoted to the problematics of the television and picture [TV picture] technology. Here in the Department, there was created the first equipping of the Czechoslovakian Television; here it was all built [all the instruments were built there]. starting with television cameras up to even the most complicated [TV] control room equipment. Later on, the Department's next considerable project was the introduction of color broadcasting [TV, obviously] with the joint cooperation back then already of the Czechoslovakian Television as an [autonomous] organization. Well and now in recent times, it [VURT] worked on the problematics of digital television, but [as a result of] the dissolution of the Czechoslovakian Federation, even the federal mass-media were also made obsolete, which means the Czechoslovakian Television as an autonomous organization, and the Czechoslovakian Radio. So at the end of 1992, we [VURT] had great existential worries. In essence, back then at the end of 1992, the Výzkumný ústav rozhlasu a televize "went under" as an independent organization, and out of the remains of the federal mass media was created a new organization, Orbis, which has three divisions:

publishing, but also the experimental and research basis which was reduced considerably from the original, probably 178 employees to probably thirty today. The activity was a little bit reoriented [changed], from the research or from the scientific research activity to rather an operational [production] activity. So today we basically work for customers' orders. For example, we help to build some of the private, newly originating radio companies. For example, we have here the problematic issues, that which my colleague over there is working on, the so-called "intelligent house" ["intelligent house" is the name of the group of engineers who work on specific technical problems]. We release some things on CD-RAMs. So the activity has become oriented a little bit differently, because today, to be quite honest, the organization which earlier was paid for and supported by the research, so today they have financial problems. So [just] like a universal trend in which exists a smaller interest in the immaterial, as it is called theoretical/experimental, activity [he suggests that there is no financial income from these activities]; of a research activity. So we hope that this period will somehow disappear, that we will overcome it, and that we will perhaps sometime again return to the experimental work; that we will again expand our [work]. So this is what the current condition looks like. LZ: Great.

[End of conversation.]

The interview of Ing. Miroslav Mandík was taped in his office at Orbis in Prague

on Monday, June 27, 1994, at noon.

#### LZ: Engineer Mandík.

[Turned off tape recorder.]

MM: The memories are in essence such that-well today it is also more than a quarter of a century ago-more or less back then and here [Czechoslovakia] in terms of electronic music I will mainly talk about it in regards to Plzeň rather than the other sites. Well, we got such an idea that in essence in Plzeň there existed an obliging [accomodating] group of technicians, and the leadership back then-which they put together there [Plzeň Broadcast Station]-arranged with us [VURT] a so-called "seminar of electronic music" [First Seminar of Electronic Music]. That was the idea of my boss back then, engineer [Milan] Meninger, who in essence lead this here our department [VURT], of which one of its activities was this electronic music. And the idea was basically based on the fact to organize a kind of an educational course for the back then performing, professional artistsmusicians—who had a feeling that electronic music is actually a kind of a new field in music, which for them could make possible certain activities give them greater freedom of sound, expression, etc.]. [This reasoning was due to the fact that] in essence they had a feeling that it [electro-acoustic music] is a far more interesting, effective and new and modern discipline, which they could perhaps come to the fore with [make a name of themselves] if they could not come to the fore with in classical music. But I must admit that they [participants of the First Seminar of Electronic Music] back then conceptualized it [electro-acoustic music] ... There were present various [age groups], from the youngest to the oldest, and there were also present respected musicians, who were famous back then; Prof. Kabeláč was there and I do not know who else?!

LZ: Oh yes. That is OK [that you cannot remember].

MM: In other words, the entire palette [of experts]. And practically, we [VURT] back then devoted a fairly considerable time and space for it [First Seminar of Electronic Music]. We had about fourteen days for preparations and so on and so on. And our attempt was essentially to create [a] half, I would say, theoretical but also partially practical seminar, where for one people would learn about the physical elements from the point of view of

electronics, which means 'What is it, sound?' [What are the physical properties of sound?] and so on, and these kinds of physical elements and all these kinds of things. And in this regard we had for one-the composers were ours [Czechoslovakian], but there were also external composers present-that is, one was exceptional, who stands out in my mind, was a certain Prof. [Antonín] Svoboda, who was a Czech cybernetician "no. 1." He was in essence here [Czechoslovakia] already an employee of Aritma, which was a factory specifically for [the manufacturing of] instruments of calculation [early computers]. And he was in essence, well the Czech cybernetician "no. 1," who back then, shortly after the [First Seminar of Electronic Music]-I would say at about the latest, about in 1965, even if he was not the youngest guy [anymore]—so despite that fact, due to practical reasons, he emmigrated; appareantly first to Switzerland, and then to the United States. So this was the dominant figure at this seminar whom I remember the most, because I believe that he was a person who ... I personally like most the fact when even the most complex things can be explained to a normal audience in the most simple manner of presentation. And this he was able to do. He was able to basically explain the most complex things normally [simply]. Again, I do not like people who basically ... apparently simple things—how should I say it—they needlessly make a big deal out of it; they use a number of "foreign" words, and they obscure it artificially with the fact that they simply create their own ego, and so on. Well, and there were others present there [First Seminar of Electronic Music] who ... those from the field of physics, and so on, and so on. Well, and [at] the end of it [First Seminar of Electronic Music] there was basically a practical seminar [course], practical practice [excercise], in which individually—I do not know how many there were back then, I would say perhaps that there were present twenty, maybe even thirty composersthey attempted to basically "move" [operate] with all the various and possible generators and effectors, all the techniques all the way up to processing. More or less, each of them was supposed to have [compose] there a "semester-like" or something like a little work, and to create there [First Seminar of Electronic Music] somewhat of a composition. So these are, in a chunk, my greatest memories of [the First Seminar of Electronic Music and other activities]. I would say that perhaps I could even find some photographic material in some drawer, but this material was more of the people than of the technology. LZ: Can I ask you something? [What was] the connection between engineer Ladislav Janík and Kabeláč? Well, is it true that these two were friends, and that is the reason why it [First

Seminar of Electronic Music] came to Plzeň?

MM: It is possible; it is possible. Simply stated, they were personalities of that time who each in his own field—were, in my opinion, exceptional; they were basically experts in their own field and I think that they respected each other. And so I do not rule this out [LZ's hypothesis], but I think that they probably knew each other.

LZ: Great, OK.

[Turned off tape reorder.]

LZ: ... [in regards to] Slovakia [Slovakian composers present at the First Seminar of Electronic Music]?

MM: In regards to Slovakia, I would say that [at] this seminar it was irrelevant from what part of Czechoslovakia a person was from. But in essence, the participants from Bratislava were kind of far more sensitive, quicker in thought, modern [than composers from the Czech part of Czechoslovakia]. They were also younger people [composers]. There [Bratislava] back then, the most dominant out of these results [of electro-acoustic music experimentation] was Mr. Ilja Zeljenka, was his name [he is still alive], who eventually even became some official of a society of composers [Sväz slovenských skladateľov (SSS), (Society of Slovakian Composers)], and I know that he really indeed had some successes with this [electro-acoustic] music. He even wrote some music for an American "Holiday on Ice," or something like that, with which he... But he was fairly universal [in

terms of music], so that he was successful even in writing quartets and things like that. But in this music [electro-acoustic music] he really established himself later on. The other people of whom I can remember, these were not exclusively musicians, but were technicians from Bratislava ... back then, what was his name?

LZ: Kolman? MM: [Yes] Kolman ...

LZ: Janík?

MM: ... Janík, yes, they were the two younger [people involved in electro-acoustic music], but there was also-

LZ: Backstuber?

MM: ... hmmm, what was his name? Stadrucker ...

LZ: Stadrucker.

MM: ... Stadrucker, who perhaps today is the Chairman of Slovakian Television, or something like that. I knew him very well, because he was a fairly big enthusiast [of electro-acoustic music]. And quite frequently we [staff of VURT] drove there and helped them [TV studios, Bratislava] a certain amount, and we basically gave them some of our equipment for their use, and served them as [technicians].

Well, and later on, maybe—I do not know whether or not, but probably—you have heard about it, Blaha and these things, there [VURT] things "played out" even up to the time that it was again ...

[Secretary walked in. Turned off tape recorder.]

MM: Later on, electro-acoustic music "surfaced" in the following way that one of the composers-basically everybody [all of the composers] "took it" ..., everybody tried to make some result out of it [every composer tried to somehow become successful with electro-acoustic music]---[Jan] Hanuš back then as a matter of fact composed an opera with electronics—a somewhat of a hybrid [opera. Thus, the opera was not purely an electroacoustic music opera]-whose name was Pochoden Prométheova [Prometheus's Torch], at which Blaha was his co-author and assistant. And it was basically performed here in Prague at the National Theater. It was, oh I do not know, in a number of a very small amount of performances for that time. But it did have a success. Well, and this was a kind of creative success [this opera actually had a success from a creative, artistic point of view], by the virtue of the fact that it even made it to the National Theater. LZ: I understand! OK great.

[End of conversation.]

The interview of Ing. Miloš Bláha was taped at AMU in Prague on Tuesday, June

28, 1994, at 4 P.M.

LZ: Mr. Ing. Bláha. Today is Tuesday, June 28.

MB: Yes.

[Turned off tape recorder.]

LZ: We will talk about Barrandov [film studios and their electronic studio].

MB: With Barrandov I will have very little information, because with Barrandov I was not [in contact] on a too closely working relationship. Rather, [I know about it] only due to the fact that engineer Spalj, my good friend and colleague actually, so that is why [I know about Barrandov and their electronic studio] ... I know him. And actually when they [Barrandov] started out with the studio [electronic studio], we [engineers at VURT] participated in some of the first studies of how it is supposed to look like [what kind of equipment it is supposed to have] and the like. The main thing that I did, or where I was [employed] ... I started out at VURT. So actually, I actually equipped the [Electronic]

studio at VÚRT. I developed [invented] some of the instruments that were used there [Electronic Studio, VÚRT]. And what I participated in were the First and Second Seminars of Electronic Music.

LZ: In Plzeň?

MB: [Yes] in Plzeň. The first one was in Plzeň, and the second one was at the Radio Broadcast Station in Karlín here in Prague.

LZ: Ah ha!

MB: That one [Second Seminar] was in Karlín. Unfortunately, up to not too long ago I still had an invitation to the Second Seminar at home, but now I did not find it. I have a feeling that I probably have already thrown it out. Well, it is like this: when we, ... as long as I had my laboratory [Electronic Studio, VÚRT], I had everything there in a closet. But due to moving things home, and the like, well then of course something took its toll [some things became lost].

LZ: Yes, yes, yes.

MB: But despite that, I found some things that would perhaps interest you [he pulls out a stack of papers, photographs, and magazine articles out of his bag, or they were already lying on top of the table and he was only pointing to them, and he will now talk about them].

LZ: [Yes] they would interest me!

MB: Hmmm... first of all, everything began with the so-called Cybernetic Commission of the Society of [Czechoslovakian] Composers.

LZ: Yes, I know about that.

MB: Cybernetic, or later it was begun to be called Commission for Electronic Music. I also have an article [Meninger, Milan. "Komise pro elektronickou hudbu." (Commission for Electronic Music). *Rozhlasová a televizní technika*. 6, 4, 1965. p. 128.] about it [Commission] in which an index of participants and the like are listed. It is there [Commission] actually where the idea originated to have this Seminar in Plzeň. And the entire Seminar in Plzeň was thoroughly, perfectly in detail described [written about] here in this one [he picks up an issue of *Rozhlasová a televizní technika*]. No, [not this one]. This is not the [correct volume] number. [RTT was VÚRT's journal.]

LZ: This is what I am looking for!!! I am looking for these magazines [RTT]!!!

MB: I have all of them. LZ: Really?!?!?!

MD. Veo

MB: Yes.

LZ: Well, in that case, I will see you again!

MB: Here in this one [he picks up the correct volume of RTT]. "I. seminář elektronické hudby v ČSSR" [First Seminar of Electronic Music]; thoroughly, perfectly, exactly described. There is an index of participants, there is a description of lectures, because all of this [article] was transcribed from an acoustical source, from an acoustical recording [the entire First Seminar of Electronic Music was recorded and archived on tapes].

LZ: Yes, that ["I. seminář Elektronicke Hudby v ČSSR"] is exactly what I am looking for in my bibliography.

MB: Yes. So here ["I. seminář elektronické hudby v ČSSR"] is everything. Then in addition to this seminar there were also published these two reports of lectures [he shows them to me: Sborník přednášek o problémech elektronické hudby, I, II].

LZ: Yes, I have already photocopied them. They had them luckily here [music library at AMU].

MB: Hmmm yes. They creep up here and there. And on the basis of the Seminar actually, then originated ... first the [Electronic] studio at VÚRT [he first picks up photographs of the Electronic Studio at VÚRT]. It looked approximately like this [he shows me a photograph of it]. This is actually, no this is actually the first manual synthesizer no. 1 [we

are looking at some old photographs that he brought]. It was the oldest. Then later there also emerged another, the no. 2. It was a little bit better. Well, "better" [he is sarcastic]. This [some picture of old instruments] has no direct connection to [the seminar] ..., but these are instruments of the Plzeň Radio Broadcast Station of the period back then, where the seminar took place.

LZ: Ah ha, and this [rooms where seminar took place] is what it looked like at that time? MB: [Yes] this is what it looked like at that time.

LZ: in 1964?

MB: 1963 or [19]64. 1963 I think. It [First Seminar] was written about in 1964.... 196? You see! I do not even know anymore [what year it was], but a date will be listed here ["I. seminář elektronické hudby v ČSSR"]. Yes, 1964, May of 1964. Yes. And the studio at VURT, actually, existed most importantly for the reason that directly there [Electronic Studio at VURT] on the spot was tested equipment that was developed and manufactured there. That was this synthesizer [shows me a photograph]; then also a tape recorder/player with variable speeds, this here [photograph]. There [Electronic Studio at VURT] were, well for that time, basically things [instruments] that were used back then: loop reverberator and equipment that more or less had a technical character, but at least it was usable for electronic music. And, later [1967] on the basis of the experience of the studio at VURT, the [Experimental] studio in Plzeň was actually proposed/based upon it. Later of course, there were several movings [of the Experimental Studio] within the building [Plzeň Broadcast Station], and it [Experimental Studio] was expanded, and it was expanded and revised. That [these activities] already did engineers Kadlec and Václav Ježek themselves. But the first design [of the Experimental Studio] came from VURT; of that, I participated in some way a little bit. And the studio [at] VURT, during its beginnings, actually [only] worked on these kinds of things [designing and equipping other studio].

LZ: I understand. [In other words, these were the only activities that kept it "alive," otherwise it would have gone broke, etc.].

MB: This [bit of information] is only a part of an article that VURT published, P 770. So you will find all of this [that I have told you about] in this article. This is the original [manuscript], in essence, that I back then prepared [wrote] for it [VURT's publication]. LZ: Ah ha. It is these things [P-lettered articles] that engineers Kašpar and Mandík are looking for [two engineers who work at the now non-existend VURT]. So far, they have found P 1000 and up, but under 1000, they—

MB: [You need] the older ones?

LZ: Yes.

MB: Then there is there [VÚRT's archive] P 777. This was the very first one [article that described the activities of VÚRT's studio. It lists the compositions realized at the Electronic Studio at VÚRT]. That was the very first article in which these things [activities] were given an account of. And Prof. Kabeláč actually is the first one to work there [Electronic Studio at VÚRT], who made [composed] the fundamental materials for *Svatovítský zvon* [*Svatovítský Bell*] there and then also for his composition, hmmm . . . LZ: *E fontibus bohemicis*?

MB: Yes. So things [sound material for these two compositions] were prepared there, but the finishing mix was made at the [Experimental] studio in Plzeň . . . LZ: Yes.

MB: In the meantime, the [Experimental] studio in Plzeň had already been created, and it [the final mixing of these two compositions] was already done there [Experimental Studio]. The composer who was the most, one could say laborious who worked there [Electronic Studio at VÚRT] was Jaroslav Wolf.

LZ: In Plzeň? [I thought that he was talking about the Experimental Studio in Plzeň].

MB: [He was the] Choirmaster at the Opera in Ústí nad Labem [city in northern Czechoslovakia]. I do not know what he does today in music; that I do not know. LZ: Hmmm, I have not heard of that name, yet.

MB: Then later, somehow, he "disappeared" and---

LZ: Wolf?

MB: [Yes] Wolf.

LZ: In Plzeň? [I had still thought that he was talking about the Experimental Studio in Plzeň.]

MB: Jaroslav Wolf. No, at VÚRT.

LZ: Ah, at VÚRT.

MB: [Yes] at VURT. He composed there *Configuracion I, II*, up to V. Dr. Lébl—that name you will know for sure, of course; in essence the doyen of Czechoslovakian electronic music—he also made some things with us there. He made an instructional record [*Elektronická hudba* (*Electronic Music*), Supraphon DV 6221] that was released. I have it, but did not bring it with me, because it did not fit into my briefcase, but I have [did bring]

... with it came this kind of a supplementary material [liner notes which he showed to me] where everything is written all that was on the record. On one side [of the record] were examples of a sine-wave tone via various clusters, noises [as in white noise], and the like. And the second, on it were *concrète* compositions. There was *Náhrobek Malovicův* [*Tombstone of Malovic*]—the score looks like this [he shows it to me], that was the entire composition [score], back then—[which was made up of] sine-wave tones, clusters, [sounds of] bells, and basically the symmetrical division along two axes [when one looks at the score, it becomes self-evident]. Then there was also Zeljenka's *Studie 0,3*, Riedl's *Study 1959* and *1962*, Hiller's *Vokalíza*, ...

LZ: But hold on! Zeljenka's Studie 0,3 was composed in Bratislava!?

MB: [Yes] that was done in Bratislava.

LZ: Oh [I see], you only had it in your [VURT's] archive?

MB: [Yes] we had it in our archive, and it was released on this record.

LZ: Ah ha. All these other [compositions], [you] also [had in your archive and were released on this record]?

MB: [Yes] as a record. [Compositions of] Malovec, Penderecki, we have them.

LZ: Ah ha. And you have this record?

MB: [Yes] I have it. In addition, there [Electronic Studio at VÚRT] were created materials for the opera by Jan Hanuš, *Pochodeň Prométheova*, which was performed at the National Theater. This [he hands me program notes] is also material that the National Theater published to go along with it [the performance].

[Turned off tape recorder.]

[We are now looking through articles that have photographs, and Blaha's old photographs of VURT.]

MB: So these [photographs] are rather—that which was published during that time around —[He now addresses the pictures that I am looking at in the short article, "Stereofonní studio čs. rozhlasu Plzeň." (Stereophonic Studio at the Czechoslovakian Radio, Plzeň)] photographs of the seminar [in Plzeň] of how it looked like there.

LZ: Really?

MB: Yes.

LZ: So, and all—well "all"—all of the instruments were manufactured at VÚRT? MB: [Yes. Either] manufactured, or there were some instruments that were used in technical production [recording production], ... generators and the like that were ... These here [certain instruments in a photograph], of course, were usually purchased, and then were only "plugged in" just so that it [Electronic Studio's activities] functioned [just so that some things were going on at Electronic Studio]. Here is Prof. Kabeláč in this first picture [photographs in article, "Umění a elektronky." (Art and Thermionic Valve Tubes) by Otakar Starý], [and] in the next [picture]—another one [picture]—is Malovec bending down and looking at something. This was one article that came out at that time. Then there was another [article] about the audio laboratory [Electronic Studio] at VÚRT, which was published twice, once in Večerní Praha [Evening Prague] and once in the RTT. The author was able to "sell" it twice.

So that was the very beginning, and then it [the development of Czechoslovakian electro-acoustic music] continued, and the Second Seminar took place at the Radio Broadcast Station in Karlín. I also think [as he is looking through various articles, journals] that there was an article written about it. Hold on! This one is about Smolnice [Slovakian seminars of electro-acoustic music]. This [article] here is also about the studio at VÚRT. And here you have it [VÚRT's studio] directly written about, "Studio elektronické hudby Výzkumného ústavu rozhlasu a televize" [Studio of Electronic Music at the Research Institute of the Radio and Television, published in RTT]. Here you have an article about the Commission of Electronic Music and who all of its members were; and somewhere there was also published an article about the Second Seminar . . . ah ha here, "II. seminář elektronické hudby v ČSSR" [Second Seminar of Electronic Music in Czechoslovakia, published in RTT]. So we [he and I] have something [written documentation] even about it.

[Turned off tape recorder. Doc. Syrový walked in.]

MB: And then actually, I left VÚRT in 1969, and then I went to [work] at the Ústav pro hudební vědu [ÚHV (Institute for Musicology)], which was located back then on Waldstein Square.

LZ: And now it is on Puškin Square?

MB: [Yes] now it is on Puškin Šquare. In the meantime, it [Institute] was relocated, [and] [music] theory was combined with art, so that it was an institute of musicology and art. There was a creative department [and] musical department. There we also established a laboratory [research department] which did not only serve for the purposes of electronic music, but also overall for the work of musicology, analysis of recordings; [there were] various indexes, the measuring of compositions. But this is already something else. This has nothing to do with electronic music. But what else took place at that time were the so-called Smolnice seminars in the castle of Smolnice north of Bratislava. There worked ..., there it was especially organized by Kolman with Zeljenka, [and] Malovec. About these Smolnice [seminars] I also have here a mentioning [article], as small as it may be so that at least you have something. Here, "Smolenice seminarfe pro současnou hudbu" [Smolenice Seminar for Contemporary Music, published in RTT] in 1968. That was the first one [Smolenice Seminar]. Then there was also prepared [a seminar in Smolenice] in 1969, but that, of course, had a very un-celebrated ending [due to the invasion of the Warsaw Pact Armies in 1969], ...

LZ: I understand!

MB:... because such a "fallen" culture [just was not allowed to have these kinds of activities]. It just was not the same thing. And this is basically all [the articles, etc.] that I have and that I have found for now.

LZ: Great. I would dearly like to photocopy it later.

MB: OK. You may photocopy whatever you need from this, ... everything! LZ: Great. Well, how then was it with Barrandov [film studios]? How did it end up then? MB: Barrandov's studio emerged, oh, sometime around after the Second Seminar in Karlín. But I would rather not prefer to talk about the studio at Barrandov so much, because I do not know anything concretely about it! But Ing. Miloš Špalj will definitely tell you about it.

LZ: Great.

MB: He was there from the very beginning, along with [Antonín] Krafka, and [Bohumil] Matoušek. Krafka I think [may not be there anymore]—well it has changed a lot there lately—but Špalj is there. So contact him, and he will definitely, if you refer of me [tell you about it]. I do not know whether or not he will be able to show you a lot [of equipment, etc.] there, but I think that yes [he will]. They, too, developed their own instruments there, but like I said, it [Barrandov's studio] was very oriented towards music for the use in movies, and the like. So it [the studio's production need] was more specific. The so-called autonomous electronic music I think was not, in essence, even done there. LZ: Yes, like Zeljenka's music to *Šestdesiatpät miliónov* [(*Sixty-Five Million*) is the type

LZ: Yes, like Zeljenka's music to Sesidesiatpal millionov [(Sixty-Five Million) is the type of work that was being done there]?

MB: Yes. I spoke to Zeljenka for the last time probably three years ago. I actually have not been in Bratislava since that time. He goes regularly to the Radio Broadcast Station. But a lot [of electro-acoustic music] was also done [composed] there [Bratislava's Experimental Studio and overall in Bratislava]. The studio [at the Television Station] in Bratislava was actually the very first one in our country, and Ivan Stadrucker did there a great deal [of establishing electro-acoustic music to be composed at the TV studios]. Today he is the Chairman of [the] Television [Station], provided that he is still there. A lot of things were done there [studio at the Television Station]. You see, somewhat different conditions existed there [Bratislava]. It was a bit more liberal there, more free than here in Prague. Here [Prague] indeed—it is a bit deceiving—anything was also done, which during normal circumstances it would seem that it [everything that was related to electro-acoustic music] would not be possible. And yet [electro-acoustic] things were successful in being established, such as the [Second] seminar, for example. Schaeffer was here [Prague] and had some kind of lectures.

LZ: I will write to him about all of the things that he did here. Koenig was here also. MB: [Yes] Koenig was here also. Stockhausen was in Bratislava at the seminar of Smolnice [in 1968].

LZ: Yes, I saw that [I found that out]. If I were to write him, I do not know whether or not I would get anything back from him?!

MB: Oh yes. I think that all in all he would write back to you. Something could "fall out" from him [he could give you some info].

Like I said. About Barrandov I will tell you nothing concretely, because I would make things up.

LZ: OK. So you are in closer connection to, and know more about VURT?

MB: [Yes] I practically established the [Electronic] studio at VURT.

LZ: Yes, I was there yesterday.

MB: And then I established the studio, or the laboratory—a so-called laboratory—at the Ústav pro hudební vědu. And I was at the Ústav pro hudební vědu since 1969, and then I completely "fell out" from [left] there.

LZ: Yes. Two weeks ago or a week ago I was there [Institute], and I spoke to Dr. Ludvová, and I went through all of Dr. Lébl's original manuscripts.

MB: Yes. We had all of those in our laboratory. When I left there [Institute]—I had to leave three years ago—so I left everything [Lébl's manuscripts] behind there.

LZ: Even your own things?

MB: [Yes] even some of my things of which there were quite a lot.

LZ: Ah ha. So also your things?

MB: But I am afraid that they threw everything [all of Blaha's materials] out.

LZ: Well, I still found things of Lébl! They still had [his] things there.

MB: Hmmm, Dr. Ludvová hid [kept] a lot of Lébl's things. But a lot of my things will not be there anymore. Well, I have some things [at home], but like I said, that has nothing to

do with electronic music. Those were things about the measuring of real time in music and the like. LZ: Great.

[End of conversation.]

The interview of Ing. Karel Odstrčil was taped in his office of SEAH in Prague on

Wednesday, June 15, 1994, at 1:30 P.M.

LZ: I have a question for you, Mr. Odstrčil. Why do you think that electro-acoustic music in Prague did not "work?" That is to say, there was a studio [in Plzeň], then there was a studio in Brno, and there was one in Bratislava. But in Prague, there was not really anything [studio *and* the production of electro-acoustic music].

KO: Well, in Prague there was supposed to be an equipped studio of electro-acoustic music, and indeed there was one. The reason that it [a studio] was equipped in Plzeň [as opposed to one in Prague], so this was a question that in Plzeň, I would say, there was a certain "air." Frankly, there [Plzeň Radio Broadcast Station] were facilities for it [electroacoustic music]. The Plzeň Radio [the building] which you know of, was built [copied] after a Dutch model [of a radio broadcast station]. The exact [architectural] plans were taken from that Dutch radio station, [and] it was constructed with the only difference that the Plzeň management back then did not recognize, I would say, the overall project, and did not built a concert hall which is there in Holland [Dutch radio station]. Therefore, the entire time a concert hall is missing, and we can see the lack of this up to today. But other than that, it Plzeň Radio Broadcast Station is exactly the same as the radio broadcast station in Holland. There [Plzeň] are a lot of facilities, equipment, I would also say, in terms of programming and composing, etc. Here in Prague, there was always a great "pressure" for recording, and so on [Prague's studios concentrated on recording music for records, etc.]. So it was possible to find [establish] some larger rooms there [Plzeň Radio Broadcast Station], which could be used for these purposes [realization of electro-acoustic music]. And these [facilities] were established in 1967, and then there was established a studio [Experimental Studio]. It was always a "Prague" studio in essence, because it was a dislocated studio as if it were in Plzeň. Plzeň [Radio Broadcast Station] did not control who was going to record [compose] there [Experimental Studio], what is going to be done there, and so on. Prague [Society of Czechoslovakian Composers and officials of the Czechoslovakian Radio] did that. So it [Experimental Studio] was a detached work facility outside of Prague. Of course, the composers from Brno and Prague searched for their own studios so that they did not have to drive to Plzeň, which was natural. And very soon there developed a little "Brno studio," where I did [composed] some things [compositions]; about this Růžička could inform you well. And always these things [composing electroacoustic music at "Brno's studio"] were done very basically, because the machines-filters and those kinds of instruments-were always dislocated among other rooms; [then the instruments] were put into one room-there was done work with them for two, three days-and then in turn they were returned to the original rooms. So "officially" there was no established specific studio [for electro-acoustic music in Brno], and status quo. But here in Prague, yes. Here was a facility which was called R-52, located in the Radio Broadcast Station in Karlín. However, in 1969 it burned out; that is to say not specifically this studio, but the main recording Studio A-a large studio in which were recorded even large orchestras-burned down completely, including all the equipment. And because they [engineers, technicians] did not have anything else [equipment] at their disposal, so they basically back then took the equipment from this small studio [R-52] which did not even

begin to "live" [operate], and put it [equipment] there [recording Studio A], and this was the end [of R-52].

LZ: To Plzeň?

KO: No, not to Plzeň. There into the burned down studio [recording Studio A]. Basically, they did not have machines, recorders; and there [R-52] was equipment. So the recorders, filters and all these things they "stuffed" into there [recording Studio A]; they repaired the studio [recording Studio A], and since that time the studio [recording Studio A] operated. And this initiative [of having a studio like R-52 for the creation of electro-acoustic music] which was supposed to "go through"-we had two rooms, studios for this purpose, and were again prepairing to work there-[after the fire] everything "died." So in the end, official studios only existed in Plzeň and Bratislava-of course at the time still in the undivided Czechoslovakia. And Prague, as long as they [Prague's composers] did something [composing electro-acoustic music], they mainly did it in Plzeň. Not until the recent phase, the recent years, does the Audiostudio exist, and it is finally [located] in Prague; and we can say that the output of the Plzeň [Experimental] studio indeed decreased. On the one hand, there is mainly only one person working there [Experimental Studio], Ing. Kadlec, and on the other hand, the technological level of the equipment—even if we have an Atari there and so on-but our guys do not know how to use it effectively; and now they even have there a Macintosh, too, and all kinds of things. But for us [Prague's composer] it is, I would say, more friendly here in Prague [Audiostudio at the Radio Broadcast Station in Karlín] rather than to drive to Plzeň. I, personally, in Plzeň practically only do the final editing. Here [Audiostudio at the Radio Broadcast Station in Karlín] I gather all of the material, and all that I need, and there [Experimental Studio] I do the editing and things like that, because there [Experimental Studio] are still better facility conditions and still more peace than here in Prague. In addition, Ing. Kadlec is the right person in the right place, and he is still there—how long?—twenty-seven years. So he has learned something up to day!

LZ: Do you know why I asked you this, because whether or not the political situation here in Prague surpressed the atmosphere so that electro-acoustic music here in Prague would not be developed?

KO: Well, of course. As long as electro-acoustic music had a good support and success [from the public and composers], or as long as it even existed—as long as some kind of [electro-acoustic] studio was established—so it was a defiance to the official political activities. Electro-acoustic music to theoretical and practical Bolsheviks [Communists] always represented some kind of danger. They never supported it spontaneously, as for example folk music or wind ensemble music [polka]; that never happened. And as long as a studio, as for example in Plzeň, existed and survived, in essence, all of these years, then I say sometimes [that the studio survived] for the prize of almost being dead as hybernation. [Composers did not compose intentionally many compositions in studios just to keep the studios operational. If they had composed many compositions, then the studios would have been closed.] You see, we started with great plans, and that was in 1967 when basically different [political and musical] "cages" than ours [today existed]. So we started with a huge enthusiasm and everything was going very well. And within a short time a Czech "school" of electro-acoustic music, I would say, around the Plzeň studio was formed; and so this [situation] survived up to the beginning of the 1970s and then began a difficult time of "stepping in the same place" [no progress]. In the [Czechoslovakian] Radio they resolved the situation thusly that they did not forbid it, but perhaps they simply did not grant any commissions even if they [composers] created [composed] something. They could do something [a little bit] there [Experimental Studio]; but in the end the number of composers who remained there were, in essence, much fewer than earlier [before the 1970s], because basically money for this did not exist. On the contrary, money had to be

47

invested [individually] there [Experimental Studio], because a person had to drive there. stay in a hotel; well, travel expenses. So these were the kinds of things when Prague, and of course the Society of Czechoslovakian Composers back then, and the central committee of the Society of Czechoslovakian Composers were not favorable to this [electro-acoustic music]. Of course, also the Ministry of Culture as a ruling organization over the Society of Czechoslovakian Composers [was also not favorable towards electro-acoustic music]. Individually among [the members of] the Society of Czechoslovakian Composers, except for Václav Kučera who was [the Society's] Secretary for many years and who worked [composed] there in Plzeň for many years; he, despite the fact that he is a Bolshevik, so he has some credits there [Experimental Studio] that they [Communists] did not liquidate [the Experimental Studio]. [In other words, because of his influence, the Experimental Studio was not threatened], because he did some work [composing] there and released records and things like that via Panton [one of Czechoslovakia's record companies]. But except him, not one among the entire number of members of the composers of the Society of Czechoslovakian Composers in the central committee and other sub-committees [of the Society of Czechoslovakian Composers], nobody did this music. So they had a despicable view of electro-acoustic music which was very difficult to change. And I would say that up to the end of the Communist era before the Revolution [1989]-about two years before that---they created a subcommittee which was led by Milan Slavický, Dr. Milan Slavický, I was according to them too big of an anti-Bolshevik for them to include me in the subcommittee]. He actually was more understanding [of] rather than tranquelized [by the Communist political situation]. And so the [following] situation came about that Bolsheviks then said—they boasted with it—and said that, 'We have an enormous extent in art. We are basically representing an enormous extent of music ranging from wind ensemble music up to electro-acoustic music.' So they promoted the fact that they were the ones who were at the forefront. But back then [two years before 1989] a lot was not done there [subcommittee]. And then after the Revolution was established the Asosiace hudební umelcu a vedcu [Association of Musical Artists and Musicologists], which had nineteen societies, and one of those-after all the difficulties-was a Society for Electro-Acoustic Music. This existed for two years when we realized the uselessness of this conduct [system]; and so approximately two years ago we deserted this system, and created the so-called "free following" [independent association]---"independent fighter plane" [he is being facetious]—and are better off than before. We [Society for Electro-Acoustic Music that existed for two years] were not able to have our own account, because we could not do what we wanted to. There was always somebody "looking over our shoulder" if we are doing 'this' or 'that.' So we were really unhappy. Well and now we have here a Society [Společnost pro elektroakustickou hudbu, SEAH (Society for Electro-Acoustic Music)] which overall-rationally-works. And I have Rudolf Růžička in Moravia; he does a lot of work for me there. So the initiatives from Moravia are in excellent condition. He is actually without employment, because first he was kicked out [of JAMU] by the bolsheviks [due to his artistic views, etc.], and now by the capitalists [due to financial difficulties] from school [JAMU]. He got one blow from the "left" [Communists], and one from the "right" [capitalists]. Well, from the "left" he got more blows, and now two from the "right;" so it had to apparently even out [he laughs]. Well, it is not a question of politics per se, but a question of innovations, because at the faculty of JAMU—and also at the [Brno] Conservatory—there our [professors] teach the "dead ones" [the music of deceased composers]. And these are our extremes; basically people who are squarely standing with both feet at the beginning of this century. Music before the time of Smetana is composed there; music after the time of Smetana is composed there, and so on. And basically modern [music] does not at all blossom there, so much the less electro-acoustic music! It is completely... They [JAMU's faculty] believe in what Růžička did not-basically, back

then he composed autonomous electro-acoustic music—which is that they want to make practical music. In other words, they "squeezed" him out due to [his music] being too demanding, and 'Maybe nobody wants it,' and that 'It is not useful,' etc.; and 'That it be necessary to create useful music' which should be done [taught] by Daniel Forró. LZ: What is 'practical music?'

KO: 'Practical music' is to perform on synthesizers-

LZ: Ah ha, live!

KO: [Yes] live. On synthesizers and perhaps add some [any kind of a] program to it. But mostly to be used for TV broadcasing, radio and pop music, and so on; basically not for autonomous music. This means no composition, but only just to have "something." Well, and they ruined his [Růžička's] department, and employed there Daniel Forró—his actual name is Karel Horky----who was there maybe twice or three times, and then he did not show up: so that it basically also dissolved. So basically there [JAMU] it [the situation] is absolutely unacceptable. But mainly what was "successful" was the ruining of the department, or I would say, the style which was taught there. And they ruined it not due to political reasons, but due to pure stupidity, and due to nostalgia. But you will also encounter this [attitude] in Prague [AMU] as I pointed out earlier that Syrový has a very difficult position there [AMU], because he is opposed by a number of nostalgists. I see it myself from recent times, because I was a chairman of somebody's dissertation—what was his name?—who at the last moment got together with Bmo's ensemble, Via Lucis. Have you heard about this name, Via ...? They use light and laser effects during their performances. Well, and I was present from the embrionic stage of the creation [dissertation] and we worked together. Well, and they had a concert here [Prague] in the planetarium with, I would say, their remaining power [the ensemble is falling apart]. And he [this student] basically composed music for this [the light show]. Well, and this was part of the dissertation material, because I participated in the [AMU] Musical Department's dissertation defense hearings and the proceedings, and so I know what kinds of people [jerks] there are. Basically, they are half-dead [he laughs]!!! That is enough. [End of conversation.]

The interview of Ing. Čestmír Kadlec was taped in the Experimental Studio at the

Radio Broadcast Station in Plzeň on Friday, July 2, 1993, at 1 P.M.

LZ: Why does this studio even exist? How did it originate?

It is not so far away from Prague; ninety kilometers [fifty-six miles]. So the impulse to the start was given by the Society of Czechoslovakian Composers. The background [facilities, equipment, personnel, etc.] was secured by the Czechoslovakian Radio. Personnel-wise, also [the personnel was also secured by the Czechoslovakian Radio]. The employers, we started as two [Ings. Kadlec and Ježek], were employees of the Czechoslovakian Broadcast. That is why it originated in Plzeň.

[Turned off tape recorder.]

LZ: Who supports you [Experimental Studio] financially?

CK: Due to the fact that the studio was incorporated into the Czechoslovakian Broadcast, all the finances [of the studio] were under the Radio, the Broadcast Station. Greater problems lay with the technical apparatuses [instruments], because prices of new technical apparatuses are rather high. So the Broadcast Station rather fulfilled first its own needs, for the [recording] studio's [studios'] production [output], and then it loosened-up some [money, finances] for electronic music [hence, the Experimental Studio]. So other organizations or sponsors did not exist, so everything—financial expenses—was dependent upon the Czechoslovakian Broadcast [Plzeň]. That is why the technical progress was a little bit delayed, let us say, compared with the production of, for example, pop music or [other] music. So the [recording and other] studios [in Plzeň] had to come first of and were most important, and then did something [money] remain to buy something [equipment] for us [Experimental Studio]. Other [financial] support did not exist from another organization, as is the case today [with other studios in the world]; only moral [support did exist then]. [He is sarcastic.]

LZ: Second question: what is the administration? What are the politics here like? How does that work? Is there a director, etc.?

CK: Directly the electronic studio does not have [a director]. It is implemented as one studio of [the] technical production, which means of the [entire] Radio Broadcast Station in Plzeň. The chief [director of the studio] is the technical chief [who] is also at the same time the chief of this studio, personally. Otherwise I, practically, I am responsible [of the studio]. I am responsible for all of the activities of this studio here, electronic [studio], which at the same time is at the disposal to all the sound engineers here [Radio Broadcast Station] for the production of "scenic music" [background music to radio broadcasts], for theatrical broadcasts [i.e., Hörspiele], or in other words, for various technical/artistic finished works. So the production of independent, autonomous [electro-acoustic] composition[s] in recent times is almost minimal-about one, two compositions per yearversus, let us say, ten, fifteen years ago when ten to fifteen compositions were recorded, [or perhaps] let us say ten compositions per average per year. So the production has declined, is low. It is not due to the disinterest of composers, but also in part due to the fact that there is not any money for any composers' commissions, because—I will describe to you the process of a composition's creation-a composition came about in the following way. The Broadcast Station asked composers, or via competitions, with a specific theme, and the composers submitted compositions. Selected were, according to the score and project, let us say five things [compositions], which were then here recorded, realized, [and] made for broadcasting purposes. The composer was paid [by the Radio Broadcast Station, Plzen, and then the Broadcast Station would broadcast them, and the Broadcast Station basically purchased and thus owned the compositions. Due to the fact that the finances for the commissions are not there [do not exist now], the interest [among composers to realize compositions] is also lower.

LZ: Is there also a director here? What is the political set-up [I say 'political set-up' in English]? How does that work?

CK: We are a regional studio, so that there is a director of this Radio Broadcast Station, whose name is Vladimír Bako-the director of our regional studio-and he is the director,

boss of the entire regional studio, and is under [the order of] the general director of the Czech Broadcast [Czechoslovakian Radio] in Prague. His name I do not know, because momentarily he probably still is not in office, and this position was announced. And currently we only have an acting director, I do not know [who that is]. The former director, Dr. [I was unable to identify his first name] Mejstřík left [stepped aside, probably because he was a Communist] from the [Czechoslovakian] Radio, and now somebody will fill his position.

LZ: Who helps you with the technical aspect, like the girl [a sound engineer in a recording studio] whom we saw, if you have people like that?

CK: During the recording, during the production of the compositions? LZ: Yes.

CK: We have here [recording] studios. The benefit of these studios, of the recording studios of which we [he and I] had an excursion [is the fact that] it is possible to record all the parts of the electronic compositions, with regards to musical sounds of instruments, which are then brought here [Experimental Studio by the technicians] on tape or another medium of storage. [The compositions] are then completed [in the Experimental Studio] with technical help of various equipment and processors. That is, in reality it seems that one sound technician works—I or my colleague, or one of the colleagues—with the composer.

LZ: Mr. Jedlec?

CK: Ježek was his name. And when he left to [establish] a private broadcast station, I am here from the original two-man team alone [the only one]. So one of us plus composer. Sometimes during a complex procedure, there were two [engineers] of us. That is, an engineer/assistant [plus Kadlec and the composer]. But, it is possible to produce it with [only] one [engineer]. [So one] composer and a sound engineer [he says 'sound engineer' in English] together.

LZ: So the composer never did it [realized a composition] on his own?

CK: Exceptionally, Rudolf Růžička with whom you will later talk to in Brno, who is technically capable that after the basic technical set-up that I prepared for him—and I am here at his disposal—he did everything on his own. During some problematic moments, I helped him and he then continued. That is an exception [an exceptional example]; that is one extreme case. Then a lot of composers made a lot of tasks by themselves, for example tape splicing, [or] the search and selection of materials. And during the recording process, there were two of us. And some composers do not even touch a tape recorder. They are minimal [there are a few of them] as opposed to, let us say, Rudolf Růžička who knows how to do everything; [Růžička] as opposed to other composers who rather do not touch technology in order that they do not mess up something.

LZ: Do you have some sort of budget [I say 'budget' in English]—do you know what a budget is—that is, money per year? How does that work?

CK: Up to last year there was a budget for composers' commissions. The way it will be this year, we have done [produced] one composition so far this year without the request for a commission, and the composer uses it [composition in order to make money off the composition]—the Radio Station can use it [composition; also to make money off the composition]—the composer also uses it somewhere. So there was a budget for these commissions, and other performers involved, like musicians or artists, sometimes those recitation, even the spoken word [recitator] was used. So there was a budget, let us say, of 50 [50,000] up to 100,000 Czechoslovakian Crowns [\$1,785 to \$3,575] for these commissions.

LZ: Only for these electronic compositions?

CK: Yes. But now in recent times, it [money] is very miserable, almost zero. On the other hand, the budget for the equipping of the technical equipment comes from another source,

which lies under the scope of the entire equipping of the Plzeň Broadcast Station. Due to the fact that this [Experimental] studio is not only exclusively for electronic music or electro-acoustic music—for its production—[but] that it is [also] at the disposal to any producers, musician, so there is a small guarantee when something new is installed here, that it is at the disposal to the entire Plzeň Broadcast Station. So now, for example, the recent [equipment] that we have here at our disposal is a computer software for the Macintosh. So now, we are learning it, and it will, of course, be used for both chamber, symphonic music, mostly for slicing [editing] digital parts, and then eventually for the production of electro-acoustic music.

LZ: What instruments—question # 3—do you have in the electro-acoustic studio? CK: So I will begin with the last piece of equipment that we have now. Now we have an analog recorder, 8-track—which is not enough—which we are upgrading to 16-track. And a digital recorder—now, fourteen days ago—we received a set from a company DigiDesign from California [called] Interface, a computer Macintosh Quadra 950, and with that the corresponding program, ProTools from the company DigiDesign for computer recording/slicing, editing; all of which comprises, one can say, our digital studio [the digital equipment of the Experimental Studio]. So with this [equipment] we finally, after so many years, got to the current technical level. In the past, we had I would say, basic stages [of acquiring equipment]. Now, I will return, from the latest to the very beginning.

When we started in 1967, [we started out] with a monophonic mixing board, with monophonic production, with minimal technical equipment. Probably two years later, [19]68, [19]69, we got— via stereophony—to quadrophony, so that we had a 4-track Studer, still thermionic valve/tube machines, thermionic valve/tube recorders. But, due to the reason that we had at our disposal a 4-track, we were at the time "smoking" pretty well—quadrophony was fashionable at that time—recording unto 4-track, which mainly Sony commercially set through. But after four, five years, because the commercial success did not come about [of 4-track recording], so everything [quadrophony] died away, went to sleep. And we at the time did several 4-channel or quadrophonic—it does not matter what one calls it—compositions in the field of electro-acoustic music. Then, it took a lot of time until we obtained the 8-track analog recorder, and it we actually have here until today. LZ: In what year did you obtain it [8-track recorder]?

CK: 1975 or sometime like that. It will actually, not in a long time, be twenty years. We began with mechanical splicing, with looping. Probably five years ago, we were successful in obtaining a sampler, Roland S-50, so that on it Eduard Spáčil did a lot of things [compositions]. So he sampled there [Roland S-50] something—both word and music—and worked on it like on a keyboard instrument. Of course, the 8-track recorder was used—the multi-track—unto which he recorded. But due to the fact that he had at his disposal his own computer—some personal computer with a musical software—so he was already able to prepare something of the composition [that he was working on at that time] at home, and here he only finished it.

LZ: The fifth question is, how did the music get disseminated? Mainly through the radio, right?

CK: Regarding the broadcasting? Well, all of these things, these compositions were, without regards for the political situation, somehow broadcast. Frequently, let us say, each of the compositions here produced, "popped-up" being broadcast five to ten times within the twenty, twenty-five years that we exist. And in the early years we would give public performances. Instead of a subscriber concert of symphonic [music], [there were concerts in which] was performed 'music for tape' [he says 'music for tape' in English] reproduced music—for a smaller circle of interested people, sometimes in studios, sometimes in the city [Plzeň] in various places. Sometimes even—rarely, but it had a big success—[the tape was accompanied] with a live musician, for a lot of the compositions are conceptualized [composed] for a musician and tape. So that was a pleasant diversion for [a] public performance, because the listeners did not like so much to only listen to [sound eminating from speakers], to sit and listen, for they had a feeling that they could play [the music] to themselves at home, and not at a public concert. Which means [this means that] the combinations of a live musician plus a stereophonic tape is very useful, because he [the live musician], the parts that he never performed in his lifetime and could not be able to perform on the spot, so those are played on the tape and he plays the "normal" [performable] music which he is able to perform on the spot; on the piano, the violin, on the usual instruments. So even through this means, compositions were presented. I think that in Bratislava they still respect these public concerts. You will find out about that there. There it [the state of electro-acoustic music] is still better. In Prague—in Brno also—it is also under way [of establishing electro-acoustic music concerts]. Now here in Plzeň, it is a little bit behind, because even the support [of the public's desire to attend these types of concerts] of listeners or the audience is smaller.

[Turned off tape recorder.]

LZ: What was the archival process? How were the compositions placed into the archive? CK: Each composition has its own signature [label], label, which is filed by us in Plzeň and in Prague—in the central music associaton [in Prague]. We labeled it [each composition] back then "EH," short for Elektronická hudba [Electronic Music]---one can more specifically say electro-acoustic [music], because under it [term], everything fits [the description]. And, the compositions are archived originally here in Plzeň, at the Radio [Broadcast Station]-in our "handy" file-and copies are [located] at the Prague Radio Station [Czechoslovakian Radio] at the disposal [at anybody's disposal]. There [Prague] apparently next to our labeling, they added their own label, maybe by [using] other numbers. In Prague, they file it [a composition] under the author [author's name], so that they have a different signature [label]. There they are [to be] found under the author, and here we did it according to time [date], according to when the compositions were created. So always all of the compositions are actually owned by the Czech Broadcast [Czechoslovakian Radio] which paid for them, and something [some compositions] even sometimes was released on gramophone records. We have not yet been able to produce a CD, because we have not found a sponsor who would pay for it.

LZ: Yes, yes.

CK: So this is an overview of the archive.

[Changed the side of tape.]

LZ: You may continue to talk about the archive.

CK: In essence, all the compositions [created at the Experimental Studio] are put aside here. Of course, they are all at the disposal to all broadcast stations [such as in Brno, Prague, etc.], and also for students. We have good ties with the cooperation of schools, conservatories, with music schools. Also with Prague's Academy of Musical Art [AMU]. We offered some overall aid to Prague.

LZ: OK, finished with this question?

CK: Yes.

[Turned off tape recorder.]

LZ: We will now discuss aesthetics.

CK: We are a little bit here in Plzeň... we were... Due to the fact that the technical equipping was not, let us say, state-of-the-art or the most modern in terms of various processing, so we [technicians, *Tonmeisters*] [along] with the composers would often use the combination of live sounds, or musical sounds, sounds of musical [acoustical] instruments. Most often used, most loyal was the piano which has a very rich spectrum; prepared piano, and so on. From it [recorded piano sounds], a lot of sounds were created—through the use of technical methods—out of which then were compositions

53

created. I wanted to say with this [I meant] that one could say that [this could be considered as] the Plzeň "sound" or "school." And each studio, with its own technical equipment has a certain trademark, or style. Some studio has, you know, a computer. So all worked [composed] on the computer. Then, for example, all [worked on] whatever kind of synthesizer came out. We [Experimental Studio], on the other hand, had [got] the [a] synthesizer rather late, so that we used natural sounds of musical [acoustical] instruments, and then would technically, analogically arrange [edit, compose the sounds] in the studio. And out of this period, in essence, arose a lot of compositions which use as music . . . concert program [performance] consists of a live musician plus tape [he says 'tape' in English]. For broadcasting, of course, exists this [live musician plus tape] recorded together.

LZ: Only for tape [I say 'tape' in English]?

CK: Yes. And for a concert program [performance], the musician—either solo piano, trumpet, violin and piano, or bassclarinet, flute, bassclarinet and piano—plus stereophonic tape. So everybody [composers] submitted to the technical equipment; each composer. LZ: So what was here [equipment] dictated what was created?

CK: Yes.

LZ: Do you know of any additional [in addition to Czechoslovakian] composers who worked here?

CK: There did not work [compose] here [Experimental Studio], in essence, anybody, no composers from Slovakia, because they have there [Bratislava], they have always had a nicely equipped studio. But one time, we thought of some kind of a coproduction, but it never came to that. So from Slovakia, composers worked in Bratislava [Experimental Studio in Bratislava], and from Moravia, from the Czech region [Czech state of Czechoslovakia], [they would work in Moravian or Czech studios]. Here [Experimental Studio] also composed two Rumanian composers: Liviu Dandara—from Bucharest, Rumania—and [I am only able to find first name's initial, A] Hrisanide [who] was also from Bucharest. So among the foreign composers there were here [Experimental Studio]: two from Rumania, from Yugoslavia a [one] female composer, Lida Frajt, and Mr. Kalčič [also from Yugoslavia], an organist. They worked here in the years of [19]67 up to [19]69. From West Germany, former West Germany, the composer, Dieter Salbert [composed here]; he is also listed here ["Skladby realizované ve studiu pro experimentalfund hudbu v Plzni" ("Compositions Realized in the Studio for Experimental Music In Plzeň"]. And in essence, those are all of the foreign composers].

LZ: What equipment [I say 'equipment' in English] was brought here, and when? What instruments?

CK: Well, the 12-tone synthesizer—manually operated—which has twelve sine[-wave] generators is visible on the photograph [a photograph that he gave me]. It was built at the Research Institute of the Radio and Television [VÜRT] in Prague, because no company manufactured these, some specialized electronic instruments. Additional sophisticated apparatuses [that we obtained]—various filters, some of which have remained here up to today—actually are due to the production of the Research Institute of the Radio and Television [VURT], which I do not know whether or not it still exists in the current time. This apparatus [12-tone synthesizer to which he pointed on a photograph lying in front of us, and all of the other instruments that were built at VÚRT] was from the 1960s and 70s. So at that time, the technical "step" [technical gap between the West and the East] was still able to be upheld [the "step" was still under control; the "step" was not as wide as it is today]. But then, after the introduction of integrated circuits and computers, they [engineers of the former Eastern Block] were not able to keep up, and they "let go" of it [trying to keep up with the West].

LZ: That [the attempt of trying to keep up with the West, and the production of instruments at VURT] was in [19]67?

CK: Yes, [19]67 up to, about [19]72. We [Experimental Studio] had a lot of apparatuses from the Research Institute of the Radio and Television which developed it and manufactured several pieces. Here [Experimental Studio] this synthesizer on which, in essence, the compositions of Miroslav Hlaváč, Zdeněk Lukáš-of which you have examples [compositions that Kadlec dubbed for me]—so there [in those compositions] this apparatus [12-tone generator] was used. And in regards to recording technology, so in 1969, a Studer-4-track-was installed, [which is] a tape recorder [he said 'tape recorder' in English]. And then, towards the end of the 70s, [we obtained] the 8-track which has remained here up to today. I would additionally like to say that we have here a Roland sampler, S-50. It is here from 1989. So it appears [is used] in some compositions of Karel Odstrčil and mainly [in compositions of] Eduard Spačil, with whom you will talk. He makes use of it a lot. The "computer station" [he says 'computer station' in English, referring to the Mac Quadra 950, etc.], so far we have not done any electro-acoustic music on it. I hope that in the near future we will possibly use it [Quadra 950]. Filters [that we have] are, actually, two Dutch Peekel-octave filters-and Brüel & Kjaer is from Denmark, a 1/3-octave. It is fairly often used in selections of colors from wide bands. The Peekels filters are from [we obtained at] the beginning of about [19]68, [19]69; about [19]74 is the Brüel & Kjaer. And then we have equalizers from Yamaha, which are 31wave bands for each channel; now we have here two. One is here [Experimental Studio], the other is momentarily in the studio [one of the recording studios]. So they are [we obtained them] from about [19]89, [19]90. Well, from recent times!

Currently, we use the processors of Yamaha a lot of the time. Here we have two EMP 100, for [purposes of] reverberation, [in which] we also have a bit of a harmonizer there [in the EMP 100], and such arranging processes. In the [Experimental] studio, we also have a REV 5. [He said 'REV 5,' but during our joint inventory we found—and he told me—REV 7.] From the Peavey company [we have an ADDVERB], also a digital sound-delay processor and effect-like [module]. And also, from the company Dynacord, one of the earliest digital reverberators [DRP 16]. Over there [he pointed to it] is a digital delay from the company Eventide [Digital Delay 1745 M], which is for the purposes of sound delay—also one of the earliest [instruments in that field]. Back then, it cost \$4,000, and actually it has one input/two outputs, and the delay is from zero to eigth-hundred milliseconds.

LZ: And in what year did that come here? Do you know?

CK: We obtained it at the end of the [19]70s; about [19]78, [19]79. But the company, Eventide, is mostly known for their harmonizers. Unfortunately, we do not own it [a harmonizer by Eventide]. In addition, we have here an [one] Atari computer with the software, C-Lab Notator, musically [a musical program], with which one works [with which people of all studios work], but not even so much in electro-acoustic music, but rather for pop music and also jazz. We here, in the electro-acoustic studio, in essence, ... A lot of things [instruments], due to the fact that we are part of the entire Radio, so they [instruments] are, at the moment-there where we were together in the studio, musical [recording studio]— according to the needs of them [instruments], moved to studios where they are needed. I did not want to, how shall I say it, "freeze" things here [Experimental Studio], that it [instruments] be used only here [Experimental Studio], because when they [sound technicians, engineers] are mixing music over there [a recording studio] from the 8track [recorder], for example, in the small recording studio, then of course, they take from here [Experimental Studio]—as long as there is not work done here—apparatuses, which they [engineers] connect to the patch-bay, the patch-bays [he says 'patch-bays' in English] as they are known, of course. So everything is [connected] either by the connectorschannels or jacks [he says 'jacks' in English], and it is possible to [connect instruments]. Of course, what happens also is that we look for something [an instrument or equipment] and it takes half an hour to find the right studio where we left it a week ago. Ah yes, but that is a small problem. LZ: Great.

[End of conversation.]

The interview of Eduard Spáčil was taped at his home in Litohlavy on Thursday,

July 1, 1993, at 1 P.M.

LZ: How did you get started in electro-acoustic music?

ES: Well, I first wrote my first electro-acoustic composition in 1985. Up to that time, I had been composing normal acoustic music. I was and am also up to today an interpreter [perfomer—pianist]. And basically with the purchase of the first synthesizer Korg 800, I, in 1984, started to flirt with it, and immediately—most importanly—projects for live electronic [music] attracted me. So I practiced this instrument and played some short concerts.

Now! In order that I line things up chronologically, Mr. Karel Odstrčil introduced me to it [electro-acoustic music]. Mr. Karel Odstrčil is, as I am sure you know, one of the founding members of the electro-acoustic studio [Experimental Studio] in Plzeň. LZ: I will call him soon

ES: I live near Plzeň, and so the closeness to the studio attracted me to work there. So in 1985, I did the first two projects there, and in addition Karel Odstrčil was at that time for about five years my private teacher of composition. I consulted [studied with] him from 1980 to 1985 about my compositions. So my work began at the [Experimental] studio at the Plzeň Radio Broadcast Station still at that time [1985], and basically at that time many private studios did not exist here [Czechoslovakia], so that the only opportunity was to work there [Experimental Studio, Plzeň].

[Turned off tape recorder.]

ES: I do not know into what detail I should describe, for example, the work or the equipment of the studio. Basically at that time there was available an [one] 8-track tape recorder, and more or less musem-like things [equipment], varying filters, and equalizers, and patch bays. Now it is a bit more modernly equipped, but at that time it really was more or less like a museum; and so there I worked with [composed] classical, analog technology unto eight tracks. I either worked with recorded sounds of normal [acoustical] instruments—primarily I worked with tape that was sliced, was slowed down, and so on; things were layered—or one worked with a synthesizer, but at that time there was not a good one [synthesizer] there, so that I worked there on my own instrument or I borrowed [an instrument/synthesizer]. Then I bought myself an Oberheim Matrix. It was a good instrument for that time. Today it is also "outdated." So this was the way that my first [electro-acoustic] compositions came about. For me, besides isolated synthesized sounds, I have always been attracted in connecting a synthesizer together with an acoustical instrument, with human voice, with song, with recitative. So the next projects composed were inspired, for example, by the poetry of Sergei Jesenin or Geomach Apolinera. On their poems' basis I basically composed the music, and there were used passages of texts that were spoken [read and recorded] by our [Czechoslovakian] prominent actors or were sung by singers. From that time, I even had some success with one of the compositions, because it was selected at the competition at Bourges into a narrower finals. A prize, she [the composition] did not win after all.

LZ: Your composition?

ES: Yes, one that is named *Hudebník ze Saint-Merry* [*Musician from Saint Merry* (1989)] on the basis of Geoma Apolinera's poem. So in this way [composing at the Experimental Studio] I worked until about 1988/89. In between that time I twice absolved [graduated from] composition courses in the former NDR [East Germany] in Germany in Gera were I met, personally, Lothar Voigtländer, a renowned German electronic composer. And---LZ: Where was that?

ES: In Germany, in Gera. That was the former NDR.

LZ: Yes, yes.

ES: And then the next year when I was there, I met Gerald Bennett. You know him for sure. He's from Switzerland. He is the director/leader of the center of computer music [Centre Suisse de Musique Informatique, CSMI Genève], and is also an acknowledged expert in competitions in Bourges in France. And out of that at the end resulted an invitation that I go work [compose there, CSMI]—I had the opportunity to go to the lab and work on the computer on programs that at that time here [Czechoslovakia] did not exist at all. They were programs for digital working [editing, etc.] of sounds on the Atari computer. So I then, after the Revolution [November,1989] in 1991, was able to accomplish the trip without [political] problems after they had invited me, and I probably worked [composed] there for fourteen days. I primarily worked there on recorded sounds that I had brought from here, or sounds that I directly created from the computer. Then the work that I did on the computer there I brought here on R-DAT tape to Plzeň [Experimental Studio], and here out of that I created a [one] composition. But unfortunately it is one of the last compositions from 1991, because at that time I began to enterprise a music publishing and studio for score writing, and—

LZ: Publishing [I say 'publishing' in English]?

ES: [Yes] music publishing [he says 'music publishing' in English]. And I simply have so much work with my company [business] that I essentially from that time, in the last two years, have not been able to write [compose] anything.

LZ: OK.

ES: So that is the history in a block [chunk]. So things that are of closer interest to you [things that you need to know about in detail], then you have to ask!

LZ: Yes.

[Turned off tape recorder.]

LZ: ... [Tell me the dates of] all your electro-acoustic compositions!

ES: OK. So the first one was-

LZ: And all the information, about how long it is, ...

ES: Yes.

LZ:... technical information!

ES: Yes. So the first [electro-acoustic composition that I composed] was *Varující Trosky* [*Warning Ruins* (1985)] for synthesizer, which could be played on the synthesizer concertwise [live]. So I do not need to give you any technical description. In essence, it falls in the category of live electronic [music], but I also recorded it in the Radio Broadcast Station [Plzeň]. Then, a somewhat more serious work was a composition named *Hledání světla* [*Search for Light* (1985)], where I also worked on two synthesizers Korg Poly-800 plus analog technology—filters, delay links, and 8-track recording. LZ: Yes.

ES: Then during that time, I worked on the ballet DG 304. This is a description of the diagnosis of drug dependence. Originally, I wanted to write it for a normal orchestra and normal ballet performance. Then I did not finish the score and out of the sketches of the score, I decided to make an electro-acoustic ballet. So I made a kind of a work-study [etude] in 1985 in the Plzeň Radio Broadcast Station also with the use of the technology of two synthesizers, the electric drum—back then it was Roland DR 808—and live recorded

57

saxophone; and edited [this] a little bit in the [Experimental] studio. But the project essentially remained a demo project. Then in 1986 and [19]87, there were compositions, like I said, that used recitation. So that was a composition, *Poéma*—based on the poem of Sergei Jesenin—which made use of spoken recitation of male and female voice, vocals of jazz—scat—and classical opera vocals. Combinations [of jazz vocals, opera, etc.] which were used together with [a] synthesizer, and I think electronic drums were also used, and some sounds of a sampler already. At that time [1986 and 1987] a sampler was already at the Plzeň Radio Broadcast Station at one's disposal. So that was *Poéma*. And immediately after that, in the same spirit, developed the composition *Hudebník ze Saint-Merry* after [inspired by] Apolinera which I sent to Bourges, and I got it into the finals.

Now! The length. *Poéma* is a shorter work—about six, seven to eight minutes and *Hudebník ze Saint-Merry* is probably fourteen minutes [long]. It is a longer composition. Then I did a sort of study [etude]—I bought myself a new drum computer, Roland R-8 which is a perfect/ideal instrument—and on that I made an autonomous composition only out of the sounds of the percussion [drum machine] and sequences that I composed [programmed into it] there. The composition is named *Solo pro R-8* [*Solo for R-8*]. Then in between that I, hmmm let me return to . . . then I prepared a project for the composition that I worked out on the computer in Switzerland, at [the studio of] Gerald Bennett. The composition is named *Chorální fantasie* [*Choral Fantasy*]. LZ; Yes.

ES: It was essentially conceptualized only after the Revolution, that means [19]89/90. There are used citations of the St. Wenzelslav chorale; and otherwise there is used, again, the spoken word, electric drum [machine], sampler, synthesizer, plus the computer sounds which I created in Switzerland. In the meantime, in the Radio Broadcast Station in Prague—about in [19]88/89—several enthusiasts were successful in equipping a professional studio for electro-acoustic music, which back then was located in the Palace of [Culture]—

[End of tape.]

LZ: OK. We can proceed!

ES: OK. Now we will continue [to discuss about] the modernly equipped electro-acoustic studio [Audiostudio] in the Prague Radio Broadcast Station in the Palace of Culture [the studio was located in the Palace of Culture], where was a 24-track board [mixing console] controlled by a computer. And still exists, also samplers and synthesizers most modern of that time-Rolands, Yamahas, Kurzweil-Atari Computer with a notator program, and plenty of additional instruments such as quality echoes, reverberations, and so on. It can be said [that] the work [producing electro-acoustic music] was already more modernly conceptualized, especially with the use of the computer. So there [Audiostudio] I made the final version of the sketches of the ballet *DG 304*. And out of the ballet I made a suite [*Suita dg. 304* (*Suite dg. 304*)], which I reduced into three movements—the duration probably being fifteen minutes. There were used electric drums, all kinds of synthesizers, and also a live performed saxophone.

LZ: Yes, so you made like a suite out of that?

ES: [Yes] out of that ballet. But I did not use material that was recorded, but [only] material that was composed like with notes [notated], and recorded [the material] completely newly into the computer; newly instrumented [orchestrated], in other words with modern sounds, with modern synthesizers at that time. And so that the composition essentially—there are themes or parts and some rhythmic progressions from the original sketch—formally looks totally different.

LZ: Yes.

ES: And then I also did there [Audiostudio] another thing which, from an authorative point of view, is not directly mine, but is rearranged [reochestrated] actually into an electronic similarity of the composition, *Jazz Concertino* [1992] of Alexej Fried. LZ: That is the name of it?

ES: [Yes] Jazz Concertino, [and] the composer is Alexej Fried; a composer who is over seventy years old. And from the 1950s, he designated [dedicated] himself to compose music in the style of 'Tretiho Proudu'-Third Stream [he says 'Third Stream' in English]—and his compositions were even performed by Don Ellis in the U.S. And he is a very successful person. And he composed Jazz Concertino for Gustav Brom [conductor of his famous Orchestr Gustava Broma (Orchester of Gustav Brom), a la Lawrence Welk, in the 1950s and 1960s], Felix Slováček [composer, conductor, saxophonist and clarinetist]. The composition [Jazz Concertino] was recorded once, then it lay almost forgotten. Weour ensemble Barock Jazz Quintet, where we also play a sort of synthesis of serious [classical] and jazz music in a chamber setting— found it. We played it often. I liked the composition's rhythmic charge, and so I decided, with a joint composer, to actually make a version in which electronics would be played instead of the big band, and in addition, instead of the solo clarinet, there be a flute, which I found more suiting to my setup. And I would also like to add that I did not imitate the big band sound using electronic means. I attempted to orchestrate it for drum synthesizers completely differently. I used typical contemporary synthesizer sounds. So this was also a project that I realized in the Prague studio [Audiostudio]. And along side [in addition] I played [performed] various compositions-actually live electronic-of not only mine but also those of my colleagues. We played concerts and the *Concertino* was performed with flute and tape, and *Diagnosis* 304 [DG 304] is performed—the suite, in essence—[is performed] also live; that is, a synthesizer and tape. Hmmm, I wrote a composition [Krok k extázi (Step towards Ecstacy) 1989] for trumpet and synthesizer which was also performed in concerts, and was also recorded at the Radio Broadcast Station [in Plzeň]. So I am trying to use the synthesizer as a concert instrument. But unfortunately, now I do not have that much time—I do not have enough time. And this is basically everything.

LZ: Can you now tell me how long the first composition [Varující Trosky] is?

ES: It is about eight minutes [long].

LZ: And it is only for tape?

ES: No. It is only [for] synthesizer. It is possible to play it live on the synthesizer.

LZ: OK. The second composition [Hledání světla], how long is it?

ES: It is ten minutes long. It is only a studio affair [it is made in the studio]. It is only on tape.

LŽ: Stereo?

ES: [Yes] stereo.

LZ: Great! The ballet, DG 304? How long was that approximately?

ES: The original version was approximately thirty-two minutes [long].

LZ: That was also on tape [I say 'tape' in English]?

ES: Tape [he says 'tape' in English] only. Yes.

LZ: And also stereo?

ES: Yes.

LZ: Good. And now, Poéma, the fourth [composition].

ES: It is eight minutes long.

LZ: Six.

ES: Six to eight minutes. I am not sure now.

LZ: OK. And Hudebník ze Saint-Merry is also fourteen [minutes long]?

ES: [About] fourteen, fifteen [minutes].

LZ: And Solo pro R-8 is about [how long]?

ES: I do not know now. About nine minutes to ten [minutes].

LZ: Oh, excuse me. I totally forgot. Poéma is for tape, also?

ES: [Yes] that is for tape. It is all for tape. *Hudebntk* and ..., those are all the studio projects that were not performed live.

LZ: Only tape!

ES: Yes, tape.

LZ: And also R-8, Solo pro R-8?

ES: Yes [tape].

LZ: And the one [composed] in Switzerland, the Chorální fantasie?

ES: That is also tape.

LZ: And how long is it?

ES: About fourteen minutes.

LZ: And now the eighth thing that you did, [which was] that you helped to equip the studio [Audiostudio] in the Palace of Culture, yes?

ES: I did not equip it. Employees of the Radio Broadcast Station equipped it. It was a kind of team [group] who wanted a "push" for money for the equipping [of a studio]—still during the time of the Communists—and it was basically so that the possibility to work [compose electro-acoustic music] would be there. Up to that time [1988/89], essentially, the [Experimental] studio in Plzeň was the only one in the Czech state of Czechoslovakia [back then].

LZ: Yes, I have already read about it. OK. Then you made out of that, out of  $DG 304 \ldots$  ES: Out of DG 304 I made a definitive version of the suite. It is about fifteen minutes [long].

LZ: Yes. Each movement of the suite [being fifteen minutes long]?

ES: [No] the entire suite is fifteen minutes long.

LZ: It is also for tape [I say 'tape' in English]?

ES: Yes.

LZ: And Jazz ...

ES: Jazz Concertino can be performed . . . We [Barock Jazz Quintet] have [varying] versions of the background [accompaniment consisting] of synthesizer and live flute—it [flute] can play with with tape, in other words 'flute and tape'—or it is possible [there is a version] to play it completely only on tape.

LZ: And how long is it?

ES: Jazz Concertino is eight, nine [minutes long], probably.

LZ: How do you pay for your studio? It is all from you [it is all out of your pocket]? ES: No.

LZ: No. This here . . . all of this [equipment] that you have here?

ES: All of this here at home? This is not a studio.

LZ: Well, OK.

ES: Well, to explain further. I wanted to equip my [own] studio, and so I bought a synthesizer, drum machine, Yamaha module [mixing console], computer into which I put [installed] various softwares. First of all, I had Personal Composer, but this one did not accomodate my needs. Now I have Master Track[s Pro], and a software for notation, Score. But essentially, now after the Revolution, so many perfectly produced [established] professional studios arose here. Most of the time, of course, they earn their money on commercials [music for commercials] and pop music, but they are [well] equipped and are capable of making quality things. And I simply have not managed here [with his own studio] due to the fact that I live here in a village—

LZ: Of course.

ES: ... and the potential customers do not have access to me [and my services of my studio]. So I have simply abandoned the thought [to create a studio], and thus I have a

potential problem. And more or less I devote myself to notation, printing of notes, and publishing of notes [score publishing]. So today you cannot call it a "studio." It was an attempt to equip a private studio, but ...!

LZ: I know. ES: I myself of course finance

ES: I myself, of course, financed everything—I wanted to equip everything—but it is impossible to maintain. Under these conditions it would be unprofitable, impractical.

Oh. Actually I forgot to mention one last thing [composition] which I did a year ago. It was directly into the computer [sequencer] and was performed in Brno at a concert only once. It is called *Fanfára pro INVEX* [*Fanfare for INVEX*]—INVEX is an acronym for a computer fair in Brno—and they asked me that I make a concert of electronic and computer music, and that I compose a composition. So this is *Fanfára pro INVEX*. It is about ten minutes [long].

LZ: Also for tape?

ES: No. It is not on tape at all. The music which forms the basis is composed into the computer—into the sequencer—and with that are played a synthesizer and a saxophone. LZ: Good.

ES: Live. So it is [consists of] two performers plus computer. So this was created essentially here directly only at home [in his own, little studio], so that when I do need something, I can do something. But for professional recording and mixing [he says 'mixing' in English] of this kind, the proper equipment is simply missing.

LZ: OK. Now! What would you say is your aesthetic?

ES: You mean altogether or just of electronic [music]?

LZ: About electro-acoustic music? And overall?

ES: So I have always been attracted in some way to, basically, very unusual and uncommon musical styles or some various combinations of them. This actually occurred to me after my completion of university when I did not support myself purely as a concert pianist or a pedagogue. It is true that I taught at a conservatory. But essentially a year after my school [after receiving my degree]-after university-we established the ensemble, Barock Jazz Quintet. Just the title tells you that there is something which is not traditional. At first, it really was Baroque and jazz, in the style of the time of how the Swingle Singers sang. Or for example, I do not know, various experiments: Jacques Lessier did Bach, Jazz Synchro, or Claude Bolling. So that was essentially our model; that [style of] Bolling we still play up to today. Now, the spectrum has widened into contemporary serious [classical] music which is seen a bit as a forerunner to Third Stream. So this was one branch. And that is probably also my aesthetic or some sort of musical opinion: to try to go some paths which are not "walked" much, and which are not as usual, and rather find something new. In the same way, of course, when I could get a bit of a feel of electro-acoustic music or electronic/computer [music], then I was attracted to it for the same reason, because the possibilities of creating something new is unlimited there, including the fact that the synthesizer really is capable of being used as a concert instrument, which was not comprehensible here [Czechoslovakia]; was not in use [people were not used to it]. So this was in essence my interest which attracted me to it [electro-acoustic music]. Then I must say, when I had the chance to study electronic music—I had the opportunity to listen to many recordings of prominent figures from the entire world—I can say that I did not like a lot of the music, probably due to the reason that it was more experimental than music. And I tried that it be more music, and not an experiment; that basically the music dominate, and the other elements-electronic, computer-serve the musical expression, and not that they be an end in themselves such as that the computer proves that it can speak or play. LZ: Great.

ES: This is the direction that I tried to work in. Perhaps to somebody from a point of view of reasearch and progress it [his view] may appear a bit more traditional than many

developmental experiments. But to me it was more important that the composition is able to be realized, and that it not "drive" people out of the concert hall.

LZ: Great. I understand.

ES: Well, this was basically my basis.

LZ: Could I, once again, go through the compositions and only get the years [of the composition]?

ES: Ah ha. The first two [compositions] are [from] 1985. Varující Trosky. Hold on!

Maybe I could find the English name. It is, *Warning Ruins* [he says 'Warning Ruins' in English] from [19]85.

LZ: And the second [composition]?

ES: Hledání světla also [from 1985]. Then Diagnosis is [19]86.

LZ: The ballet?

ES: Yes. Then Poéma and the Hudebník are [from 19]87.

LZ: Solo pro R-8?

ES: *R*-8 was [19]88 to [19]89. That was from the turn of [19]88 to [19]89.

LZ: Good. Chorální fantasie is from [19]89?

ES: [No] it is in [19]90 when I finished it. Actually [19]91 when I finished it. Something like that; [19]90 to [19]91;

LZ: OK. Then the suites of DG 304?

ES: DG 304 was finished in [19]92; no [19]91. And Fried's Jazz Concertino was from [19]92;

LZ: Yes, OK.

ES: And the last composition [that I composed] was also from [19]92—Fanfára pro INVEX.

LZ: Good, thank you very much. Can I ask you now, what instruments and software you have?

ES: Well, the software that I use is Master Tracks [Pro] from the company, Passport, for the PC version, not Macintosh, but Atari PC. Before then I did some compositions on Personal Composer—you know that one, it is from America—but it did not suit me, so that is why I bought this program [Master Tracks Pro]. And the instruments [are]: first was Korg Poly 800—a simple synthesizer. Then Oberheim Matrix—I have that one up to today. Six Yamaha Expanders DX-81. Roland R-8—the drums. And then at the Radio Broadcast Station in Plzeň there is a Roland S-50 sampler which I use. Before that, they used [a] Korg—it was the first sampler [Korg T1] by Korg. What was its name? It was the first sampler by Korg. It was still before M1, and it was a sort of a big monster. 12-bit—it was not yet 16-bit! It was not so quality-like [compared in quality] like the S-50. Well, in the Prague studio [Audiostudio], they have equipment of: Roland D-50, Kurzweils [plural], some expanders, Yamaha DX-7 IID, Roland D-110 module, sampler of Yamaha. They have a lot there.

LZ: Great. OK. Could I go through the compositions once again, and could you tell me what instruments and software you used for each?

ES: For each?

LZ: Yes.

ES: Well, [in] Varující Trosky [I used] the Korg Poly 800 plus the ... Hmmm no. There was only the Korg. Then in *Hledání světla* I only used the synthesizer— LZ: Korg Poly 800?

ES: Or actually, I had two [Korg Poly 800s] over MIDI. But I used a lot of the multi-track recording technique. I recorded a lot of layers over each other in order to "create" numerous colorations. Then the first version of the ballet—DG 304—of that time, there were also used two of the Korgs [Korg Poly 800s]—two instruments. LZ: Korg Poly 800?

ES: [Yes] Poly 800. Then there was Roland, I think, TR-808—that is an old analog drums [drum machine]—plus a [one] recorded live saxophone. And all of that was without a sequencer at that time. Then, in *Poéma* and *Hudebník*, I used the sampler by Korg; but what was its name?

LZ: In both of these compositions?

ES: [Yes] in those [compositions] I used the same equipment. There was the sampler by Korg—I do not know exactly the type and what it was called—Oberheim Matrix 6 synthesizer, also Roland TR-808, plus recited voices, human voices, song, etc., and this electronic equipment [he pointed to his instruments in his studio]. Again, [they were composed] without sequencer; only the drum computer [he says 'drum computer' in English].

LZ: Great. And what else is left? Solo pro R-8?

ES: Well, that is only for one [instrument], the Roland R-8, drum computer [he says 'drum computer' in English].

LZ: And that is recorded on tape?! Then the *Chorální fantasie*; you only made use of sampling?

ES: No. There it is complicated. There I used the Personal Composer software in the computer, where I recorded the theme of the St. Wenzelslav chorale. On the computer I worked with it. I layered it variously, shortened, recut, in essence in sequences. I myself recorded essentially these composed notes via a sampler unto tape. So this was this software for the computer. Then there was a sampler—they [Experimental Studio] already had—S-50 Roland. In addition to that, the drum part was composed on the R-8 sequencer. In addition to that I used normal-added recorded-sounds of a synthesizer, the Matrix. There [Chorální fantasie] is used recorded introductory word, which is at the beginning as a certain motto in spoken—it is in English—unchanged [unedited] form. Of course then, I took the spoken word with me to Switzerland, and then there on the Atari computer-and I do not know what the name of the software for digital processing of sound, Digital Sound Processing [he says 'Digital Sound Processing' in English]?---I, with that word, worked exclusively on the computer. And in addition, I created various sounds with the help of FM synthesis directly on the computer. And these sounds, I then remixed here [Experimental Studio] analogically, and added them during the final recording to create the resulting effect.

LZ: Good.

ES: So this is the most complicated composition.

LZ: Of course.

ES: It lasted a year and a half, or two years until I finished it, because I had something ready; then I waited here to go to Switzerland. Then I brought it back [after my visit to Switzerland]. Then I waited for a free time in the [Experimental] studio so that I could finish it. So that was the most complicated. Then DG 304, the final version, and Fried [Jazz Concertino] were done in the Prague studio [Audiostudio]. So there is a computer, Atari with software Notator [he says 'Notator' in English], well and the synthesizers, Yamaha DX-7 IID and Roland D-50; and Kurzweil and Roland expanders; Yamaha sampler.

LZ: Great.

ES: And I used there [Audiostudio] also my own drum [sequences]; yes, and I also used my own R-8 in this composition [*Jazz Concertino*].

LZ: Your own drum ...?

ES: Well, the R-8 drum computer was not mine. It was not part of my private studio. It was merely used in the composition.

LZ: Oh, like that. So it is merely used there [Jazz Concertino]?

ES: Yes, yes. And then the *Fanfára pro INVEX*, that is for PC software Master Track[s Pro], Roland R-8 drum [machine], Oberheim synthesizer, and Yamaha expander—that is X-81 Z.

LZ: Great!

ES: So this is the complete instrumenation of these compositions.

LZ: Good. Do you have a list of instruments that you used in your compositions? Or do you have a list of your little studio's instruments?

ES: I do not, because with time it grew from nothing, and now again it is being reduced, because we are equipping for another activity as a [publishing] company. LZ: Yes, I only asked.

ES: Of course. Well, the standard [equipment] that existed, and what you can note [write down], was the Roland R-8—drum computer [he says 'drum computer' in English]— Oberheim Matrix, and a Yamaha Expander. That was even the basis with which I worked, performed live electronic concerts. I had a small mixing board, and essentially, I played with the Yamaha Expander even in concerts. It all fit into one car.

LZ: Of course. How do you disseminate your music? You have a concert right away, or how? How to you disseminate your compositions?

ES: You mean, how do they originate?

LZ: Hmmm, ... yes.

ES: Well, that is that some compositions essentially-that was mostly during the old structure [Communism]-essentially, the Radio Broadcast Station realized [brought into being] and payed, financed these projects [compositions]. The [Experimental] studio was in the Radio Broadcast Station, and in order that it be used, [in order] that the Radio Broadcast Station could present some production—so the composers, upon the order of the Broadcast Station, presented projects in the form of various scores, sketches, or it did not necessarily have to be on demo [tape], because they did not even have the means [equipment] to record it—it [Broadcast Station] simply ordered projects. The Radio Broadcast Station approved, for example, three, four, five projects per year, which could be realized. Perhaps it took a year until a person got it [time in the studio], until the studio was available, and then one had the opportunity to work there for one, two, three weeks. Regurarly he had at his disposal one, two technicians; and he could work there. He created a recording which was the property of the Radio Broadcast Station, and in addition he received a reward [financial contribution] in return that he created it. This was the means [process]. In recent times, the Radio Broadcast Station does not have the means of financing such activities, so that this system is being reduced. And in addition, most of the time there was a practice that more than one project per year, per two years, was not allowed [by the Radio Broadcast Station] per one composer, so that somebody would not think [get the idea] that the possibility exists to make a lot of earnings.

So when I had more than one project per year, I did them in such a way, that I essentially rented the [Experimental] studio in the Broadcast Station, and I worked there privately and received nothing [money] from the Broadcast Station; and the tape is mine. So some [compositions] originated like this. Some of them are by an agreed order with the Radio Broadcast Station—the projects—and some of the projects I realized myself. In Prague [Audiostudio] it worked the same way even after the Revolution, but the projects that are being realized [there] per year are now considerably less than earlier. It is possible to say that perhaps they [compositions realized at the Audiostudio] are better in terms of quality thanks to the fact that today there is better equipment, and that alongside the best [people] in the music, one can say, stayed by [endured]. So this is the way that they [compositions] originated more due to some need, because we [Barock Jazz Quintet], in 1987 or [19]86, did a series of concerts of "live electronic" music—that was essentially the

first big event in the Republic [Czechoslovakia]—probably in five, six cities: Prague, Plzeň, Brno, Ohlomouc, and Bratislava. [For each concert] I invited guests: Emil Viklický on the piano and synthesizer, from Finland Jarmo Sermilä, who is a trumpeter and composer. We also invited a player on the marimba [playing the marimba], and I played the piano and synthesizer, and we had combinations of ... And I know for sure that in this combination of performers, we performed sections of Bach's Art of Fugue over [along side with] contemporary music of various domestic and foreign composers. So as a result, essentially, originated a need, for example, to compose a composition, or a transcribed version [of a domestic or foreign composition], in order that it could be performed. Then I wanted to continue these concerts, but at that time, it was extremely difficult and demanding to organize it and to secure organizers and schedules. In fact, we even had ready a festival for electro-acoustic music in Plzeň. But, at the end, the main sponsors who were supposed to finance it, began to step away from it due to some reasons. Then came the Revolution [1989], and after the Revolution already there was no money for it, nor sponsors. So it [a festival for electro-acoustic music in Plzeň] remained as a project, and it was supposed to be a big event. Indeed [for] projects like this one, we [had] always agreed upon or even brought in other colleagues, for example Karel Odstrčil, Jan Jirásek, Ruda [Rudolf] Růžička from Brno. In other words, that we [each composer] prepare a composition targeted for this event, so that new compositions would be introduced there. So this is how some [compositions] originate, and they were immediately, under such occassions, premiered in concerts.

LZ: Good. Thank you.

[Turned off tape recorder.]

ES: From the beginning I did all of these things [compositions] with the help of engineer Kadlec. He is my excellent friend.

[Turned off tape recorder.]

ES: So get in contact with Jan Jirásek. He, actually at the time when I did the projects in the Prague Broadcast Station [Audiostudio while it was still located in the Palace of Culture] was the chief [boss] of the studio. And in addition, he is a very successful and capable composer, also specifically in electro-acoustic music, [and] mainly in the field of live electronic [music]. We performed at several concerts together.

LZ: Jirásek?

ES: Yes. So he will surely give you information about the studio [Audiostudio] as well as of his own compositions. And he also has very good compositions. I performed in two of his compositions. So I think that to visit him will also be pretty interesting.

LZ: Great.

[Turned off tape recorder.]

ES:... and this [one of his composition that was playing in the background] also uses the software—computer and software—Personal Composer.

LZ: And what is its name?

ES: Krok k extázi [Step towards Ecstacy].

LZ: And what year is it?

ES: [19]88 I think.

LZ: And how long is it?

ES: Ten minutes.

[Turned off tape recorder.]

LZ: Can you play it?

[Turned side of tape.]

LZ: Can you tell me about extázi's instruments, and so on?

ES: Trumpet and synthesizers, and computer—PC—and software, Personal Composer.

LZ: And which synthesizer?

ES: Yamaha's Expander, Oberheim, and one more Yamaha DX—I do not know—21 probably [Yamaha DX-21].

LZ: Yes.

ES: And that is all. And solo trumpet.

LZ: And that is for tape and trumpet?

ES: It is on tape, but it can be also performed as the trumpet solo [live] with tape.

LZ: Of course. And it is ten minutes [long]?

ES: [He gestured, yes.]

[Turned off tape recorder.]

ES: There is one more composition.

LZ: So there are twelve [compositions]?!

ES: Hry.

LZ: What is its name?

ES: Hry.

LZ: Hry?

ES: [Yes] Hry pro klavír a magnetofonový pás [Games for piano and tape]. In this composition I composed—there are four contrasting movements—on tape basically the accompaniment, the foundation. For this I used a Yamaha, some sort of drum computer—RX-17, I think—and Oberheim synthesizer. And everything is improvization; everything, including the score. And the foundations I created in the [Experimental] studio. But each movement has one specific tonal center around which it revolves, or departs from, or it

"sits" [stays] on it all of the time. And the piano part is also in the same vein. So when I perform it—which is about once, twice a year or more often—I do not even, in the meantime, practice it or listen to it. I simply turn on the tape, and begin to play.

LZ: And how long then is it?

ES: It is about thirteen minutes [long].

LZ: When did you hmmm [compose it]?

ES: [19]87.

[Turned off tape recorder.]

ES: In *Chorální fantasie* [we had listened to *Choralní fantasie* during the last time that the tape recorder was turned off] what is going on, I, in essence, implemented directly the sounds unto the computer, hmmm using synthesis. And [in addition] to that, of course, there were the layers—as one could hear that—in the drum computer from the Roland sampler. The choir was normally processed from the sampler; it [sampler] simply played melodies. And in the same way, the spoken text—the introductory one which is there as a motto—was further cut-up, re-worked through various harmonizers and digital slices; in other words, also in the computer.

[Turned off tape recorder.]

LZ: DG 304 was composed in the Audiostudio, Prague.

[Turned off tape recorder.]

ES: In Bratislava, they built a new building for the Radio Broadcast Station which, on the whole, got perfect equipment. And due to the fact that all of the studios [in the Radio Broadcast Station in Bratislava] were being equipped, a successful situation came about in equipping—I do not know in what year it was, [19]85 or so, during the time when I began [to compose electro-acoustic music], or [19]86—the [Experimental] studio [in Bratislava], for that time really, very modernly. Modernly, because they got [obtained] a Kurzweil [K] 250 I think, and a Macintosh with some software, and a digitally controlled mixing counter [mixing console] of twenty-four tracks. In essence, equipment which almost was not here [Czechoslovakia] anywhere. So that was a sort of a "first" here [Czechoslovakia]. And here in the Czech state of Czechoslovakia, simply was nothing [a sophisticated studio], until only in Plzeň [Experimental Studio], and that was more of a museum; or almost still is

66

somewhat of a museum. Well, [then] Prague became equipped [with the Audiostudio]. But rather what is there, it was equipped more towards, it benefited popular music more [than electro-acoustic music]. Basically, normally finished sounds [factory patches] and along with that some [a] sequencer so that at least one could work [realize] there; and mixing. So I wanted to say, that actually here [Czechoslovakia] in the [past] twenty years, there was a lack of information; there was a lack of contact [Czechoslovakian electro-acoustic composers had a lack of contact with composers from the West], contact-maybe I wanted to say something else. I just got lost a little bit ... Yes, I know what I wanted to say. But in regards to the studios, in essence electronic music was more or less a taboo, because not until after the Revolution [1989] when the Society of Czechoslovakian Composers was abolished and a new association was created, which was an introductory association whose members were musicians and professional musicologists and composers, arose a Society of Electro-Acoustic Music—directed by Karel Odstrčil—which in the meantime has already broken off from the association, and functions independently. It [SEAH] became a member of ICMA. And, it [SEAH] is in contact with ... There were even concerts in Bourges, in France with our compositions by our composers. So now the organization [SEAH] is coming "alive." But during the entire time [of Communism], concerts for example, or some kinds of, well, live electronic music did not exist here [Czechoslovakia]. We started this a little bit not until [19]86, [198]7, hmmm with Jan Jirásek and Jarmo Sermilä [from Finnland], when he came [over here]. We simply got it going here, somehow. Then in Brno, similar efforts were undertaken by Karel Horký, alias Daniel Forró—you know of him?!

LZ: Yes, yes. I am also going there [Brno].

ES: Yes. So he is also that type of person in Brno, who now does these things [concerts, etc.] and got them "running," [which are] based on synthesizers and computers. But other than that, nobody [else does/organizes electro-acoustic concerts]. And, we faced such things [situations]—that is a curiosity, this will interest you!—that when I was supposed to play on the synthesizer, the music agency [music agency which gave permission for the performances of music, dances, etc.] refused to write a contract with me, due to the fact that I do not have a right [appropriate instrument], because a synthesizer is not a concert instrument. OK?! The concert agency from the Prague Cultural Center refused to issue my contract.

LZ: So you were not allowed to have a [the] concert?

ES: Well, the concert... They did it then in the following way that an agency carried it out, which organized popular music. Of course there [popular music], synthesizers were in use, so that it did not bother them. But basically, at the concert agency they patronized me that a 'Synthesizer is not a concert instrument,' that is to say that it is impossible to play on it solo, OK? They simply did not acknowledge that I could be a solo performer and play on the synthesizer contemporary music or even Bach or Scarlatti, for example—OK?—which I did. Here [he points to it] is a CD of Bach, done by some [Don] Dorsi, an American maybe you know the name—who did a lot of things of Bach on the synthesizer, on the computer, probably about five years ago.

LZ: I know. Do you know Wendy Carlos?

ES: Yes. Well he was twenty years ago.

LZ: Yes.

ES: Twenty-five years ago. They were the first synthesizers. And I know about that. And Dorsi did it about twenty years after him [Carlos]. And I even did at the Broadcast Station such programs, where I compared the recordings from every which way, and from the point of view of the possibilities [that can be done with the music]. And then I also have here a CD of Bob James—a jazz pianist—[who] did Scarlatti's sonatas with the use of the computer unto synthesizers which is very nice, interesting. Do you know it?

LZ: No, I do not know that.

ES: That is, I told myself that I would like to do this also, and I would like to do this not only on disk with a computer, but to really learn to play it; to have two quality instruments [synthesizers], and play for example—I do not know—an Italian concert [concerto] which I actually I played on the synthesizer normally—or some things of Scarlatti, Handel. And people like it. It is interesting to people.

LZ: Yes, of course.

ES: But like I said. Basically during the Communists, all of this [electro-acoustic music, etc.] was a problem to establish, and that people somehow would even get used to it. LZ: Well, it is not even that easy in the States.

ES: Well, it is not. But at least there are some activities organized, and some CDs are released. Basically, he who wants it can listen to it—he has the opportunity—so that he who wants to do it, can; and does not "bump" into any opposition, or—hmmm I do not want to say "superior"—somebody who is from an organization [i.e., Society of Czechoslovakian Composers] and would forbid it [electro-acoustic music] or would not recommend it. Here [Czechoslovakia] everything depended on somebody's decision who simply forbids it or recommends it or does not recommend it. When somebody raised [in terms of power] himself into the Society of Czechoslovakian Composers and proclaimed that "It [electro-acoustic music] is bad,' well then it [electro-acoustic music] could not appear at the concerts of the Society of Czechoslovakian Composers, because it was an "ideological organization" [he is sarcastic].

The same paradox is what information, I am sure, Jan Jirásek will tell you in more detail about the Prague studio [Audiostudio]; why it obtained finances more or less so that it could be equipped so well during the Communists only because the Prague Radio Broadcast Station does not have in the meantime a [one] real building. It [building] is somehow being build. There are, basically, various studios—in Vinohrady, in Karlín, etc.[suburbs of Prague]. And when the Palace of Culture was built, which—it is true—is called 'Culture' and was presented as such, but did not have anything in common with culture, because it was used for political congresses [Communist meetings] such as by Communist unions,—

LZ: Yes, yes. I was just there [I had just attended a jazz concert there].

ES: ... and, in essence, the studio [Audiostudio] was successfully created only because they [Communists] wanted to have there broadcast studios so that they could record those meetings and have live broadcasts. And of course, when ideological things were concerned, then everything was bought from the West, and it did not matter to them how much things cost. OK? Yes—it is true—Communist ideology was important to them. But it did not matter to them that these [instruments] were Western—hmmm products from the West—and that it costs a lot; that they are [having to] pay for it with dollars. These are the paradoxes!

[End of conversation.]

### Written Communication

The formats of the following correspondence with Tomáš Svoboda is here reprinted

unedited. My letter of 10 May, 1994 and Svoboda's response of 15 May, 1994, were

written in Czech, and are here translated.

Libor Zajicek 4452 Mattos Dr. Fremont, CA 94536

Tel.: (510)791-1756

Mr. Tomás Svoboda c/o Thomas Stangland Co. P.O. 19263 Portland, OR 97219

10 May, 1994

Dear Mr. Svoboda!

With this letter I would like to first introduce myself and at the same time kindly ask you for the following information:

I am studying music history of the twentieth century—with concentration in electroacoustic music—and currently I am working on my Master's degree at San Jose State University with Prof. Allen Strange who is the Chairman of my thesis committee. The title of my dissertation thesis is *History of Electro-Acoustic Music of the Czech Republic and Slovakia (former Czechoslovakia)*. During the summer of last year, I was in the Czech Republic and Slovakia gathering information for this thesis, where I probably visited 25 important composers. As references I am citing, for example: Ing. Syrovy of AMU; Prof. Ruzicka of JAMU; Dr. Odstrcil, Chairman of SEAH; Ing. Kadlec, Plzen Radio; Ing. Jirásek, Prague Radio; Ing. Peter Janík, Ing. Juraj Duris, Jozef Malovec, Bratislava; and especially Dr. Eduard Herzog. Dr. Herzog told me that your father during his stay in the United States and also after his return to Czechoslovakia after World War II experimented with the unification and combinations of computer technology with music and vice versa. That is why I would like to request from you whether or not you have from this period some documentation that documents this activity, or even some recordings and the like. I would be very indebted to you if you would get in contact with me by any means!

On May 31, I am flying back to the Czech Republic and Slovakia to continue my research.

With sincere greetings, Libor Zajicek.

# PORTLAND STATE UNIVERSITY P.O.Box 751, Portland, OR 97207-0751

May 15, 1994

Dear Mr. Zajicek:

With regreds I have to notify you that I do not have any recordings in regards to my father, who was the founder of computing machines in Czechoslovakia around the year, 1960. I only remember that he was interested in cybernetics, about the mathematical experiments of Mozart, when he wrote the composition for piano in such a way that every measure can be

interchanged and it will still work musically. I also remember that father often spoke with Bohuslav Martinu. They were close friends and together dreamed about electronic music.

Hopefully he left some recordings in Prague, but after our illegal departure, the material definitely got lost.

I wish you much success in your explorations.

With sincere greetings, Tomás Svoboda.

Libor Zajicek 4452 Mattos Drive Fremont CA, 94536 USA

Prof. Tomás Svoboda 4729 S.E. 34th Ave. Portland, OR 97202

May 11, 1995

Dear Prof. Svoboda!

I hope that you still remember me! I am the graduate student at San Jose State University documenting the history of electro-acoustic music of the Czech and Slovak Republics. Unlike my last inquiry—seeking information about <u>your father's</u> involvement in the early stages of this history—this time (v Anglictine!) [in English!] I would like to kindly ask you to provide me with information about <u>your</u> involvement and activities in electro-acoustic music during the time as described by Lébl.

When I interviewed Dr. Eduard Herzog, he incorrectly—so I believe—informed me that you did not experiment in electro-acoustic music during its "beginnings" in, well, Czechoslovakia. However, Dr. Vladimír Lébl (and Ladislav Mokry), in his article, "O soucasném stavu novych skladebnych smeru u nás" in *Nové cesty hudby* provides the following data on page 24:

"Zájemcum nezbylo, nez se pokouset o vysledky na primitivních aparaturách, sehnanych soukromou iniciativou; z této doby [around 1960] existují první pokusy Vladimíra Srámka a Tomáse Svobody, zmínená montáz Wiliama Bukového k baletu Rozkaz, televisní nahrávka Krakatitu Václava Kaslíka, nepocítáme-li hojnost rozhlasovych, televisních a filmovych mixází, spokojujících se s realisacemi prílezitostnych zvukovych kulis."

[Nothing else was left open to the interested but to attempt results on primitive instruments obtained from private initiatives. From this time [around 1960] exist the first attempts by Vladimír Srámek and Tomás Svoboda, the mentioned montage of Wiliam Bukovy to the ballet, *The Command*, a recording for television, *Krakatit* by Václav Kaslík; we are not counting the abundance of radio, television and film mixes, satisfied with the realizations of the occassional sound scenes.] Thus, could you please be so kind and this time provide information about your early experimentation/composition in electro-acoustic music? Again, the response need not be lengthy and detailed, but only entail your most important recollections such as where the music was realized; at home? What was the instrumentation? What was the style of the music (i.e., *concrète*, electronic, or music for tape, etc.)? Was the music basically "etude-like", or was it "more" than that? How long was the music? When were these "early" experiments undertaken? And so on.

Your last letter provided me with absolutely invaluable information; information that I was not able to find in any published or unpublished source. Again I thank you for that! Although I could have contacted you by phone, the format of my thesis requires that our correspondence be written!

Thank you very much in advance for your response!!!

S pozdravem [With greetings], Libor Zajicek.

In Portland, May 15, 1995

Dear Mr. Zajicek:

Because you wrote me a letter in possible worst time (no explanation) I decided to respond immediatelly, since tomorrow I will forget to write you and then ..... you probably know how our time is overloaded.

So - sometime in year 1957 in Prague (I was 17) my father brought a real-to-real taperecorder Grundig from East Germany, 3.75 speed with high quality microphone. It had one nice feature; accurate cutting tape mechanism with clean sound (no click). About three years after I started to experiment new sounds from Piano using the advantage of tape cutting and composed a 5 minute piece for tape called "Ballade of Destroyed Church". (I still have it, but the tape is too old now.) At that time it was not a propriate title for a music committee, full of communist members. The piece was not received positively and frankly, I did not care too much about their opinion. For my benefit it was very important discovery what cutting tape could do for me like start recording right after the hammer's impact to Piano strings receiving a great imitation of Organ sound + tapping the resonant wooden bars while holding the pedal, stuffing strings with metal keys or triangle bars and other unusual effects. What was very difficult at that time, there was no other channel, the taperecorder was mono-type, so all simultaneous sounds had to be performed together and some sections I had to practice for many, many minutes. I remember that the project took 3 crazy weeks to finish 5 minute piece, working every day approximately 5 hours. (I guess that the time was May or June 1960.) But the project was great fun with the believe, that something new is coming from this unusual score.

I hope this might help you about this subject. Thank you for your interest in this matter.

Sincerely, Tomás Svoboda.

# List of Instruments

The following list of instruments of the Experimental Studio at the Radio Broadcast

Station in Plzeň was compiled with the help of Ing. Kadlec during my visit in the summer

of 1993.

1 Tesla mixing console (24/8/2)

2 Tannoy speakers

2 Grundig speakers

1 Klark Technik time spectrum analyzer

4 A-Type Model 361 Dolby systems

2 Studer A-80 tape recorders (stereo)

1 Studer A-80 tape recorder (8-track)

2 Revox PR 99 tape recorders (stereo)

4 DAT Sony DTC 55ES

1 Sony SL-HF 950 Super Beta Hi-Fi

1 Sony Digital Pulse Code Modulation PCM-501 ES, digital audio processor

1 Roland S-50 sampler

1 Roland SH-2000 sampler

1 Roland TR-808 drum machine

1 Fender piano 2 Peekel TF 824 filters

1 Brüel & Kjaer 5587 filter

2 Yamaha Q 2031 graphic equalizers

2 Yamaha EMP 100 multi effect processors

1 Dynacord DRP 16 digital reverb

1 Yamaha REV 7 digital reverberator

1 Yamaha SPX 90II multi effect processor

1 Peavey Addverb digital stereo reverb/delay processor

1 EMT compressor

1 Eventide 1745M digital delay

1 MacQuadra 950; Software: Protools, Soundesigner (DINR - Noise Reduction)

1 Atari 1040; Software: C-Lab Notator 3.1 version

## CHAPTER 3

# BRATISLAVA

This chapter documents (1) the first private experiments of electro-acoustic music made in Bratislava, (2) the consequent establishment of the Audio Studio at the Television Station in Bratislava, and (3) the formation of the Triková režie (Sound Effects Studio), later to be renamed Experimental Studio, at the Radio Broadcast Station in Bratislava. Roman Berger (composer) rendered information about the early experimentations of electro-acoustic music among composers in Bratislava, and the history of the Audio Studio at the Television Station. Ing. Ján Backstuber (retired sound engineer of the Sound Effects Studio/Experimental Studio) recollected the history of the Sound Effects Studio/Experimental Studio. Dipl. Ing. Juraj Ďuriš and Dipl. Ing. Andrej Zmeček (sound engineers and program advisers at the Experimental Studio), RNDr. Miro Bázlik (composer), and Jozef Malovec (composer) recounted the history of the Experimental Studio. In addition, interviewees associated with other studios and cities also provided information about Bratislava's history of electro-acoustic music. However, their alliance with Bratislava is secondary, and thus their interviews are listed in chapters where their interviews are more pertinent. Those interviewees are Eduard Spáčil and Ing. Miroslav Mandík (CHAPTER 2), Ing. Alois Piños and Doc. Michal Košut (CHAPTER 4), and PhDr. Milan Slavický (CHAPTER 5).

## Private Experiments

Among the origins of electro-acoustic music in Bratislava, the early experiments of the composers, Ilja Zeljenka and Roman Berger with Sonet portable tape recorders date from 1959/60.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> In the chapter, "Elektroakustická kompozícia na Slovensku" (Electro-Acoustic Composition in Slovakia), in *Rozhlas a slovenská elektroakustická hudba* (The Radio and Slovakian Electro-Acoustic

# Audio Studio at the Television Station in Bratislava

The first electro-acoustic music to be realized in established facilities was in a studio—Audio Studio—of the audio department in Bratislava's television station. The Audio Studio was located in a building that housed the Tatra Bank on Stalin's Plaza. Today the plaza has been renamed Namestie Slovenského Narodného Povstania (Plaza of the Slovakian National Uprising). Music was begun to be composed in the 1960s.<sup>2</sup> Among the reasons why electro-acoustic music began to be realized at the Audio Studio were due to the interest of modern music by film and movie directors. The only reason why electro-acoustic music could be realized at the Audio Studio, and symbolically all of Bratislava, was that film and movie directors requested such music to accompany movies. The production of autonomous electro-acoustic compositions, therefore, was almost nonexistent and made under false pretense that the music was indeed for films. Only music for films and television broadcasts was created at the Audio Studio.<sup>3</sup> The fact that all music was realized during nighttime hours in order that its composers not be punished confirms the unofficial status of the Audio Studio.<sup>4</sup>

The lack of equipment was also indicative of the Audio Studio's status. The basic equipment consisted of only mono tape recorders, some filters built by the staff of the

<sup>2</sup> In "História" on page 348, Stadrucker lists the first composition to be realized in 1961.

<sup>3</sup> Perhaps Berger overstated himself. Most of the compositions were for such purposes. In "História" on page 348, Stadrucker lists forty-seven compositions realized during the Audio Studio's existence.

<sup>4</sup> Stadrucker makes the same claim in "História" on page 345.

74

Music) (Bratislava: Metodicko-výskumný kabinet československého rozhlasu, 1989), 43, Alena Čierna writes that "in 1958, during the time when in Cologne, Milano and other European cities electro-acoustic music was being created, do we encounter the first primitive experiments with audio technology on a private basis in Slovakia." Ivan Stadrucker—"História jedného zvukového pracoviska" (History of an Audio Studio) *Slovenská hudba* 13, nos. 9-10 (1969): 344—elaborates Čierna's statement by writing that the first private experiments were undertaken in 1958 by the composers, Roman Berger, Pavel Šimai, Peter Kolman, and Ilja Zeljenka using Sonet tape recorders.

studio, and sine-wave and white noise generators. The contacts between the founder of Warsaw's Experimental Studio, Jozef Patkowsky, and the members of the Audio Studio provided for some additional instruments such as ring modulators.<sup>5</sup> Later on, engineers of VÚRT also had contacts with the members of the Audio Studio, providing them with some additional equipment and technical support.<sup>6</sup> Furthermore, the studio did not have a budget or an administration. This studio was essentially not an established studio, but the only facility in Bratislava at that time where some electro-acoustic music could be realized.

Among the composers at the Audio Studio, perhaps the most significant was Ilja Zeljenka. The style of most of his film music was *musique concrète* perhaps not only due to the instruments of the studio, but also due to the psychological appeal of the genre on him. Some of his important compositions realized at the Audio Studio were *Šesť desiatpäť miliónov* (*Sixty-Five Million*), music for tape, and *Studia 0,2* (*Study 0.2*) and *Studia 0,3* (*Study 0.3*), electronic etudes. Due to the fact that it accompanied other media, the music was thus disseminated and archived.

The manager of the studio was Ivan Stadrucker, and the superb *Tonmeister* and the "soul" of the studio was Ján Rúčka.<sup>7</sup> Roman Berger was hired as a Director of Tonmeisters in 1966 and only worked there for about a year.<sup>8</sup> Among the composers who realized compositions during the studio's existence were Jozef Malovec, Roman Berger (already before his employment at the studio), Ladislav Kupkovič, and Ilja Zeljenka.<sup>9</sup> The demise of

75

<sup>&</sup>lt;sup>5</sup> In "História," Stadrucker writes on page 345 that the instruments at their disposal in realizing the first composition, *Šesť desiatpäť miliónov* (*Sixty-Five Million*) in 1961 were four studio tape recorders, a sine-wave generator, and a ring modulator that was built after designs that Patkowsky sent them!

<sup>&</sup>lt;sup>6</sup> Stadrucker does not mention this contact in his article, "História." However, the list of the Audio Studio's instruments along with Mandik's statements supports the idea of VÚRT's involvement.

<sup>&</sup>lt;sup>7</sup> Interview with Berger.

<sup>&</sup>lt;sup>8</sup> Stadrucker indicates that Berger became Artistic Director.

electro-acoustic music realized at the Audio Studio, and thus the studio's demise, also, was due to several factors. Perhaps most significant was the establishment of the Triková režie (Sound Effects Studio) at the Radio Broadcast Station in Bratislava in 1965, thus creating an overabundance of facilities for so few electro-acoustic composers in Bratislava. Furthermore, the death of Rúčka and the departure of Berger in 1966 depleted the studio of two of its important supporters.<sup>10</sup>

Triková režie (Sound Effects Studio)/Experimental Studio

The reason for the formation of the Sound Effects Studio in 1965 was for the improvement of sound effects for *Hörspiele*. The studio was located at Lenin Square in a former building of the Radio Broadcast Station. The Sound Effects Studio was and is part of the Radio Broadcast Station's Technical Department.

Among the studio's equipment in 1965 was a sound effects tape recorder with four heads. The distance between each couple of succeeding heads was twice as great as the previous couple (i.e., 2 in., 4 in., 8 in., etc.), thus enabling echoes to be realized. In addition, there were two or three tape recorders, generators and filters. Some of the equipment was built by the studio's engineers such as a Klúcovač ("puncher") and the studio's first ring modulators.<sup>11</sup> In 1970, some of the studio's equipment consisted of ring modulators, and an East German Subharchord.<sup>12</sup> Later the studio's staff obtained an ARP

<sup>11</sup> See the interview with Ján Backstuber for the best explanation of what a Klúcovač was.

<sup>&</sup>lt;sup>9</sup> In addition Stadrucker lists the following: Dessau, Stračina, Šimai, Dolák, Bukový, Drmola, and Lexmann.

<sup>&</sup>lt;sup>10</sup> The date of the studio's closure or demise is difficult to deduce. Berger informed me that it coincided with the establishment of the Sound Effects Studio at the Radio Broadcast Station in 1965, while Stadrucker—while agreeing with the above reasons—writes that as late as 1968 some compositions were still realized. In his listing of compositions realized at the Audio Studio in "História" on pages 348-49, Stadrucker indexes sixty-five compositions in 1969, with nine additional ones composed "without chronological order."

synthesizer.<sup>13</sup> Once the studio was sensibly equipped, the realization of music could also be made at the Sound Effects Studio. To this end, the studio in 1967 became a part of the Radio Broadcast Station's Music Department, and obtained its own Musical Director, Peter Kolman, Technical Director, Peter Janík, and *Tonmeister*, Ján Backstuber. Furthermore, the Sound Effects Studio was renamed Experimental Studio and was relocated to new and better facilities within the Radio Broadcast Station.

The first electro-acoustic composition realized at the Experimental Studio was Jozef Malovec's *Orthogenesis* in 1967. From 1967 to about 1974, compositions of high quality were realized at the Experimental Studio. These compositions earned a good reputation for the studio at festivals and competitions such as in Bourges, Florence, and Germany.<sup>14</sup> As a result of the newly instituted hard-line Communist regime of the late 1960s, the compositions realized between 1971 and 1977 were not permitted to be disseminated to the public in any way, but were only stored in the Radio Broadcast Station's archive. Not only did these years bring about a period during which fewer compositions were realized, but also a disruption in the development of the music's aesthetic and style.

The Experimental Studio has two functions. One is the realization of electro-acoustic music and other experimental media such as sound poetry. Within the infrastructure of the Radio Broadcast Station, the studio provides all needed services for all departments'

<sup>&</sup>lt;sup>12</sup> In the chapter, "Úprava snímkov" (Processing Recordings) in *Rozhlas a slovenská* elektroakustická hudba (The Radio and Slovakian Electro-Acoustic Music), Ján Backstuber documents on page 189 that the studio in 1969 was equipped with four ring modulators. A Subharchord was a sound effect generator with a three-octave keyboard (Jaromír Vítek, "Subharchord," *Rozhlasová televizní technika*. 6, no. 2 (1965): 62-3).

<sup>&</sup>lt;sup>13</sup> Among Backstuber's lists of instruments in "Úprava" on page 191, the ARP 2115 synthesizer is first cited in 1974.

<sup>&</sup>lt;sup>14</sup> In "Úprava" on page 199, Backstuber lists three compositions to have won prizes in international competitions between 1968 to 1974. Malovec's Orthogenesis "placed among the top six places" at Dartmouth College in 1968. Kolman's Lentement mais pas trop (Slowly, but not too much) placed fifth in Bourges in 1973. Zoltán Pongrácz's Mariphonia won First Prize in Bourges in 1974.

activities such as creating special sound effects for broadcasts, restoring recorded material of various archives, or aiding in recording productions. There are two sources of the studio's finances. The most important is from the Radio Broadcast Station itself. Due to its position as a part of the Technical Department, the Experimental Studio's finances are allocated by the department annually. For example, in 1993 Juraj Ďuriš alone received about \$30,000 for the task of purchasing digital equipment. The second source is the national Department of Culture whose money the studio uses only for advertisement purposes.

Today, four people comprise the Experimental Studio's staff. Peter Janík has been the Technical Director since 1965. Juraj Ďuriš is the Music Program Adviser, and Andrej Zmeček is the Experimental Word Program Adviser. Ernest Walzel is a sound engineer. The studio's technical support consists of two groups of technicians. One group installs equipment, and the other, consisting of Ivan Košiar and František Kluka, maintains it. The studio has undergone five phases of technical improvement. The first phase was the equipment of the original Sound Effects Studio in 1965. After its new status of Experimental Studio, the studio obtained new facilities which were later again improved. In 1985, the entire Radio Broadcast Station changed location. The staff first ugraded its analog recording studio, studio A, and after 1989 began to equip a digital studio, B.

More than 120 compositions have been realized at the Experimental Studio which are disseminated by four means. The primary channel of dissemination is broadcasting. *Extempore*, a one-hour long program broadcast each month in the Slovak Republic, features compositions, while another broadcast may profile composers or various aspects of electro-acoustic music. Compositions are also disseminated during at least two annual concerts which are organized by the studio's staff. Third, the double CD, *Elektroakustická hudba* (*Electro-Acoustic Music*) was released in 1992, and another CD is planned on being

78

released in the near future. Finally, exchanges of music with other radio stations' studios is the fourth means.

There are two types of compositions realized at the Experimental Studio. The first type, of which there are created about four annually, are commissioned compositions. These compositions can only be realized after the Experimental Studio's staff has approved the composer's submission of his composition. The second type of composition is "studiinf" (etude) by which a composer or student may experiment with various techniques in the studio and ultimately compose an "etude." The composer does not receive a financial honorarium for etudes. All compositions are archived in the studio where the master is stored; additional dubs are stored in the central archive of the Radio Broadcast Station. The standard format is stereo magnetic tape, but DAT and 4-track tapes are also used.

### Transcribed Interviews

The interview of Roman Berger was taped at the Experimental Studio in Bratislava on Friday, July 9, 1993 at 3:10 P.M.

LZ: Interview with Roman Berger, July 9, 1993, 3:10 P.M. And the first question [is that] we will talk about the television studio in Bratislava, and we will begin with question # 1. How did this studio get started? Why did it exist? And so on and so on. RB: That was in the 1960s. Experimental music, new art was simply tabooed in essence. And a unique situation was established. Of course, we as colleagues . . . I was back then still an amateur composer. I played the piano and taught piano at the conservatory [in Bratislava]. Due to the fact that I was working at the documentary film studio, and this is indeed the address where everything began. The documentary film studio [television studio] where colleagues of my generation were [working and] who were somehow able to "stand up" a little and resist the pressures of the [Communist] ideology. They [film makers, etc.] basically began to request music from composers which was oriented towards the modern. And there indeed opened up a room [atmosphere] for some meager experiments. And of course there absolutely did not exist anything [in Bratislava]. But, at the television studios existed an audio studio [department] ...

LZ: As a sound department [I say 'sound department' in English]? RB: Exactly, exactly, exactly. And one of our friends whose title was Director, Ing. Ivan Stadrucker, was the manager there [of the audio studio]. And he simply had an interest in this direction [electro-acoustic music in general, and that electro-acoustic music be created at the television studiol to help bring about. I, back then, taught piano at the conservatory. At that time we got a new director/chairman of the conservatory, and I came into conflict with him, and thus handed in my resignation. And I left the conservatory immediately. And literally as I left the building [conservatory] and made the first step on the sidewalk, on the street I met this Ivan Stadrucker and he asked me, 'Would you like to work at the TV station? I have an opening there, an open position.' And I answered, 'This is exactly what I am looking for,' because right now I am free.

LZ: Really? On the sidewalk?

RB: Yes, literally, literally it happened as I have just described it! So I went there [I accepted the position], and it was in 1966. Well, and there we basically did some film music with the goal in mind to create there a good studio. And he employed me as a manager of Tonmeisters, with the goal in mind that we will create a good studio. And in the meantime, Peter Kolman who was employed at the Radio Broadcast Station basically organized the beginnings of the sound studio [Experimental Studio] at the Radio Broadcast Station. And this was basically a time of [before 1968] when everything was fermenting in Czechoslovakia. The political and economical situation was close to a breakdown. At the time, President Novotný-also the Communist party Chairman of Czechoslovakia-was in power and was directly responsible for this economic disaster. This was in about November, December of 1967.] I was later removed from the TV [and the position that he had] and was placed into the Society of [Slovakian] Composers [SSS]. So I can say that I was working at the TV station not even a year. Well, the entire situation around the television studio did not develop, because the duplication [redundancy of having two studios doing the same type of work, that is at the television studio and the Radio Broadcast Station's Experimental Studio] would be unsustainable, because there are only a few of us [composers interested in electro-acoustic music] here [Slovak Republic and Bratislaval.

LZ: Ah ha, so that-

RB:... the studio emerged here [here where we are sitting, Experimental Studio] earlier than the one at the TV station [he means that the Experimental Studio "got its act together" before the audio studio at the TV station]. So the development of the studio at the TV station "died" to operate. But looking back at the time, everything that happened was interesting from the point of ideological opposition. In conjunction with the documentary film studio [television studio] ... The [movie] directors were very inclined towards the experimentation in the music, and we as composers had the alibi that we did not do these experiments and compositions just for the sake of it, but that we had a request from an important institution such as the film [film studios] which was, of course, owned by the government. So this was a sort of masked maneuver, and the like. So overall this was a sort of brief prehistory of the Radio's [Experimental] studio.

LZ: So can I ask you something? When was the audio studio at the TV station in Bratislava "dying," as you put it?

RB: In essence, the studio at the Bratislava TV Station in the true sense of the word did not exist. We worked there for the film [studio] unofficially [illegally in terms of the government's approval, unofficially in terms of creating music/sound effects that were not intended for the use in television] under some false pretenses that the product was for something else than film—usually we worked on these projects only in the night. And in essence, there was no equipment there. There were only tape recorders. We had—they built—some filters there, some sine-wave generators, and some [white] noise generators. And then came Josef Patkowsky. I do not know if you know this name. He was the founder of the [electro-acoustic] studio in Warsaw [Polskie Radio Experimental Studio, ExpSt Warsaw] [which was] an experimental studio. He was in contact with us [audio studio]. He brought us some ring modulators. And basically everything [all the equipment of the audio studio] was simply built. In essence, everything was very primitive there but the ideological significance was magnificent, I would say.

[Turned off tape recorder.]

80

RB: I have to mention one more name. A person who is not alive anymore and who was there the *spiritus movens* of the entire "thing" [all of the audio studio's activities]. The aforementioned, Ivan Stadrucker was very inclined but in essence he was more theoretically oriented due to his philosophies. And there was a *Tonmeister*, Ján Rúčka [the *spiritus movens*]. And he was an absolutely phenomenal expert. And he was the soul of everything [audio studio].

[Turned off tape recorder.]

LZ: [I probably asked him about the financial situation.]

RB: There was no money, no administration, no formality. Everything was done on the basis of friendship and contacts, and everything was "underground," in essence. LZ: That was [the answer to] question # 2.

[Turned off tape recorder.]

LZ: Question #3. Technical equipment; when and what?

RB: The dates I cannot tell you [I cannot remember]. There [television studio] were a number of standard tape recorders that were used at the time. Everything was single-track—

LZ: Mono?

RB: [Yes] mono. Mixing we made via [an] unbelievable—as if cooking in the kitchen [he laughed]—process. Some synchronizations were [a joke]. To go from some six instruments to a seventh, we used a "rope" [he is sarcastic] so that at least it [process] even worked. Man! Those were comical situations!!! There were two, three generators; one sine-wave, one [white] noise. I think that there was an impulse generator. There was ring modulator—a circular modulator—that Patkowsky brought from Warsaw. There was a reverberator—which was made in our shop—designed by using strings ["string reverberator"] and was very primitive. And then I think that there was a contact with Berlin. In Berlin—I cannot remember now—it was a developer who made a sort of an electronic instrument, a keyboard instrument. Gosh, what was the name? Something like Jonika, or something like that. Again, it was a very primitive keyboard and electronic instrument, which was "hot stuff" back then [most likely the Subharchord].

Probably one more motive, the orientation of the electronic [music and instruments] in the classical sense like Stockhausen or Cologne and the like, was in essence the matter of Peter Kolman-later here at the Broadcast Station-and [of] Jozef Malovec also. And who worked at the TV audio studio? It was Ilja Zeljenka, I have to remember. He was there from the beginnings. We, in essence, began with music for tape [he says 'music for tape' in English] at home by me, and at home by Ilja Zeljenka simply on small portable tape recorders. When the small portable tape recorder was for the first time available on the market—I think that the name of it was Sonet; I think that it was in 1959 or 1960—so we basically played around with it at home. In other words, it was a very pleasant amusement for us in that we created some very primitive montages without any great equipment. So Ilja Zeljenka was there [audio studio] when everything started. And he, and I have to emphasize this fact, in all the compositions created for the movies which was "quasi-electro due to the availability of our equipment, but maybe not only due to this reason. Maybe some inclination existed [towards musique concrète], because the music was influenced due to some ethnic or psychological factors at the time [ethnic and psychological factors that existed in society due to the political situation in Czechoslovakia]. But to prove this, more study would have to be done. And Zeljenka made [music that accompanied]—it was the first more serious [significant] attempt-and one of the film directors made a documentary movie called, Sest desiatpat milionov [Sixty-Five Million], basically about the victims of World War II. It was an all-evening long [about two hours long] documentary movie. It was made partially of real footage and some acting. And Zeljenka composed

music to this movie, basically like [music] for tape. It was the first somewhat significant [musical] work in this genre. And this music had the distinction of being "untouchable" by anybody in view of the theme of the movie: the war, the victims and the like did not allow for an ideological attack [Communists could and would not attack the movie's documentation of atrocities committed by the Germans, and thus they also could not attack the music]; and I would like to emphasize this fact! I do not know to what extent my colleagues described this [the social conditions under which electro-acoustic music had to endure during Communism]. Simply, the ideological pressure is [was] terrible [overwhelming] *always*!!! This [pressure] lasted for decades, in essence. It [electro-acoustic music] was a diversion. It was a cultural diversion with regards to all aspects connected with new music [all new music was a "cultural diversion."] LZ: So this movie *Šest desiatpät miliónov*, what year was this?

[Turned side of cassette.]

LZ: [He probably answered my question during the time that I turned the cassette.] OK, so the date of the movie [1961] you do not know but think that it was about during the middle of the 1960s, and the music for the movie was created at the television's audio studio in Bratislava?!

RB: Yes.

LZ: Great.

[Turned off tape recorder.]

RB: The colleagues who worked at the audio studio at the TV station were Ilja Zeljenka, Václav [actually Ladislav] Kupkovič; perhaps you know this name? He was the number one avande-gardist and founder of an ensemble, Hudba Dneška [Music of Today] founded in the time of the television studio's activities. And Jozef Malovec, I think he did something there also, and myself.

LZ: Great;

[Turned off tape recorder.]

LZ: What compositions were composed there or if any at all?

RB: As far as I know, no autonomous compositions were created there. It was just music for movies, and something [music] was also created for television broadcasts.

LZ: OK, great.

[Turned off tape recorder. Peter Janík walked in.]

LZ: What else was composed there?

RB: Hmmm, I cannot tell you from memory. Somewhere exists . . . Ohh, Ivan Stadrucker wrote in the past a kind of a report [Stadrucker, Ivan. "História jedného zvukového pracoviska" (History of a Sound Studio), *Slovenská hudba*. 13, Nos. 9-10, 342-49 (1969)] of the activity of this particular studio. It was published in the journal, *Slovenská hudba*. I believe that it was in 1971 [actually 1969]. I could give it to you [he did]. I probably have it somewhere. I would probably find it somewhere.

[Turned off tape recorder.]

RB: I just remembered. Ilja Zeljenka created in this studio some miniature autonomous [compositions]. They were named, *Studia 0,2* [*Study 0.2*] and *Studia 0,3* [*Study 0.3*] which were short little electronic etudes.

[Turned off tape recorder.]

LZ: How was the music disseminated?

RB: How was it published?

LZ: Yes.

RB: Unfortunately, the purpose of this music because the music was in essence a 'used music' in conjunction with other media such as movies and for television productions, and I do not know whether some music was for radio broadcasts. In the past, I remember an [one] act. It was probably already in 1968 or 1967, but I think it was during the time of

Dubček [Dubček was in power from December 17, 1967 to April 1969. But his power was limited because of the Soviet occupation: August 21, 1968. From this date up to April 1969 he was only a symbolic leader.] sometime in 1968 in Divadlo Hudby [Music Theater, Prague] which was a very contributive institution [towards electro-acoustic music] where simply all kinds of activities took place such as those against the government's ideology. There were sometimes sections of a program in which productions of homemade [electroacoustic music] creations were introduced. So under the pretense [that the television audio studio's electro-acoustic creations were homemade] our first attempts [in electro-acoustic music] from the early [19]60s were also introduced there. I dug up these compositions, because my colleague in Prague, Petr Kofroň was interested in them [just recently]. I do not know whether or not you have met him?

LZ: No, not yet [I had not met him at all].

RB: So I think you will probably get in contact with him. He is the director of the famous ensemble, Agon [Agon Ensemble] which performs new music. And he was a proponent in this music. And he asked me for these compositions, and so I dug up the old compositions which are primitive but are documentary.

It is extremely important to view the entire electro-acoustic [music] development how it was influenced by the ideological [political] conditions in our country at that time. I do not know, it is possible that this [ideological influences upon electro-acoustic music] is in the view of the West a completely foreign experience. But the [ever present] consciousness that creating electro-acoustic music is prohibited, that it is classified as [an] "anti-state" and "anti-regime" activity, so this was a big stimulus [for the creation and aesthetic of electro-acoustic music].

LZ: Ah ha!

RB: The resistance against the regime in our generation was very distinctive.

LZ: Meaning, 'We [musicians] will show them!!!'

RB: Yes, yes, yes, yes. The entire orientation of new music, not only electronic, not only electronacoustic music, so this is a completely dominant moment.

LZ: Only at the TV station in Bratislava?

RB: No, overall! All new music, all new art!

LZ: Ah ha. Even at the Radio etc.??

RB: Overall [in Czechoslovakia], even instrumental music. The ensemble, Hudba Dneška [Music of Today]—Oh my God!—there was one conflict after another! They always tried to get rid of this ensemble. We are not talking about some pure aesthetic, and so on. [Turned off tape recorder.]

LZ: Question # 6. How were the compositions archived?

RB: Hmmm, because these compositions were essentially ordered [requisitioned], they were archived in film departments [Bratislava film studio] and maybe at the TV station. LZ: So when the movie was archived, so was the music along with it?

RB: Yes, of course.

LZ: Great.

[Turned off tape recorder.]

LZ: What is the address of the studio, the television audio studio in Bratislava?

RB: Hold on! Hmmm, it used to be [at] Stalin's Plaza, but today it is called Namestie Slovenského Narodného Povstania [Plaza of the Slovakian National Uprising], and the number I cannot recall. This is the building called Tatra. In it there in the past used to be the Tatra Bank, and later [it] was occupied by the TV station where shops and the audio studio were housed.

LZ: Great.

[Turned off tape recorder.]

LZ: Question # 11. Now we will talk about the aesthetic of the music.

**RB:** It was a time when ... It is probably difficult to talk about a positive aesthetic concept. I would characterize it as a period of fascination with something that was on one side inaccessible in essence not only-one was dependent upon the other [the availability of technical problems, because the only possible source of information was the Radio [Broadcast Station] where we could hear such music. And I would like to use a case as an example how things worked. One of my colleagues, through some miracle, was allowed to visit the studio [Aldershof Berlin] in [East] Berlin at [the studio of] Paul Dessau, and he worked there on some composition for one or two years. He returned from [East] Berlin and brought with him tape recordings of [the music of] Webern. So this was actually the first time that we heard the music of Webern; this was an extraordinary event. And then another colleague who was a musicologist, Dr. [Ladislav] Mokrý, basically from somewhere—gosh, I do not know from where, he had some contacts—from somewhere he got some recordings from the United States. Hmmm, I cannot remember, the recordings were basically of the beginnings of music for tape—American music for tape [he says 'music for tape' in English]—and recordings of the first phase of Schaeffer in Paris. So this was a fascination. And what we did here [Czechoslovakia] were attempts of the same intensities. In other words, what happens with any tradition is that there is a period of imitation, in essence, due to the determination of the absence of technology. These were very primitive conditions in which we attempted to do something. So . . . and then what I emphasized earlier which was very important, in that there was a psychological factor of the resistance against that one *must do* it like this, that one *must compose* like this and that one cannot compose in any other way, and not compose according to one's own desires and not do it according to some aesthetic [i.e., the aesthetic of some style]. The aesthetic prescribed was that in conjunction with the political regime.

LZ: Yes. And now exactly I want to ask you about this, how *did* they want you to compose?

RB: So, it was—

LZ: [A la] Shostakovich?

RB: ... the embarrassment [disgrace] of Social Realism which we regarded as absurd, and against which we always resisted. And this also applied in schools [he means, for example, that composition professors hated to teach this style of music/composition].

LZ: But in essence the style of the music was Romanticism?

RB: In essence yes, yes, yes, yes. Even [the music of] Shostakovich was very problematic. I remember when the Leningrad Symphony Orchestra came on a visit and performed his tenth symphony. So we even regarded this music as his rebellion against the "official" aesthetic [Social Realism]. This music was regarded [by us] as a kind of "contra"-aesthetic.

[Turned off tape recorder.]

LZ: Now we will talk about Mr. Berger's compositions.

RB: Oh, one little commentary to *Epitáf pre Mikuláša Koperníka* [*Epitaph for Nicolaus Copernicus*]. This was a reaction against the situation that developed after the invasion [by the Warsaw Pact Armies on August 21, 1968], of the Soviet invasion. In 1971—I do not know exactly when—experimental creations of new art [*all* arts] were officially declared and publicly pronounced and announced and denounced by the [Czechoslovakia's] Minister of Culture as being an anti-state, anti-Soviet, anti-Communist cultural diversion; basically a Western [evil]. In essence, our necks were concerned without any regards [the situation was very serious]. And when this announcement occurred, I went to the [Experimental] studio and told my colleagues that I would create something [a composition]. And so we started something—some activities, some experimentas—and then I began to somehow put it [the composition] together. And out of this [experimentation]

emerged a sort of a first version of Epitaf pre Mikuláša Koperníka. And originally I planned it to be a sort of a melodramatic composition, hmmm in which I would use citations of Copernicus's works. [Copernicus discovered that the earth rotated around the sun and not vice versa. This was regarded revolutionary back then, and so would the use of these quotations during the time that Berger composed this composition.] It was the 500th anniversary of Copernicus's birth or something like this. And his works were published, and out of those I took a few extracts and wanted to use them. Here [Radio Broadcast Station] everything was done as an official work, as opposed to the audio studio at the TV [station] where everything was done as an underground work. And so I had to apply for the permission with the director [of the Experimental Studio] to do this composition. The director had to know what I was working on. So I told him [that I would work on] a composition based on the texts of Copernicus. So then the director had to give this application to the management of the Radio Broadcast Station for approval and also to the Communist party of the Radio Broadcast Station]. And this Communist party in the Radio Broadcast Station said 'No,' that it would be an anti-state provocation; basically, Copernicus's texts would be ... anything by Copernicus would be an anti-state provocation. So this is an illustration of the absurd "climate" of that time. And then there was a period of time for many years about up to 1977 of an absolute taboo, in essence, [during which one was] forbidden to produce anything.

LZ: You mean this composition?

RB: No, *nothing*! No electronic [electro-acoustic] music!!! And for the first time was organized a concert of electronic music within the Bratislavské hudební slavnosti [BHS (Bratislava Musical Festival) which lasted several days] in 1977. So from 1968 to 1977 there was a long period of "hands-off" [electro-acoustic music].

LZ: You mean *completely* not involve oneself with electro-acoustic music in any way? RB: Well, the music existed here. We worked [on electro-acoustic music] in Bratislava, but nothing [no music] could be disseminated in *any* way to the public.

LZ: But now you are talking only about Bratislava, not Czechoslovakia?

RB: No! In the entire Czechoslovakia. Here in Bratislava it was still relatively liberal, because the [Experimental] studio survived the entire time via some artifially found intricacies [means]. But basically somehow the people who worked in the [Experimental] studio always found a way to save the studio.

LZ: So only that I understand things, so from what year?

RB: Probably from 1971—

LZ: To about 1977, let us say?

RB: [Yes] to 1977. The period of time from 1968 up to the inauguration of the Husák regime [April 1969] was chaotic.

LZ: So not that one could not compose electro-acoustic compositions, but that ...? RB: One could. But very rarely and without any right for dissemination. This was a sort of paradox. And in 1977, [during] the first concert at the Bratislava Musical Festival [BHS], a fantastic interest evolved [about electro-acoustic music]. There was a huge crowd of people—even in the streets—that the police had to come and had to retain order. And when they [government officials] saw that there was an interest in this [electro-acoustic] music, they immediately again prohibited any activities of this kind of art [music] in Czechoslovakia.

LZ: And where was this festival?

RB: Here [Bratislava]. They call it [it is called], BHS—Bratislavské hudební slavnosti [Bratislava Music Festival]. It is a traditional festival. So they [government officials] "cut things off" and again nothing [electro-acoustic] music was done here. And then later, they allowed for a performance [of electro-acoustic music] at the Society of [Slovakian] Composers. And there I gave—organized by the [Český] hudební fond [Czech Music Fund] which is an affiliated society—and they asked me to give a keynote address. And this speech is part of the text in the book [Rozhlas a slovenská elektroakustická hudba (The Radio and Slovakian Electro-Acoustic Music), (Bratislava: Metodicko-výskumný kabinet československého rozhlasu, 1989)] that I remembered. For example, in this keynote [address] one part is describing the methodology of the basics of electro-acoustic music; for example how the music is created, how the music originated ... because something has a bad influence; something has a good influence. How the creation of the music is manipulated, and so on.

## [Turned off tape recorder.]

LZ: Now I will ask Mr. Berger about his own compositions, and if he could perhaps talk about his own aesthetic. And when did he write something, what and the like; whatever [information] he can [tell me].

RB: In essence, this is an easy question, because there is not so much of it; there is little. First, there are several illustrations of music accompanying movies. In some way I will give you the index/article [Stadrucker, Ivan. "História jedného zvukového pracoviska" (History of a Sound Studio), *Slovenská hudba*. 13, Nos. 9-10, 342-49 (1969)] about them.

LZ: Now Monday?

RB: Yes. Maybe this [his film music] is not so important. Maybe it is important from the point of view of the activities in this field here in Bratislava. But to qualify them by opus [numbers] would be too exaggerated. And the autonomous compositions that I did, there are very little of them. One was Elélegia in memoriam Ján Rúčka [Elegy in memoriam Ján Rúčka]. Ján Rúčka is the remembered Tonmeister from the TV audio studio-my friend. He later died of cancer, and so I wrote the elegy for him. The title is not somehow heavily symbolic, but the starting material for this composition was music for films that I made with him. So this is a bit of a curiosity [note of interest]. This is one composition. It was in 1969. The early attempts at home which we did together with my colleague Zeljenka were in 1960, and then some of the compositions for the films were in the 1960s. One more composition for TV production was-it was some sort of an American cinematic piece-Vzbůra na ulici Sycamora [Revolt on Sycamore Street (1963)]. I did [composed] this. So this is one of the materials used in the Elegia [Elélegia in memoriam Ján Rúčka]. Then I composed what I was talking about earlier, Epitaf pre Mikuláša Koperníka. That was in 1972-73. This is on the [double] CD [Elektroakustická hudba (Electro-Acoustic Music)]. So this [Epitaf pre Mikuláša Koperníka] is in essence an analogical development. Again, the essence is, the material consists of several short fragments of orchestral compositions. So this is [not] on [the side of] the classical electronic music, but instead is music for tape [he says 'music for tape' in English] and something like this. It is not *musique concrète*; that it is also not. It is rather music for tape. As far as the aesthetic [of all of my music] is concerned, there was a sort of a tension between the director of the [Experimental] studio at the Radio Broadcast Station, Peter Kolman [and myself] who was vigorously interested in the electronic technology and I basically did something different [Berger was interested in another direction]. Well, in essence he was very tolerant of me. And what else could I add to it [say about my aesthetic]? Basically I had an opinion which I have up to today that the understanding of electronic music as an antithetic against everything else-----'electronic' in the sense that everything what is done using tape with electronic equipment—that this antithesis—to understand this development as a negative—that this is simply a matter of a development. In general, all new [artistic] creations are considered this way by people [in other words, all new art is at first disliked by people]. In other words, everything new is seen with a negative outlook: 'No, we do not need it!' In essence, all new music was for a long time defined as *pre negatio*; in other words that it is not diatonic, is not rhythmic, is not this and that, and so on. The 'no' is the specific factor [in determining everything that is new]. And instead I rather understood it [electro-acoustic music] as attempts of integration of the traditional with the [new technology]. Today, I would characterize things that in all compositions [composing] the essence is about the principle of-I would not say 'transmission'—but about 'transgression.' In other words, about stepping over some boundaries. And the boundary was determined, perhaps, by the tempered tuning system and rhythmic structures. And all of these disappeared somehow. In essence, rhythm disappeared. So that what was qualified as inste novum specifically in Epitaf pre Mikuláša Koperníka, so the new thing was that I conceptualized new rhythmic structures, in one particular passage for example. In this composition there is, for example, an attempt . . the starting point is a broadening of tonality in the orchestral sound. This is a motive which is introduced like a theme for 'theme and variations,' perhaps one could say. And then what happens with this [motive] in this composition is a 'transmission' of the tonal ... from one group to another. The tonality is very intensely—based on the twelve chromatic intervals-interwoven with some micro-intervallic structures. But everything originates from the tonal beginning. The tonal structure is somehow understood; the indications are very elementary but are present. In essence, a notion of an elastic tonal space, expansion, compression, and so on. So overall I would say today that we have come to the point where it is necessary to consistently talk about composition-not of electronic music-but of composing using or not using electronic means so that we can arrive at some criteria that would have some sort of a general validity which [the criteria] were always viewed as the 'traditional' [in electro-acoustic music]. But now, the time has come that these criteria should be generalized, be universalized, and be established to have a general validity. This means that we [musicians] achieve a more precise regulation; and that the requirements for composing not be diminished under the excuse that, I am writing an experimental composition.'

#### LZ: That it be amateurish.

RB: More! That it be art! Because I always stress the difference between music and the art of music. This fact has been neglected to the extent of the discrimination of art [he means that we categorize something as art while in reality it is a bunch of bull]. The traditional understanding of [electro-acoustic] music as an art form is an anachronism. [Turned off tape recorder.]

RB: The problem of artistry and, I would say drastically, production of music. Basically these are two separate things. And I unfortunately have the feeling that the consequences from isolation which we [Czechoslovakian electro-acoustic composers] got into [he does not complete the phrase]; well one concrete fact is that several of us were thrown out of the Society of [Slovakian] Composers. And this did not only mean that we were thrown out of only the Society, but it meant that we did not have the right of an existence as composers, in essence. And these consequences meant for me that I was unemployed for ten years! I was basically scraping out a living. I was vegetating out of nothing. This means that a man had to present himself a very radical question: 'What do I want to do, and what am I doing?' And the solutions were varying. I have the feeling that in many cases [composers] the situation led to that the [political] regime was successful in forcing talented people into a situation that they began to produce music derived from psychological reasons. They proved to themselves that they *are* productive, that they *are* capable to be in this profession [composer] despite this situation, to be azure [strong] for the price that one could show oneself that he could produce, to extend some schemes.

LZ: That 'I will show them!'

RB: [Yes] 'that I will show them!' But one probably cannot show it [one's ability] to them. Basically one has to get into the frame of mind that I am not doing it [composing] due to the fact that I learned this profession, but because I have a vision that forces me to bring it about into reality. And in this case it is a question of stress, how a person functions under permanent and strong stressful conditions in the field of existence, how one functions when frustration continues for years. So in this case it is probably a very big problem to arrive at one's own conviction with a clear conscience that what I am doing is my [creative] maximum. This means, it is a polemic [controversy] with the usual profession [being a composer]. This means, 'I have the diploma and I will compose, from morning until night everyday, because I am a good composer.' It is not so easy. This was one aspect of the aesthetic. Another [aspect of the aesthetic] some sort of aesthetic is the unification of the category of the innovative and the new. I think that this is also a very superficial label. From this time [the restrictive early 1970s] I came to the conclusion which I believe until today that it is not important that music be new, but that it be alive! And this is the fundamental difference. When the music is alive, then it is *eo ipso* alive, but new does still not mean that the music will be alive. Actually, to conceive newly anything is possible, but this does not necessarily have to meet artistic requirements. So this is the emphasis of the aesthetic about the subjective moment, basically the condition in which the person exists and that he could be able to function in the level of art and not in the level of music. LZ: Do you think that music is subjective?

RB: I would say it in this way. Man is not subjective overall,—

LZ: That he is not?!

RB: [Yes] that he is not subjective. Today, one cannot make this claim in the traditional aesthetic [of classical music] of centuries-long dichotomy of subjective/objective as some kind of an act. But I see it as probably under the influence what I read of the biologist, Françoise Jacob [b.1920, French geneticist] in one of his books for which he won the Nobel Prize. He formulated this problem very authoritatively and very lapidary [succinctly] and I am citing this verbatim: 'That what we still yesterday considered unequivocally subjective, today we know that it overall is not subjective.' And I added to this a kind of a symmetrical formula, That what we still yesterday considered unequivocally objective, today we know that it overall is not objective.' Basically I believe that this opinion is convincing as in the example of a problem solved by the famous psychologist, Jean Piaget [1896-1980]. He created several categories of activities. And he tried to prove and claimed that the schism, subject/object-which basically originated by Descartes [René Descartes (1596-1650)]—that this schism is usually overlapped in the activities from one category to another. When I am in contact with the object, then I am abolishing the contradiction, in essence. I am doing something with something, and this means that I am creating a uniqueness, I am reconstructing a uniqueness, a pontifical [religious] uniqueness, in essence. So the aesthetic, I believe, has to take this fact into consideration. I could say it even in another way. From the school of Dazed, there is an author-he is pedagogue-Hans Eblisch [I was unable to find biographical information about him], a Swiss author who tried to prove on the basis of an experiment basically that visual art contains any materialized operations without any consideration to style. This means, internalization of activity. In other words, what we qualify as some kind of real or realistic or abstract image without regards for it ['it' refers to being real or realistic or abstract], so despite this there are present human operations, mental operations, and this also overlaps [the notion] of the subject/object. Just lately when I have returned to the [Experimental] studio after many years,... The last time that I worked on something [electro-acoustic music] was in 1979 in Warsaw. Here [Experimental Studio] I was "erased" [by the regime], in essence. And I was invited by the director, Josef Patkowsky of the studio [Polskie Radio Experimental Studio, ExpSt Warsaw] in Warsaw to visit the studio in 1979 and I created there a tenminute long work named, En Passant. And since that time I have not created anything [electro-acoustic music]. And now they [staff of Experimental Studio] gave me an opportunity to come here and create something, and so I tried. Together with Duriš we are

debating. To me it is a very inspirational experience, because originally he is a physicist. He is a nuclear physicist, atomic physicist.

LZ: Duriš?

RB: Yes. And he came to the [Experimental] studio [for a little amount of work]; he quit the job there [wherever he was employed as a physicist] and came here and lost interest in his former profession.

LZ: An atomic physicist?!

RB: Yes, yes, yes. And simply began to do this [electro-acoustic music] and then began to compose and became a composer, but an interesting composer. He began to do this [composing] and now we met and began to have discussions—

[End of tape.]

RB: So we got [involved] into a debates of basic questions. And the result was that one of my old hypotheses was reaffirmed. And due to the general activities in the studio, we achieved a certain level of universality that man can realize that the compositional process has the possibility—it does not need to be so—but that there exists a better possibility than when I am creating a composition on paper, when I am writing notes; when I realize a fundamental fact which indeed is connected with this issue of subject/object mutual relations. And lapidary I would say it so: the compositional process I understand as a dialogue. With the media, with the sound substance I have the possibility to step into the dialogical relationship. I simply create something with a sound, an applicable operation, and now it depends upon me how I will qualify it. I can qualify it as having done something with it according to my plan and *de facto* this will be a manipulation with this material. But I must listen carefully to what has actually happened with the sound. And it is possible that this will "tell" me something, that this will give [provide] some kind of information which will be above the level of abstractly understanding the structure; that this achieves a level of meaning and sense. And this is in essence something that is fairly constitutive in the compositional process. What Duris underlined to me was that—I have almost forgotten this because I am too old—but he reminded me of my old experiences: the traditional school of composition here [Czechoslovakia] directs or directed in the past to a feeling that one must be "above" the material, that one must have technique, and that one must master the technique and master it and master it! And to me it seems that this is an outdated idea. It seems to me more beneficial to realize to oneself that one has the opportunity to communicate with these materials. I create something and now the composition can have a retroactive effect to me personnally—a 'feedback' [he say 'feedback' in English]. And this is the structure of the dialogue. [In other words, the personal meaning between the composition and its composer!]

And if I am not boring you, I would like to tell you about one more aspect of my aesthetic; and this a structure of the creative process. It was advantageous to me when I discovered the concept of brainstorming [he says 'brainstorming' in English]. I do not know whether or not you know the structure of this thought process which is very simple. There is a first phase of a meeting where experts are present and they address one problem. And the first phase consists of everybody expressing what has entered his mind, spontaneously. And nobody may criticize; criticism is forbidden and self-criticism, too. There are only free and spontaneous discussions. I must take the risk that I will even say rubbish, that I will produce nonsense. Then there is a pause and then the critiques begin. And this is a principle that is very fruitful to me and one that takes into account the brain's thought structure. Thus, the brain gets a chance to function under optimal conditions. And then in the next phase of the meeting the polemic, the ability to formulate occurs. [So the meeting is divided into three phases:] the separation of spontaneous generalization, and critique, and the exposed [the outcome]. And a cycle can develop out of all this activity which means that everything that I critically formulate over can again be re-qualified as

another base of quasi-material. In order that I illustrate this point, it is similar to a situation which I went through here [Experimental Studio]. I essentially examined some sound sources for the last two, three weeks, and then came a moment that showed me what could be done [with this material]. After fourteen years the [Experimental] studio really is different than it used to be. It is still very modest but nonetheless there is the Yamaha instrument [SPX 90 II Digital Sound Processor] that allows for the transposition of semitones and micro-intervals, etc. So we experimented with something and suddenly I got a click in my brain that this is *the* sound, that this sound "tells" me something. I threw away ten sound materials and got attached to one. And what is it? It is an old composition [his old composition]—a twenty-year old composition—for solo violin. I put the name [of the proposed composition] in quotation marks, "Paraphrazia Electronic". This means, something that was already defined as a composition, as an ante-fact; it had its own distinctive characteristics. I, as one says, "degraded" the composition unto the level of the material but retained certain symbols, basically the macrostructure. And that which I once conceptualized only on the structural level, now I began to perceive and qualify it from the point of view of meaning and expression-expressé. And there appears the principle which pointed out the famous mathematician [Alfred North] Whitehead [1861-1947]. And he talks about the principle of emphasis. And something in the structure is latently anchored but it is hidden. And we have to uncover it and all of this could emphasize some aspects. And out of this shines some expression. So this is all about aesthetic.

[Turned off tape recorder.]

RB: That what I was talking about is sort of a permanent polemic that dominates in the overall domain of composition at least here in Czechoslovakia—I do not know how it is in the rest of world, but I think that it is not all too different—which is practicality, pragmatism, and utilization, and everything else that is connected with it. And what is still missing is a commentary for all that I talked about.

And one more small comment, that the traditional attitude to composition is very influenced by the rational paradigm, 'Descartes's Rationalism', which means the linearity of thinking on the basis of yes/no, either/or, basically. And that what is born [created] and what I believe in, and this is also a perspective for art. In other words, the basic principle of ontological contradiction between the rationalistic paradigm and the art itself, basically from the base [essence]; because art cannot be squeezed into the rational structures, so that the classical musicology is still on the periphery, in essence. That classical musicology is only "touching" some isolated aspects. And there was always the talk about some musical elements and components of music, and that here is a [musical] form and contents, and always the schism, because we cannot grasp it completely. And here [electro-acoustic music] is now a beginning of a new era, I think a non-classical paradigm oriented by the hollistic point of view of the world and also thinking. In essence, the intuition is penetrating into different situations than compared to the point of view of the old rationalism. And as Conrad Warrens [I am unable to infer which Conrad Warrens he is referring to] characterized it, basically the respect against intuition of the people as somebody who is primitive—simply we can talk about anachronism—because nobody who is smaller than Lawrence  $\Pi$  am unable to infer which Lawrence he is referring to who said that 'Intuition is a fundamental mechanism of learning.' This is one side and it is ratio morphi which discovered and created the rationalistic structures. But the point of origination is based in the hollistic, overall point of view. So there is a time period when it culminates into a modulation, when one comes into another sphere, into another philosophical view of the world.' As long as the world does not fall apart, the direction could attain a different direction compared towards the overall use. And it could be thinkable—this is one of my personal obsessions—that art could begin to attain totally different functions, basically in society, unlike the traditional aesthetic; that art could

90

methodically make use of [the fact] that man overcome psychological crises and the stagnation which threatens man in his every step. And from this perspective I do see today that this is a chance, however only if the world does not fall apart. [Turned off tape recorder.]

RB: One more small comment to 'new paradigm.' I have been fascinated with a book that has just been released here [Czechoslovakia] about a year ago, and this is a book written by a significant English physicist, David Bohm [1917-1993]. The name of the book is ... [Science, Order and Creativity (1987)]. Gosh, I am sclerotic. Now I cannot tell you what the name of the book is. So in it is very lapidary described on what the classical paradigm is based on. I forgot to mention one very important aspect, which is mechanism: mechanically understanding the world and what can be derived from this. How Bohm characterizes it, and very lapidary states that 'Mechanical fragmentation of the world'---and that what I was talking about musicology-continuously [always], in essence, splits up the complexion of the *arte factuna* into aspects, into some pieces, and then tracks [categorizes, sectionalizes] them as if they were autonomous. And this is the fiction. As I in the past was talking to my colleagues and I said that 'Harmony, as you teach it, does not exist. This is heresy. This is an abstraction. This is a rational construction. In music it does not work [this way] how you are teaching it [such as a la Shostakovich!] and in the books in which you write about it [harmony], and so on. Basically, this is only one aspect of the unity.' So Bohm basically proposed—he is no longer alive, he died a year ago, hmmm no half a year ago [about January 1993]-proposed-[he was] opposed to the mechanical fragmentation—he is talking about a model of the world based on a hologram where everything is a part of a mega, a unit; and the information of this unit is a part of the whole, and the whole is indivisible from some universal unit. And from this point of view, we are only a step away to present ourselves a question of some measurement of a regularity, and present a question how these regularities are part of art, and electronic music. And this is what Duris and I are discussing. So it is much easier to talk with him about this issue than with a musician because he is a physicist. [End of conversation.]

The interview of Ing. Ján Backstuber was taped at the Experimental Studio in

Bratislava on Friday, July 9, 1993, at 2:15 P.M.

LZ: Interview with Ján Backstuber, and we are talking on July 9, 1993, 2:15 P.M., and we are talking about how the studio came about . . .

JB: [We are talking] about the history of the Experimental Studio, Bratislava. Originally the Experimental Studio was created—better said, Triková režie [Sound Effects Studio] as its original name, this was its original name—and it originated from 'slovesné vyroby' [verbal productions—*Hörspiele*] which were created, and as in every radio broadcast station so we too created *Hörspiele*. And the directors of these *Hörspiele* had requirements that these *Hörspiele* would be filled in the background with more effective sound effects [than were presently used]. For example, we were looking to produce the effect of making the sound of a midget out of a regular voice or some other ideal personalities—personifications—talking crows, and so on; or the voice of a speaking wind. So from this impulse, in essence, originated the requirement to create, set up, and equip the Sound Effects Studio. It was in the vicinity of about 1965.

LZ: Can I quickly ask you what is 'Triková režie?' This was its name, or ...? JB: [Yes], this was its original name, Triková režie. LZ: OK. JB: Only later was it renamed to Experimental Studio. Hmmm, the Sound Effects Studio was under the----

[Turned off tape recorder.]

JB: The Sound Effects Studio was organized under the Technical Department [of the Radio Broadcast Station]. Well and, what was the equipment of this studio? There was a sound effects tape recorder. This recorder had multi recording heads. Specifically, this one had four heads. The next head was always twice as far apart as the previous two heads [for example, 2 in., 4 in., 8 in.]. So with this tape recorder [it] was possible to create such effects as echoes in the mountains, or in stadiums where we hear the sound coming to us in numerous time intervals. In addition, there were two or three tape recorders, and some other equipment such as generators, filters; of course, not fixed filters, but those kinds in which the frequencies could be changed. Well and later, the head engineer created a kind of "realization group" which designed and built for this Sound Effects Studio several custombuilt [pieces of] equipment for the [purposes of] sound effects. [This group was not part of the Sound Effects Studio, but part of the Technical Department.] For example, one of the pieces of equipment's name was Klúcovač [Puncher]. It was an apparatus [into] which [one] punched holes to emit different partials into sound transmitting material.

[Turned off tape recorder.]

LZ: Puncher, continued.

JB: The approximate description of the Puncher was that it had something like a telegraphic key system which, when one pushed it, it opened—something like a fader—up a path of the sound source [sound]. This part of the Puncher could be equipped with intake [input] and outtake [output] fixtures with different [conical] forms [with different angles]. These fixtures were able to change the sound [frequencies]. These fixtures were connected to the central portion, thus creating one common part [three parts making up one part: intake (input), central part, outtake (output)]. Thus, the sound flowing continuously through this body could have a fixed or changeable sound frequency. The change of sound could be performed lasting from two seconds up to a minute. So we could create sound effects with this.

[Turned off tape recorder.]

LZ: Let us continue.

JB: Well, once that it was somewhat equipped—this Sound Effects Studio—then it showed us that it would be possible to use this Sound Effects Studio for musical purposes. And this is the reason why our colleagues, later our good friends ... The first of them was Jozef Malovec. He in essence joined our activities, and there [in the Sound Effects Studio] began to be produced and respectively created the first electro-acoustic compositions. The first was Jozef Malovec's Orthogenesis.

[Turned off tape recorder.]

JB: Later this studio became part of-

[Turned off tape recorder.]

JB:... became part of the program of the Music Department. This means, it received its own studio manager who could manage its activities, and also it immediately received a new name, Experimental Studio. And in these conditions, this studio started to achieve the first remarkable, impressive, and good achievements. Of course, at that time there were found new facilities for the studio. Both of these studios [Sound Effects Studio and the new facilities] were facilitated at Lenin Square—today known as Jakub Square—in the old Radio Broadcast Station building, in which was also located the post office. Upon the relocation of the post office, the Sound Effects Studio moved to these new facilities former property of the post office—where it functioned under the name of Experimental Studio. Well, and then we slowly, under the management of Peter Kolman, began to collect and order new equipment, and completed the purchasing of our electronic measuring equipment [i.e., oscilloscope, etc.].

I have in front of me a specific material [Kolman, Peter. Experimentalstudio des Tscheslowakischen Rundfunks. September, 1970 (Experimental Studio of the Czechoslovakian Radio), the studio's pamphlet] which documents all [the instruments] that we had there at the time. I see that we had there ring modulators. We built the first ring modulators ourselves. We built them into boxes; we soldered diodes. Of course, it was not anything [technologically] advanced. The ring modulators were of low quality. In order to get the effect from the ring modulator, we had to remodel it and increase the efficiency by using an amplifier so that we could use it. And on the other hand, when we wanted to input into the ring modulator with a generator output or microphone output, we had to decrease [the efficiency]. It was more or less a prototype. Later we received a real ring modulator during the [time of] purchasing of new equipment. The new ring modulator was an instrument named, Subharchord, built by some East German company [RFZ, Berlin]. It was of course robust, big [he is sarcastic, because everything manufactured in East Germany and most Eastern Block countries during the cold war fit this description]; but at least it was already possible to create on it a lot of new effects which we were unable to create before, because somehow in the beginning the principle of activity was such that everything was done mechanically, such as cutting [tape] with scissors, glued together laboriously. One sequence, perhaps four minutes long, was glued together, and via playback were sounds accumulated together taking sometimes up to a month's time! The results, of course, were based upon technical possibilities—the temporal results [were based upon technical possibilities]-but many times we can say today that in the work of the time one could feel the human spirit, as compared to today's used computer technology, where I feel that in many cases the technology is splitting this relationship apart [today, the human spirit is missing when creating electro-acoustic music using today's technology]. [Turned off tape recorder.]

JB: So in these facilities we existed. We had there, as I can remember, much music equipment. The central piece of equipment of our studio was the Subharchord. Later [1974] we obtained a more modern synthesizer, ARP [ARP 2115] from America. But at the same time came 1968—[the] occupation by the Warsaw Pact Armies—and we were told that we represented a decadent art, that we represent a demoralizing art, which meant that there was a constant tendency to eliminate our studio. Thanks to our director—even he was a Communist—[who] held a protective hand over us so that it would not come to the point of closing our studio, because forces from within the Radio were not as strong [to close the studio] as forces from outside the Radio, such as the Ministry [of Culture] and other cultural institutions.

During this time we had to unfortunately create various and unpopular realizations and works in order to keep the studio open. There were [existed] here very good results, and even before this [the political situation after 1968], there were already seminars [Smolenice Seminars for Contemporary Music] in Smolenice [town twenty-five miles northeast of Bratislava] which were not organized after 1968. [Actually, the seminars in Smolenice took place from 1968 to 1970. Thus, he probably means that those seminars of 1969 and 1970 were not as good as those of 1968 due to the political "cloud" hanging over the seminars.] These were very nice seminars with international delegates: from Germany, Holland, from Yugoslavia. We tried to incorporate into these seminars also musicians and artists or experts from the former Soviet Union, or also from [the] so-called "folkdemocratic" countries [Eastern Block countries]. At the time, they [countries] were called by this name. Unfortunately, they always rejected our invitations to participate. Those who would have liked to have come were considered in their countries as representatives of [a] decadent art; that is why they did not allow them to come to us. The seminars in Smolnice had to be eliminated.

[Turned off tape recorder.]

JB: In the time after 1968, slowly but surely our studio slowed down to produce anything [due to political pressures]. Some of the members of the studio decreased their creativity in electro-acoustic music, because they were under the pressure that this music was a decadent and immoral art. Many other members were politically persecuted, and they were fired, they lost employment, they lost their existence. And one of them [Roman Berger], under these psychological conditions and stress, created in this studio at the time a superior composition. This composition is, *Epitaf pre Mikuláša Koperníka* [Epitaph for Nicolaus Copernicus (1973)].

[Turned off tape recorder.]

JB: In 1968, we already used in our studio a multi-track recording system. First we had one unit of 4-track system. Then shortly after we received a second [4-track] unit [Studer J-37], and approximately in a few years [1974] we received an 8-track recording system by the company Studer [Studer A-80]. Studer was our primary supplier, and the equipment purchased earlier [before 1968] was from Sander-Jansen.

[Turned off tape recorder.]

LZ: OK, we can continue talking.

JB: Yes. So let us talk about Jozef Malovec. His first work [was] Orthogenesis which immediately was a stereophonic composition. And little bit later—I was involved in this work—a quadraphonic version was made out of this stereo version. Well, I must say that I joined this type of work [converting compositions of a stereophonic format to a quadraphonic format] done by Ing. [Peter] Jank who was essentially a pioneer in this type of work. I joined him sometime in 1967—at the end of 1967—and from that time, I have been actually working in this studio my entire life up to [the time of] my retirement. LZ: When was this [retirement]?

JB: 1991, because I was born in 1930. [The age of retirement is sixty.] [Turned off tape recorder.]

LZ: Now we will talk with Mr. Backstuber about what equipment he has in his studio at home.

JB: Well, this is a little bit different. After my retirement, a group of three people agreed that we would create a small production company. And the market showed us that the conditions would be ready in creating some kind of a studio. So in my own house, I wanted to make available two rooms for the disposal of a studio and production. Later, this idea shrank to only a studio [so no production facility]. First, I remodeled a room; I put new sound covers on the walls. Well, and the equipment I purchased from the Radio Broadcast Station, which [the equipment] was out of service: two tape recorders, Studer, and I already owned a commercial tape recorder, Tesla, and I later purchased some other equipment such as dual cassette player/recorder. And my last purchase was a CD player. We bought a mixing console; the mixing console is a little bit complicated, but it is possible to work with it. Hmmm, but somehow it [the studio] did not work out economically. But somehow the original financial agreement did not work [in other words, the "piece of pie was cut unevenly"], and so the group broke apart. Of course, we separated peacefully, but agreed that we would try it [create a studio and a small production company] individually. Honestly, I am one of those who did not succeed. It did not work out. Today, I at least try to work there [his little studio] just for my happiness-some things I do there-and momentarily I am trying to produce a cassette-meditation music-cassette for meditation. That is all.

[End of conversation.]

94

The interview of Dipl. Ing. Juraj Duriš and Dipl. Ing. Andrej Zmeček was taped at

the Experimental Studio in Bratislava on Friday, July 9, 1993, at 1 P.M.

LZ: We are here with Duriš, 7-9-93, 1 P.M., Bratislava. OK, the first question is, why does this studio even exist? How did it come about into existence? JD: The studio originated in 1965, officially, but its activities began in the late 1960s where [when] the composers began to do the basic experiments and created simple compositions using tape recorders, and so on. In 1965, the success came about in the registration of the Experimental Studio which was organized as part of the Slovenský rozhlas [Slovakian Radio Broadcast Station] whose aim was to create special effects for broadcasts. After two years of experimental work, this studio finally started to produce its autonomous compositions. This means that the first composition created there was in 1967; it was Orthogenesis by Jozef Malovec. It is on the CD [Elektroakustická hudba of the Experimental Studio that he gave me]. From that time, the [Experimental] studio registered a large boom of compositions [as self evident] just from the fact of the dates of compositions registered in the archive, where it can be seen how many compositions were created. From 1967 to 1972, or 1974—in about six years—the studio produced very qualitative compositions which represented Slovakia well at competitions around the world. This means, we received numerous awards and prizes, for example at Bourges. We performed at many concerts, for example in Florence, Italy, in Germany; in other words, we had our music played, and we produced [a lot of] music. Then came a somewhat complicated time—Russians occupied us—the suppression began in terms of suppression of concerts and performances, but not in terms of creations [compositions]. The studio realized compositions, but everything ended up in the archive; but [the compositions] were not allowed to be performed in any way. We had a problem of communication in any way with the Western world, whose effect showed up later in terms of quality [of compositions], and in essence in the analysis of aesthetic-in a comparison of what we did here and what was done in the outside world [the West]. Basically, for some period of time we created compositions solely for archival purposes. It is very interesting to note---you can notice it yourself-to make somewhat of an aesthetical analysis of [the music of] this CD [Elektroakustická hudba]. This CD is kind of a source. I do not want to say that it [aesthetical development] was due to some kind of a Bratislava-ian "school," or some kind of a closed system. But instead, it [aesthetical development] is marked [characterized] due to the political problems here at that time. The last period of time-actually the 1980s-the communication [with the West] became somewhat more free. We were able to enter again into the domain of comparison of quality [of compositions], but already we are historically characterized by the thinking of the noncontinuous development [in other words, the invasion set forth a disruptive developmental process of electro-acoustic music at the Experimental Studio in Bratislava; and in essence we are also characterized by the result of this noncontinuous development in terms of aesthetic. Later, I will tell you in detail what I mean. Basically, this was the overview of the beginning up to today. LZ: Yes, great.

JD: Also, I would like to explain to you the question of why this studio even exists. Hmmm, the [Experimental] studio has a very specific place from the point of view of the infrastructure of the Radio Broadcast Station—to which it [Experimental Studio] belongs, [to] the Radio Station—and specially situated from the point of view in the entire Slovakian Radio's context. [Notice, it is no longer the 'Czechoslovakian' Radio.] This means, it is the only workplace where, or only center where electro-acoustic music is being actively created in all of the Slovak Republic. In terms of private studios [in the Slovak Republic], nothing is being created. This means, we are in essence the only center [in the Slovak

Republic] where compositions are being created, and where we present them and show them—in terms of the best available technology that exists. Hmmm, in regards to our internal placement of the Broadcast Station's infrastructure, the studio has a very specific placement, because it works together with all departments that exist here in the Radio [Broadcast Station]. And in essence, due to this symbiosis, the relationship exists that the Radio needs us [Experimental Studio] and we need the Radio [Broadcast Station]. This means, we have-up to today-enough finances for technological support to buy new equipment, and so on. And we in return produce for the Radio top quality compositions [whatever the Radio needs], in terms of music, in terms of dramatic works [drama], special activities; for example, getting rid off superfluous noise of old compositions [recordings], or the reconstruction of recordings in the archive[s], or other special effects that the Radio itself would have big problems [doing]. Otherwise, the Radio would need to purchase these services from external companies. OK, these are the reasons why the Radio has this specific studio [Experimental Studio] and why this studio exists. [So, the main reason for the presence of the Experimental Studio is *not* to realize electro-acoustic music.] LZ: Great.

#### [Turned off tape recorder.]

JD: Question # 1-- the last part—where the studio gets its financial support, where it gets its money for existence. The only source for the money for this studio is the Radio Broadcast Station. And it works in such a way that the Experimental Studio-as an independent "block" of the Radio—communicates and creates products [compositions, projects, etc.] for all departments that are here, such as editing for symphonic editing, folklore music editing, drama editing, and so on. In other words, for all departments. And [the] Radio produces top-quality recordings for them [departments] which represent the Radio in broadcasts domestically and internationally. And therefore, it [Experimental Studio] is totally financially supported by the [Slovakian] Radio. [So, the Radio Broadcast Station in Bratislava is both the radio broadcast station in Bratislava and the headquarters of the Slovak Republic's Radio]. In addition, there is another source [of financial support]—it is fairly interesting—this source is due to our studio's participation in various cultural activities. We [Experimental Studio] have a so-called Centrum pre elektroakustickú a computerovú hudbu [CECM (Center for Electro-Acoustic and Computer Music)]-it is the society known as SEAH [Společnost pro elektroakustickou hudbu (Society for Electro-Acoustic Music)] in which also Mr. Růžička works; it is the organization of electro-acoustic music in Czechoslovakia-for which, in essence, the financial support comes from the Department of Culture and other related societies. But this money is only used for our advertisement, because the Radio does not have a great interest that their [Radio Broadcast Station's] money be used for advertisement. They [Radio Broadcast Station] are interested in the production and broadcasting of compositions, . . . and the expansion of broadcasting. So this was the second source, in this case for advertisement. LZ: Fine.

### [Turned off tape recorder.]

LZ: Question # 2.

JD: The structure of, the organizational structure of the Experimental Studio has two sides to it. One is the organizational structure as a part of the infrastructure of the Radio—I have already described this under question # 1. This means that the Experimental Studio is an independently workplace with an independent status, incorporated into the internal organization of the Radio of the Slovak Republic [Slovak Republic's Radio], where it has an independently working production program, where it creates its own products [all kinds of projects] which are of its interest. And parallel [in conjunction], it [Experimental Studio] works together with all other departments on works that are of their [other departments'] interests. Now! From the point of view of the internal structure—this is the second side—

the studio has at the present time four employees. It is ... all four people are actively involved in 'Tonmeister-ly' work-they are actively participating in the compositional process-and in addition to this, they are also responsible for other work of this organization [Experimental Studio]. This means, the Technical Director of this studiofrom the beginning of this studio, from 1965-is Dipl. Ing. Peter Janik. Then [in addition], we have two positions responsible for the studio's productions-program adviser-that is Juraj Duriš [he himself]. He is responsible for-

LZ: That is you?!

JD: Yes, that is me ... He is responsible for the production of music, and Andrej Zmeček -he is the one who was just here [just left our presence]-is responsible for the production of experimental words [word-oriented experimental works, radiophonics, and experimental drama pieces]. That means, that it does not exist strictly only for music or only poetry, but [there] exist experiments of music and poetry together. That is, one does not have to precisely differentiate between two activities what is done in our studio. That is one common interest. Then we also have a fourth person-Tonmeister-Ernest Walzel. who is purely [only] a *Tonmeister* and works here.

[Turned off tape recorder.]

JD: The technical equipment of the studio-that is under # 2, the second part.

LZ: Ah, you do not have to ... [name the instruments], but only [name] the people who do technical support for you.

JD: Ah ha. For the servicing of the studio, we have a special department-comprising of two people, electronic engineers—who perform for us regular service which [the service] is comprised of two parts: one part is the installation of new equipment, and the other is the maintenance, servicing.

[Turned off tape recorder.]

LZ: Talk more about these people [technical support]!

JD: Our Radio [Broadcast Station] has a special department which interests itself in installation work, for example, the reconstruction from analog to digital of the recording studio [Studio A]. And this team, actually, does [any kind of] work from [the] basic installment of cables, from the drawing board up to finished studios [they do everything]. And then there is a second team of service who only maintain the equipment. At the present, we have a bit of a problem with acquiring a software engineer, I think that in a short [time] we should employ a young man who will be responsible for all softwares. At the present, we are taking care of software issues ourselves.

LZ: Does this work?

JD: Well, it works.

LZ: Can you tell me the names of the people who you just discussed?

JD: Hmmm, I can.

LZ: Great, then proceed!

JD: The service team who is responsible of servicing our studio is [consists of] Dipl. Ing. Ivan Košiar, and František Kluka-also a Dipl. Ing. They are employees of the service department [of the Radio Broadcast Station]. The team, the people who do the installations, so I could not name them, because the department is comprised of about ten to fifteen people. They are specialized in "heavy technology," for instance NF [in Slovakian, 'NF' stands for low frequencies; EMI, ElectroMagnetic Interference; RFI, RadioFrequence Interference, etc.] cable transmission, etc. So this is very specialized work, I would say. LZ: That is all?

JD: [Yes] for now, that is all.

[Turned off tape recorder.]

LZ: Talk more about money [Experimental Studio's budget], now!

JD: The studio is . . . Hmmm each year the studio receives a financial budget, and this budget is a fixed limit which the studio can use as it wishes. And based on this budget, the studio creates its own projects such as proposed projects of buying equipment. For example, I would like to tell you, this year we received a specific amount of money for the purchasing of computer technology which we actually did ourselves [we bought it ourselves], and we ourselves wrote—I myself wrote a proposal of which technology we need.

LZ: A grant [I say 'grant' in English]?

JD: Yes. We installed a [Macintosh] Quadra, sample cell. cards [based on the list of the studio's instruments that Zmeček wrote down for me, there are two sample cell. cards, 2x32 mb RAM], and so on.

LZ: So only you the Experimental Studio?

JD: No, no. We are part of a so-called Technical Department.

LZ: Ah ha, great;

JD: It was good of you that you asked me this question, this is a good question. Experimental Studio, in terms of the infrastructure, is a part of the Technical Department of the---

LZ: Ah ha, now it "came out."

JD: . . . but with the addition that it [Experimental Studio] has its own itinerary [its own program of activities]; that is that our itinerary has specifically dedicated people for [the purposes of] this itinerary. But actually our studio, overall, is a part of the Technical Department.

LZ: So the Technical Department gets the money?

JD: [Yes] it divides up the money.

LZ: And may I ask you about how much? Is it annually?

JD: [Yes] it is annually. It depends upon the overall budget which the Technical Department receives. Last year, it was approximately twenty million Slovakian crowns [about \$606,000]. [This is how much the entire Technical Department received] for the entire Technical Department. Basically, this year I [as program adviser] have received one million Slovakian crowns [about \$30,300] only for upgrading our computers [buying computer technology].

LZ: Great.

JD: For your information—inclusive in this amount of money—we bought a Quadra with 40MRam, two sample cell. cards—2x32 mb Ram. We bought interfaces [two of them, MIDI Mixers]—Mark of Unicorn. [In addition] to that, a color monitor, and some other things inclusive in this sum of money. This was the extent. Hmmm, another question of how are our employees paid. The technical support employees, who are the service people and actually thank goodness us also, we are paid from the budget of the Technical Department of the Radio [Broadcast Station]. The program advisers [Duriš and Zmeček], who are actually planning the itinerary, they are also partially paid by the budget for the Radio's program. So they have in essence two salaries.

LZ: OK, great.

[Turned off tape recorder.]

LZ: Question # 3. When were instruments added here, what and when, and the like? JD: Hmmm, the whole history, from the point of view of [the] technological development was upgraded during the course of five generations [the studio was changed five times]. The very first studio was located at Lenin Square—this was a totally different building under the name of Triková režie [Sound Effects Studio]—this was the beginning of which I talked about earlier—in 1965, where only special effects were created. Later on, Mr. Janík will describe [to you the] technical finesses of this studio. Then, after two years [1967] the studio's status was changed to Experimental Studio. It changed location, in the same building [located on Lenin Square], but it received a bigger room where new technology was installed, and where the technology, I think, was completely changed twice; at the Lenin Square. In 1985, we moved to a new building—here—and in this new building at the present time, we are in the second phase. The first phase was the equipping of analog technology—this is the Studio A where we have the multi-channel analog system—and currently, we are completing the digital Studio B. This is how we name the studios. In terms of numbers and dates, Mr. Janík can provide you with more information. LZ: Great.

#### [Turned off tape recorder.]

LZ: How is the music disseminated? Is there a formal way of how the music is disseminated? Or something like that?

JD: Our archive of our studio, currently, lists about 120 autonomous compositions from the entire history. Out of this archive, our studio prepares [a radio broadcast] for regular broadcasting—it has its own broadcast under the name *Extempore*—which is minimally one hour long of electronic music each month. Then in addition we have special broadcasting profiles [of various aspects of electro-acoustic music]; we can have them be two to three hours long if we have good material and if there is interest. This means, this is one way of presenting the music, via broadcasting. Both of these broadcast programs are broadcast by the entire national broadcast system, [in] the entire Slovak Republic [the program is heard in the entire Slovak Republic]. The second way of presenting this music is via concerts, where we annually organize at least two large concerts, each being made up of a mixed program—this means that we invite guests and present our own compositions or we organize concerts that purely profile [various aspects of electro-acoustic music]. It all depends on the number of compositions created during the previous year. And the third way is through a form using media which are outside the broadcast system. This means, with the cooperation of the Radio [Broadcast Station], we [Experimental Studio] organized the Center for Electro-Acoustic and Computer Music [CECM]. This society released a CD [Elektroakustická hudba]---this is an anthology---of music. In essence, this is the only CD that has been released until today, and is the only complete information about Slovakian electro-acoustic music. In the near future we are planning to release another some kind of a CD. For now it is all still [stored] in the computer. So these are in essence all the ways of dissemination.

## LZ: So can I ask—

JD: Oh, sorry! There is a fourth way. It is a way which is the exchange of information with radio stations, and non-radio stations, and with other "partners" [studios or individuals] which are interested in electro-acoustic music. This means, upon the request or up front negotiations, we send out information in the form of cassettes or written texts. So these are the four ways of dissemination of electro-acoustic music.

LZ: OK. Can I ask you now something else about this question [# 5]? The compositions are kind of composed for the Radio Broadcast Station? That is, the Radio Broadcast Station will say, 'Johnny, in a month we have a concert. Compose something for it!'?? Yes? JD: In essence, something like that. We also have, it can be said, a regular "rhythm" of production of electronic music [electro-acoustic music is composed on a regular basis] which is determined by the financial status. We distinguish between two types of compositions. One is commissioned, where the composer receives financial, that is, money for the composition. The second is a type of which we call "studijnî" [study, hence etude] composition, in which in essence, the composer tries out some of his tricks and some of his things. But out of this [experimentation], a composition is created and then registered in our archive. But this composition [the composer] does not receive any finances for its authorship. Each year we receive some amount of money for composers' commissions. Together, the budget and the capacity of the studio of only electronic music make up about

forty-five percent of the entire studio's capacity; of the studio's capacity of production. We produce about three, four electro-acoustic music compositions annually. It is not a lot, but in essence, we produce what we believe are high quality compositions. Besides, we are able to create several "studijnf" [etude] compositions which are apart from our plans. This means for example, if a student comes to us to apply to use our studio, he will be scheduled after regular production hours during nighttime hours. He can work on some of his experiments and work on some of his things.

[Turned off tape recorder.]

JD: The structure is such that, in essence, within the scope of our own progam [schedule]—within the scope of our own dramaturgical program of the studio—we actually specify the genre and order the compositions that are interesting for us to produce. So we do not produce so many compositions. And if we should produce three top quality compositions per year, then we will produce at least one or two; there are sometimes some rejects. In order for us to remain in the tempo-set standard level of the exchange of information and performances on the international forum, so we watch our quality precisely which means [that] we are very selective of whom we invite to work here. So overall we do not work extensively in quantity but in quality. And during all of this then, in the case when we do select a student and after an interview with him, we can give him [the] opportunity to realize some of his things. There does not exist here a system, one like yours [CREAM] or so, that upon the request by the student, . . . hmmm we do not support students' activities. We do not support [the idea] that our studio be used as an educational studio for students [in other words, this is strictly a professional studio]. [Turned off tape recorder.]

LZ: How are the compositions archived? Who does all of this, and so on? JD: Like I said earlier, the archive has about 120 autonomous electro-acoustic compositions. We are creating the archive. The master stays here [Experimental Studio], and the copy of these are placed in the central archive of the Radio [Broadcast Station] which uses them for broadcast purposes and [in] other parts of broadcast programs. As far as the format is concerned, we have [a] standard format consisting of normal analog tape, without editing.

LZ: Yes, stereo?

JD: [Yes] stereo. In recent times, the recent compositions we archive them on DAT format—on Data Streamer—using DAT tapes.

[Turned off tape recorder.]

LZ: More about the archive.

JD: In the archive, we also have multi-stop [multi-track] recordings which originated over time—it can be said from the beginning of 1967, when was archived [using this system of archiving] for the first time the composition Orthogenesis by Jozef Malovec, 4-track version. These recordings are archived on regular 4-track analog format [tape], without noise reduction. And it can be said that at the present time these tapes are in the archive only for historic purposes, such as for historical research [such as what I am doing]. What is interesting is that the archive is not made up of purely non-electronic music. This means, compositions which are for instrument, tape, or some live performance. These [compositions] are archived in part using a tape format, which means either analog or DAT. And the second part [is that] we archive them in the archive of scores, which we try to preserve for historical and documentary reasons. The documentation of the performances could be on stereo recording or multi-track recording, but at the most on a 4-track system. We have never used more than a 4-track system. During a period of time in the past, we used a Beta processor, and [the] 4-track system was recorded on Beta—located in the back of the room along with the Data Streamer—unto which we recorded digital signals on the two tracks, and on the other two we recorded B/C modulatory signals to use for low

frequencies. But this is fairly unreliable due to the bleeding, and so we used it only as an intermediary carrier. Currently, the use of these multi-track systems is very questionable and problematic. I think that something will appear with time, but this system is not advantageous at the present.

Andrej Zmeček [AZ]: I would like to also add to what Juraj was talking about, that the recording with the recording equipment, the quadrophonic system is actually a file of inputs. Actually, the possibility exists to store on DAT, and the second possibility is to store as a computer file, which looks towards the future as the standard. And I believe that in the future, when the media would like to use just portions of this file, or use the file, or edit the file, or look for the frequency sample, or for sound poetry, etc. [then one still has the ability to edit]. Therefore, everything that we did last year we have everything stored as a computer file.

LZ: Ah ha, great.

JD: We have it saved on the streamers [Data Streamer].

LZ: OK, great, great.

JD: So it is digital.

[Turned off tape recorder.]

LZ: Now we will talk about the aesthetic; that is the overall aesthetic [of the Experimental Studio] and the personal one of Mr. Duriš.

JD: The electro-acoustic music, from the beginning [of the Experimental Studio] was heavily dependent upon the available technology; possibilities that were available to the people and [the] studio. We can document this just from [examining] the archive records, and also from our CD in which through the change of the technology from analog to digital were changing also the basic elements; that is, all compositions that are there [archive and CD]. But in essence, a general opinion here is that the presently available technology is so saturated that we can have enough expressive compositional possibilities. This does not mean only competition against time and new technology, but the repertoire is already rich enough from the time of analog technology, which is currently-analog procedures are today's aesthetic legacy [analog technology has left a strong impression upon today's digitally produced music]-we are currently using both analog and digital aesthetic. This means in our continuous development-now from the point of view of the development of technology—the studio did not make a turn from, and jump from the old classical discipline to the new digital technology. But gradually we are elaborating both disciplines in parallel, and we try to incorporate both aesthetical systems during the compositional process. This means, we do not specialize in purely computer composition nor in purely analog [composed music]. We do, it can be said, a kind of a "mixture" of both. It depends upon the intentions of the composer, or the expertise of the composer with which he would like to express himself. Due to the hypothesis described earlier that we believe that the technology is saturated enough for expressive purposes of the composer, we [Experimental Studio] developed—from a historic point of view and also due to the isolation status that existed in our country, and also due to our [Experimental Studio] own opinion and analysis of electro-acoustic music—our own view and opinion of a certain type such as melodic composition, structurally rich—using colorful, large—structures. This would all go under the positive results [due to the negative influences just mentioned]. Now I would like to talk about the negative aspects. We did not devote much time on rhythmic and structural compositions. I think that currently we will compensate this deficiency ourselves by involving ourselves more in the structural aspects, and in parallel we will also develop the others of which I talked about.

[Turned off tape recorder.]

LZ: Personal aesthetic of Mr. Duriš [we will now discuss Duriš's own aesthetic].

JD: I am composing for ten years now. I have composed several compositions that are located in the archive. I received several international awards for these compositions. Basically, I would currently be interested with pure electro-acoustic music ... [Turned side of cassette.]

LZ: We are continuing to talk with Mr. Duriš about his own personal aesthetic of his electro-acoustic compositions.

JD: Basically, I am in the same category of interest that Bourges developed; or I do not know how I should describe it. I am interested in the style of programmatic electro-acoustic music, which means that in my own electro-acoustic compositions I have an interest in some philosophical thought that could be somehow incorporated into the medium, into this electro-acoustical medium. In the present, lately I am interested in multimedia activities [of] which I—together with other artists—realized some kind of installation in 1989 named, Portrét [Portrait] and an eight-minute long video, which could basically be also classified in the programmatic music category, as it is known in America. And I try to develop some theme in a philosophically abstract way, not necessarily from purely musical elements [he does not compose a composition derived from only musical elements]; also from another point of view, from the practical point of view in terms of the realization of the composition, I try to essentially incorporate and use technological elements that are available in the studio with equal merit. This means, besides the purely digital computer technology, I try to quantize or form ... Hmmm, ahh out of this sentence will become nothing [nothing will "come out" of this sentence].

[End of conversation.]

The interview of RNDr. Miro Bázlik was taped in a restaurant near the

Experimental Studio in Bratislava on Saturday, July 10, 1993, at 11 A.M.

LZ: July 10, 1993. I am talking here with Mr. Bázlik and he will tell me about his [electroacoustic] compositions, where he composed them, where, and a little bit about his aesthetic.

MB: I began, in essence, with one composition and immediately created a second one. The first was named Adieu [1970] and [the second], Aria. Both are characterized by the fact that they originated from live music. Adieu is from the Fugue in B Minor from The Well-Tempered Clavier which I played myself, and which I composed for the Czechoslovakian Radio. And from a two-year long inspiration I was convinced that when I write an electroacoustic composition I will base my aesthetic on something that is very permanent. As an example, I am using a statue, made of stone, which already exists and needs only to be discovered. So my first attempt was to discover what was still hidden in the fugue while we are listening to the fugue. Bach is talking to us using the fugue and we can still discover something new.

LZ: In the fugue?

MB: [Yes] I am talking about the laws of the fugue. In Adieu, diatonicism and chromaticism are placed against one another, freely and very tensioned. So I put it into another key basically by using mixers and sometimes filters and combining more sounds. But there are also other things such as, out of a canon by Bach which used sixteen voices, and the effective aspects of dramatics of the fugue and similar things. Aria was made from my film music. And the idea there [Aria] basically was my reaction to the occurrences of 1968 [invasion of the Warsaw Pact Armies]. Aria was created in 1970 and everybody wants to sing his own song and tries to sing, to sing, to sing; and finally when one has gotten to the point of being able to sing, they stop you but you try again and something "comes out." But again, together with Adieu, Aria has [is characterized by] the fact that it

consists of live recorded music-even of the human voice-but I used only filters and no concrète sounds. Then I continued somehow [to explore electro-acoustic music] and fell interested with the idea of Bach and the overall aesthetic of softening and discovering in the music, and the possibilities of live music using different instruments [i.e., electronic means] and circumstances [electronic means], thus looking at music from another point of view like finding out what else is possible to do with the music. This means to try other possibilities what the human ear can still differentiate, for instance other harmonies, combining of different sounds what is still considered as harmony or what is not, and dissonance and other things. This problem interested me. Well, and so between 1970 and 1972 was created a composition—a cycle—Spektrá [Spectra] which I subtitled, metamorfosy and komentarie [Metamorphoses and Commentaries] to the first part of [Bach's] The Well-Tempered Clavier, but in the sense that three [there are six movements/sections altogether] of them are metamorphoses of the direct sound of the piano. In these three [movements/sections]—but extracted from big factors, and factors that are grouped into four, in the frame of the entire The Well-Tempered Clavier which means that there are six [preludes and fugues]: C-sharp-minor, D-sharp-minor, F-minor, G-major in which I made G-major as G-minor, then A-minor, and B-minor. So these four [there are six] segments [movements] make up the entire composition [Spektrá]. The first [movement] for example, Pieta, is made up of the Prelude and the Fugue in C-sharp Minor. So there are instances that the prelude and fugue are going together and sometimes are also transformed, or are isolated and then are searching for each other and the dependency of each other. I was interested, to put it simply, how much the prelude with the fugue harmonized with each other, etc. Then there was D-sharp Minor, in which the fugue is transcribed unto the sound of the tam-tam which is electronically somehow interrupted. So this action [movement] is named, Imersion which means immersion. So this is the second one. This actually [is] a metamorphosis [see title above], but also a commentary [see title above]. Then F Minor; there I completely did not use this principle and there is strictly used the human voice, and the tam-tam sound, and the sound of cymbals which comprise the commentary to the original Fugue in F Minor. The G Major is again a metamorphosis which is named, Concertino. Oh excuse me, in addition to the F Minor, the commentary is named Apokalypse, because the fugue itself inspired [me to see] a vision of the apocalypse. Therefore, I composed my own apocalypse based on my vision of Bach's apocalypse Fminor Fugue]. So this is the commentary. Well, and the G Major, I named, Concertino where a concert principle-actually a stochastic-is used. The theme of the fugue was randomly "cut up" to pieces [he took the theme apart] and then put differently back together. And this random ["cut up", revised] theme was used as a common denominator in Concertino, like in a passacaglia that would be electro-acoustically together with the concerto principle, which means recorded, and mixed by chance, starting up, and precise structure.

The next [electro-acoustic composition] is *Aria*—I have already talked about it which is based on film music. There is mainly used the human voice which would like to sing fully but after great difficulties and interruptions sings fully up to a chorale—I would like to say an emphatic chorale and theme—but suddenly is brutally interrupted with some sound which symbolizes, in essence, some totalitarianism or some anti-inhibition and antioppression which happened in the 1970s. And it ends with the attempt to fully sing again.

Well, and the last one [electro-acoustic composition among these six] that I started makes use of the Fugue in B Minor [*The Well-Tempered Clavier*, Book One], which [this]*Adieu* in essence symbolizes a double meaning. Not only is this composition sad, but [it] also [has the feeling of when] people say 'good-bye' when separating. This is like in Bach's fugue [B Minor]. The theme—the theme has the feeling as if Bach were saying 'good-bye' with all twelve tones—has all twelve tones, and he gradually says 'good-bye' to each tone. And there [in the fugal theme, and in the act of saying 'good-bye' to each tone] are also sensitive tones that caress, as I would say ... [he sings the fugal theme of the B-minor Fugue, *The Well-Tempered Clavier*, Book One] ... and then it goes to the dominant. And in, *Adieu* the theme is also in the harmony, melody, in every parameter. So I think that the title, *Adieu* was exclusively forced unto me by the entire structure and the concept that Bach had [in this B-minor Fugue]. Well, and in addition, *Adieu* served me the purpose of saying 'good-bye' from the tempered piano, that in essence this [*Adieu*] was my farewell to the tempered piano. But by the way, in regards to my philosophical, aesthetical opinion, I searched in that time for some security basically, and I found it in Bach's music; basically, in the amazing, hmmm how shall I say it?—

LZ: Genius.

MB: Well, he is-for me-the basic "knot" of European culture.

LZ: Well, of course. [To best explain the information that Bázlik has just provided, I am resorting to Miroslav Kaduch's dictionary, *Česká a slovenská elektroakustická hudba 1964-1994* [*Czech and Slovakian Electro-Acoustic Music 1964-1994*], 1994:"... six movement [composition], *Spektra* [*Spectra*] (1970-75). The basis of the material present the transformation of [Bázlik's] piano recordings of Bach's preludes and fugues (C-sharp minor, D-sharp minor, F-minor, G-major, A-minor, A-minor) from the first book of *The Well-Tempered Clavier*, to which the composer creates compositional commentaries and metamorphoses (Árie, Adieu, Apokalypsa, Pieta, Concertino, Immersion). The composed movement, Adieu from 1970 expands upon technological trends of the time, originating from the metamorphosis of the instrumental sound. In the movements, Concertino and Pieta from 1972, we come across sensitive filtration of Baroque (Prelude in G Major of *The Well-Tempered Clavier*) sound material."]

MB: So to that [aesthetic] I "arrived" at. So [I "arrived" to the] spirituality and also the incredible structure[s] developed in all kinds of directions; structure[s] that "blossomed" and calculated [filled] with everything that can give a person something [that can "speak" to a person]; and also in the music [in other words, the music also gives a person something; the music "speaks" to a person]. But not only in the music. I see Bach philosophically, because every fugue is, in essence, a kind of a drama about some specific subject, as [for example] 'to be.' 'To be' in the sense of [Martin] Heidegger [1889-1976] of 'to be and time.'

LZ: Ah ha, I understand.

MB: Well, so much about these compositions. Then I had about a three year long pause, and in 1975, I—still under [the direction of] Mr. Kolman—was invited [to the Experimental Studio], during which time I worked . . . They already had received new instruments, so [that] I had the opportunity to create better electro-acoustic composing. And so I created, *Simple Electronic Symphony* [movements: Sonata, Cantus firmus, Madrigal, Giaccona] which is on the double CD [*Elektroakustická hudba*]. In it I tried to create more complicated . . . but as a cycle—but as if all in one—a cycle more or less independent, but bound together with one idea—in essence a cycle—as a symphonic cycle. So in this composition, I would say, one principle out of numerous principles . . . But I will explain it to you more simply. Well, turn off the tape recorder for a moment, please, so that I can . . . [think about it somewhat]!

[Turned off tape recorder.]

MB: I have to admit that the original idea for this composition [Simple Electronic Symphony] was actually to compose an opera with electro-acoustic music. And indeed I preoccupied myself with Shakespeare's *The Tempest* fairly intensively. And I wanted to write an opera. And this application [to write this opera] was rejected [probably by the Czech Music Fund] not only [due to the fact that I wanted to write it]—I wanted to write it in English—in English, but it was rejected even [if I had written it] in Slovakian. Basically, it was indicated to me that this is a theme that is almost "anti-state,"— LZ: Yes, I understand.

MB: ... and I was told that 'What do you want to "do" with a theme like this?', and so on. And I was told that even 'The theater could not perform it,' and that 'I would not get my stipend.' Basically, I had to leave this idea. So in essence I [emotionally] compensated for this [situation] in the [Experimental] studio that the ideas that I already had from The Tempest, I somehow used and placed them into Simple Electronic Symphony. [Just a side note. Again, by using an electronic studio for the release of the frustrations and disappointments-and almost the only means for an expressive channel-composers nonetheless were able to use their expressive ideas but used them in other media.] In it [Simple Electronic Symphony] are principles like those which we can find in Shakespeare's The Tempest, such as the use of aria—the human voice—and so on; various things such as the poetic use of the third tense [he, she, it]. And in the fourth movement [there is] also a choral finale. And in the last [fourth] movement in which I used—and I must admit—a new and another principle which is not used in the first three movements, the principle of the Golden Mean, which I used in all possible ways: in rhythm, small rhythm, big rhythm; in sectionalizing [of the movement]. In this fourth movement everything is based on the principle of the Golden Mean; one could call it "Passacaglia of the Golden Means." That is, all material used in the previous three sections is synchronized on the Golden Mean, and in essence this is the new direction. There [Simple Electronic Symphony] I got the idea of that actually the king who is wealthy, so 'gold' [gold as in Golden Mean] was symbolically agreeing with me: so if a king, why not 'gold'!? And Jesus is portrait with glissandi—big glissandi—that are both up and down, and similar things are somehow expressed fairly isolated. They are not strong enough that they can musically express some action, like it could be expressed in *The Tempest* itself, such as huge glissandi up and down and similar things, [which symbolically represent virtues] such as belief, poetry of love, or basically forgiveness, etc. So I personally believe that by creating this Symphony in some way, I made up for what I strongly wanted to compose in the opera. So I substituted this Symphony for the opera which I always wanted to do. So it can be said that this Symphony is inspired by Shakespeare's The Tempest. LZ: Yes, great.

MB: Well, then we can talk about two not-too-significant electro-acoustic compositions based on and made with folklore music, both in 1977. And in 1983, I composed, again based on folklore music, and based on the structure of folklore music, *Bačovská elégia* [Sheppard's Elegy], and Balada [Ballad] in 1977. Both were successful. As a matter of fact, *Balada* received a first prize in the 'pre-folkloric' category [I do not know which festival, but probably Bratislava Musical Festival] which surprised me, because I created it [Balada] "just on the side" and I told myself, 'I will play around a bit with folklore music.' In 1983 [Bačovská elégia], I was not so successful for I received only third prize. But I would say that I was convinced of the fact that folklore music material is just as, like any other—

[End of tape.]

LZ: OK. We are continuing to talk with Mr. Bázlik and he is talking about folklore music. BA: Well, so—

[Turned off tape recorder.]

MB: Well, in short I would like to say that I used folklore music without any preconception, but for me it had an importance [in] that I proved to myself what I was convinced of that actually classical expression uses folkloric material. So there is nothing wrong with this, and actually it is a serious matter, and it is not necessary to be ashamed of that, or to underestimate it. For example, I was very surprised in *Bačovská elégia* of the

use of fantastic, beautiful sounds of the cimbalon, for example, which after small edits were surprising, interesting, and exotic. Such good things [sounds] should be made use of. But it is a shame that we do not.

Well, later what I was enthusiastic about was ... in 1980, I had the opportunity to compose the so-called Ergodická kompozícia [Ergodic Composition] in which I applied the First ergodic theorem from the ergodic mathematical theory-the theory not at all trivially used—a limited phrase which symbolically is described as: mathematically the phrase is proving the stabilization theory of physics, which, for example-if I would like to illustrate-deals with such things as if into a pipe would flow a stream of water with big turbulences. So gradually the turbulences will go away, and in the end in a longer pipe [he prolonged the pipe mentally, symbolically] there would be no turbulence at all [so the longer the pipe, the less turbulence]. In other words, the water stabilized one could say at the end of the pipe, and is uniformly sitting in the pipe. In other words, the water is touching the pipe at all points of the cross-sections of the pipe. Therefore, we can say that the water at this point achieved a constant stabilized speed; well, not constant everywhere, but basically it does not fluctuate. We achieve a constant speed at every point. And so I applied this theory using high mathematical probabilities formulas to the transposition of tones-rows of tones-and actually also to harmonies, and created stochastic contra-points [counterpoint]. So then I also applied this theory unto the length of pieces of [magnetic] tape. Well, and so was created, for me I can say, a very interesting matter that I could not have created without these things, for instance statics—gradual static—which created very interesting harmonic sound relationships. Well, all of this [the above described mathematical system] inspired me that I became preoccupied with it, and even created based on this system, Koncert Celori, where I also used this Ergodická kompozícia on seven [tape] tracks . . .

#### [Turned off tape recorder.]

MB: I do not know whether or not you know that I studied math in Prague. I graduated in 1956 from Charles University in mathematical analysis. So such things as I described before [mathemetical formulas, etc.] are of course close to me. Even if the interval of time that I have been away from it [the university] is great, so I am still thinking with math in mind, even when I am composing. For example, specifically in *Simple Electronic Symphony* with the Golden Mean, and so on. But for the first time [*Ergodická kompozícia*] I used high [sophisticated] math in the electro-acoustic studio where, I have to say, that actually I did such highly qualified work with only literally "Stone Age" equipment, because at that time when we did not have the necessary equipment for our work, everything had to be calculated on old calculators with simply a huge number of calculations; and the slicing to the centimeter, and even smaller, in essence to the millimeter, glueing together. So my beloved and precious colleagues had to work very hard, who by the way were instrumental in all of my [electro-acoustic] compositions, such as Jan Backstuber, Ing. Peter Janík to whom I am grateful for a big-[Turned off tape recorder.]

MB: Well, there emerged a seventeen-and-a-half minute long composition [*Ergodicka kompozicia*] in which, as far as I can remember, the first eleven minutes are created very strictly according to the calculations, and the rest was overall formulated. Maybe there is more of the strictly-composed section, but at least two-thirds are composed so [in such a way]. So the entire composition was pre-prepared. Incidentally [by the way], there was created a scale from tam-tam sounds, a thirty-six scale degrees scale, a so-called 'tam-tam half-tone [scale]' we created. It was also very interesting how accurately—it was created by only using the human ear—how accurately we could recognize the next scale degree. Well, and there was recorded in essence a scale of seventy-two tonal scales with the help of one cellist. And everything else was done based on the calculations and applications of ergodic

formulas on the fundamental theme. This composition benefited me in that I was convinced for the rest of my life that every law which is fundamental in the world—in the sense that the world exists—has probably also meaning for music, because we can perceive with the help of music this fundamental law with regularity. And it is always interesting for the existence of man to know what conditions exist and are in the material world—which one is around us—and also the spiritual world, because I believe that everything is very connected to each other.

LZ: Can you tell me about this "mathematical" composition, what was its name again? MB: *Ergodická kompozícia*.

LZ: And when was it composed? What was the year?

MB: I created it in 1980 in the electro-acoustic studio [Experimental Studio].

LZ: You mean in 1971?

MB: In 1980.

LZ: Oh, in 1980. Oh, sorry, sorry, sorry. Great. And could you tell me quickly where all of these compositions were realized? That was all at—

MB: They were all, all, all realized at the—

LZ: At the Slovakian Radio Broadcast Station [Experimental Studio]?

MB: Yes, except one, to which I am now slowly coming [to]. Well, this I want to add that I later also used *Ergodická kompozícia* as *Epoché II* [Epoch II] to which a pre-composed solo cello part is added. And *Ergodická kompozícia* plus solo cello is titled, *Epoché II*. And it is, in essence, a concert for solo cello with tape.

LZ: Yes, with tape.

MB: And then there is a cello concert without tape, titled *Epoché I* [which is] for orchestra and cello. By the way, the same cellist-Mr. [Jozef] Podhoransky-who recorded the music [Epoché II and Epoché I], he won a prize [he does not say where] with these compositions, and in essence inspired me with his playing, and [inspired me] to my composing of this cello concert and to Ergodická kompozícia. It was one of the greatest working cooperations [for Mr. Bázlik]. Well, there also exists Epoché III, in which the tape is together [recorded] with the cello concert, in which the seventeen-and-half minutes are divided into seven parts which are entering into the cello concert. [So he takes Epoché II—both the tape and cello part recorded unto one tape—splits this tape into seven sections, and adds these seven sections into the recording of the solo cello part, thus creating Epoché *III.*] So for example, there is a cadenza where the cello plays alongside with the tape. So all of this I finished [Epoché I, II, III] in 1983 [actually 1984], as I was remembering earlier. I do not claim that this took a short time, but it was necessary to conceive, to develop the idea how to put everything together, how to compose the cello part. And basically for me it was interesting for example to see how the ergodic law, and perhaps the law of dodecaphony or serialism, in essence I very nicely combine [he combines the ergodic law and serialism and dodecaphony] without any problems. And one can say in Epoché II a meaningful counterpoint exists. In other words, a counterpoint made out of various worlds, I would say. In other words, a sort of a "shift": on one side there is the ergodic law, and on the other side the law of serialism, and they both function together. LZ: Well, of course. I understand.

MB: And this was for me very was fascinating and somewhat of a discovery, because usually as a rule one claims that one should not mix together what does not belong with each other, because impurities will emerge. And I personally believe that if one knows that one is mixing different groups [styles, techniques, etc.] together, then one can mix together anything, probably. And then, in this sense of mixing I applied this very clearly and consciously in my latest electro-acoustic composition which I created in Budapest, in the Budapest studio [Magyar Rádió Elektronikus Zenei Stúdiója, MR Budapest] with my colleagues, when we were invited. And this composition is entitled, *Balada o dreve* [Ballad of Wood]. It was, in essence, commissioned on the basis . . . it was based on fragements of Bartok's Viola Concerto.

LZ: And what year was it [composed]?

MB: 1987.

LZ: OK.

MB: In the autumn of 1987. Well, I think that we were there for about ten days. Well, the basis was taking fragments of Bartok's Viola Concerto and even in one moment I am exclusively citing the theme of the viola of this Concerto. But otherwise, the structure [of the Concerto] is used in different ways, especially in augmentation. The rhythmic/melodic structure is somehow used and applied for example by the sound of wood-the breaking of wood-then also Styrofoam, and various other things, for example the sound of a viola. So there [MR Budapest] and then I realized-according to my previous compositional experiences—that it is OK to mix all these different sounds together. So I was very pleasantly surprised when I discovered that my courage returned to me due to [the following]: in the end, out of the new sound of the Styrofoam I was successful to make a chorus—a chorus-of-Styrofoam sound—where actually the Styrofoam is singing with ['with' meaning 'like a'] a human voice. In other words, we did not need to use a real human voice, but transformed the sound of Styrofoam so successfully that we actually achieved, we can say, a somewhat of a mystical chorus. So I would say philosophically that it is almost comical [to use the sound of Styrofoam in a composition]. But actually the humanness which is "put" into the artificial material does not disappear, but in the end when man knows how to use it [artificial material] in a proper way, it [artificial material] will sing back to him with a human voice. [In other words, whatever material man uses to compose with, he will in return achieve and receive back a feeling of human spirit if he puts his soul into the composition.] It is a composition about thirteeen minutes [long] ... Hmmm, no, eleven minutes and something [actually 10'58"]. Well, we [the colleagues who went with him to MR Budapest] actually created it for the Budapest Radio Broadcast Station.

LZ: Ah, Budapest Radio Broadcast Station?! Great.

MB: It was actually composed on their [Budapest Radio Broadcast Station] commission [request].

LZ: Yes.

MB: There, of course, also exists a copy in our Radio Broadcast Station's archive where it can be made use of anytime.

Well, in essence, this is basically everything regarding my electro-acoustic compositions. I, of course, have other plans to compose [more electro-acoustic music]; that I would gladly like to do. Thus, I am currently studying some things about the so-called 'geometry of sound.' There were published some sources about this subject. I myself have been interested about Xenakis's---

### LZ: Xenakis.

MB: ... Xenakis's vision [theory, etc.]. I was asked to teach Xenakis's theories during my part-time employment at the Vysoká skola muzickych umení [VSMU (Academy of Music and Drama)] in Bratislava at the department of composition. So I was forced—thank God—to study everything [of Xenakis's theories]. So when I am now widening my knowledge about the 'geometry of sound'—and I have also my personal ideas—so that [I will be successful in my compositional endeavors]...

[Turned off tape recorder, because he did not feel that this was pertinent information.] MB: Now I am past my age [I am old], and during my active years I was fairly heavily involved in pedagogic responsibilities. For three years I even taught selected sections of classical math which had meaning for philosophy of mathematics and mathematical logic, and also from the point of view of the meaning of philosophy of mathematics. So I had to acquaint myself with a large amount of things [all the mathematical principles that he learned and knows of and likes] that could be used in music. And I think that these things are applied best especially in electro-acoustic music. LZ: Yes, of course. MB: So I think that this is— LZ: This is everything?

MB: ... everything that I could tell you.

LZ: Great.

[End of conversation.]

The interview of Jozef Malovec was taped in his apartment in Bratislava on

Saturday, July 10, 1993, at 3 P.M.

LZ: July 10, 1993, Saturday. We are talking with Mr. Malovec, and he will tell me about his electro-acoustic compositions. He does not have to tell me the year of each composition [because I had a list of compositions realized at the Experimental Studio] and everything else. But [he should tell me] what he tried to "say" with each composition, and where he realized them, and a little bit about what his aesthetic is.

JM: Well, before I started to compose autonomous electro-acoustic music [compositions], I was preoccupied during my employment as an editor at the Radio Broadcast Station with composing electro-acoustic music for the Radio Broadcast Station's program, and the Television's program—music that was used for immediate broadcast purposes. These activities occurred in the beginnings of the 1960s, when actually it was still impossible to consider any aesthetic of some new music, because the official aesthetic was only Social Realism. So during the course of time, people [composers] became accustomed to the fact that mainly in films and broadcast plays [Hörspiele] totally different "sounds" and effects appeared. And because I worked in the studio at that time, these conditions gave me the opportunity to start to work in this field—in electro-acoustic music. In order to create this music, we did not need at that time to have sophisticated [instruments]. It was sufficient to have two tape recorders, some generator, and some filters; and with this [equipment] already we could create something. Well, then in the Czech state of Czechoslovakia began an initiative of the so-called Plzeň Seminar of Electronic Music [First Seminar of Electronic Music] organized in Plzeň. And there we [Slovakian composers] attended as a group of composers from the Slovak state of Czechoslovakia where we also presented one's own personal creations, still not autonomous music, but already very precisely recorded used music [music that was used for immediate broadcast purposes]. Well, and we received an opportunity-specifically I received the opportunity-to compose music [Orthogenesis] for the Anthology of World Poetry which was also released on record later by Supraphon. So I told myself 'when this composition will be released on a record, then it [music] will have to be something really unique,' because I told myself that 'this record will stay with us for a long time.' So I took great care with it [Orthogenesis] and I received very interesting material [with which he composed Orthogenesis for this anthology]. I told myself that 'this material is too good to be used for used music' [music that was used for immediate broadcast purposes] and I began to process the material into some kind of meaningful shape [form]. And I cooperated back then with [sound] engineer, Peter Janík; that is, as a technician who helped me a great deal, especially with regards to mixing and editing and these kinds of things. Well, I needed somebody who knew how to do these things as they were done here in Europe at that time.

LZ: Of course. A Tonmeister?

JM: [Yes] Tonmeister. So at that time I greatly admired the new French philosopher, Teilhard de Chardin, and until that time we were only able to study his philosophies from hand written copies of his texts [in other words, Chardin's texts were not published in Czechoslovakia at that time]. And there I was interested in the term 'orthogenesis' which means 'gradually infiltrating the complexities of the universe,' simply stated, but actually it is much more complicated; but it is de Chardin's unique theory. And so I told myself that 'this theory'—it is also a material which I could use in this composition—that 'it could be realized as an independent composition and through it [Orthogenesis] express this theory.' So in this composition I attempted to do so, and in fact I achieved this goal, and in the end I submitted this composition to the First International Electronic Music Competition at Dartmouth College, where it won the second prize [Second Finalist]. And later, I improved this composition after this composition was [unfortunately] released on a record. And together with Mr. Janík, we transcribed—at that time we had just received a new 4-track tape recorder-so we created a 4-track mix. And this [version] we presented at the Marge Musicale Florentino in 1968 with a great success. And through these successes, our [Experimental] studio at the Radio Broadcast Station tabulated [gained] a special respect, and other composers came to work there, our domestic composers and also [composers] from foreign countries. So unique conditions came into being. Of course these conditions were created a long time ago during the long developmental process—via the used music [music that was used for immediate broadcast purposes] in television at the [Television] studio headed by Ing. Stadrucker. I hope that you will meet [get to know about him] him. Well, these studios' conditions ... All of my colleagues who immersed themselves into this type of work, who were courageous to start to do this kind of work, all of them became very interested [in electro-acoustic music] as a new expressive means [from] which everybody has the chance to extract unique things. Well, I personally think that electroacoustic music, from its beginnings up to today, is exclusively something totally new that has not yet been possible in music. Of course, it has its predecessors; predecessors in playing machines such as music boxes.

#### [Turned off tape recorder.]

JM: Predecessors of playing machines; that is, the seventeenth and eighteenth centuries, in clock music machines. However, this has its continuation in the player piano. Even Stravinsky composed for the player piano. Well, and now suddenly came the opportunity to record sound completely in detail and with great accuracy; and this is the tape for tape recording [and the opportunity to record sound completely in detail and accuracy was made possible by tape which is used in tape recording]! This is the possibility which never before existed. And now there was the possibility to manipulate the sound, [to make] various manipulations with the oncoming of new equipment such as artificial reverberation. Before the beginnings of recording sound on tape, the opportunity of artificial reverberation did not exist. And all of these moments [reverberation, etc.] which are making creations on tape, are something completely new, adventurous, discovered, and one can direct them in which way one wanted. In other words, this technology is actually something new and revolutionary. These are not only my beliefs but the same belief confirmed Olivier Messiean who was here sometime in 1988, and he said that he had the feeling that 'the only thing that is exclusively new in the twentieth century is the sphere of electro-acoustic music.' Well, and in this sphere [of electro-acoustic music] all of the possibilities were definitely not discovered in only one generation, because the technological possibilities are continuously being improved; there are constantly being build new synthesizers, new computer-created compositions. And the sphere of electro-acoustic music is really [has] a future. However, we must not forget that this technology is only a means, that it depends on who uses these means, and what he makes with them, and how he could aesthetically influence other people; because music, in my opinion, is a type of communication amongst

people. In other words, why are we composing music? Why are we musicians? Why are we composing music when we can make music live [he says 'live' in English]? But there always has to occur a form of communication between people, between peoples' souls, between peoples' perceptions, between the entire complex that makes up a human being. And in this [attitude] I see the meaning of music! And it does not matter what type of music it is, because the genre of and type of music there are terribly many. And some of these genres are meditative, are indulging from a philosophical up to a mystical level. And some [genres], of course, very easily influence the primary signal system [basic human understanding, specifically desire]. And these [genres] are more a question of business rather than a question of art. Well, this is the problem of what actually a person will assess more to be artistic: quickly demand a recording or a more serious contemplation over the spirit of man and communicate this spirit to somebody else; or opt for the primary signal system [desire]? [Malovec is here expressing his own opinion that he rather create art after a deep analysis rather than creating only music.]

But I diverted here a little bit. Well, this is how I came about to creating [my first electro-acoustic composition]. This was my first [electro-acoustic] composition and was also successful.

LZ: May I ask you who won the first prize?

JM: That was Pril Smiley, I think. [Pril Smiley won the prize of First Finalist, and Olly W. Wilson won the competition.] Hold on! I will find you the record.

LZ: Great, great.

JM: And then you can find out everything.

[Turned off tape recorder.]

JM: Then I began to work on other things [electro-acoustic compositions]. Of course, the following composition was more extended [than Orthogenesis]. Orthogenesis is actually only eight-and-a-half minutes long. The next [electro-acoustic] composition was entitled, *Punctum ALFA* which refers to the point from which life began in the universe [big bang theory]. This is actually a theorean mythological belief. And so I tried to express this idea in this composition which is almost twenty-three minutes long [23'40"], this second composition, Punctum ALFA. Well, then was organized a seminar in Smolenice named, Smolenice Seminar [Smolenice Seminars for Contemporary Music]. This was a seminar which was amongst others attended by Stockhausen, Ligeti, and the entire European avante-garde at that time [April 1-5, 1968, a time when democratic attitudes prevailed] in 1968. I created a composition [Tmel (Putty)] which can also be performed live [he says 'live' in English]-that is, live-by three performers on instruments which they could choose, to whom I wrote specific instructions out of which they chose passages by chance. And at the same time, each person's instrument is amplified with a microphone. And in addition, the sound [from the three instruments] goes into a ring modulator—a specifically made [ring modulator]. And in addition, into this ring modulator there goes a second carry which comes from a tone generator, a regular tone generator which is performed by [three] performers according to aleatory principle, which means the changing of degrees [knobs] of the generator. So actually it is a composition for six interpreters plus one who mixes everything together. And to all of this [music] there is a musical base which is-[End of tape.]

JM: *Tmel* was composed for the Smolenice seminars which were at the time organized here in Slovakia. It is a composition for, in essence, six interpreters of whom three of them play instruments and the [other] three play [operate] generators. And the products of all six interpreters are modulated in a ring modulator. And all of this then is mixed. And in addition to all this [music generated by the six performers] there is a musical base played that is recorded tape which is in stereo, and later was changed to a quadrophonic version. Well, this is an approximately fifteen-minutes long composition [actually 11'56"] in which

the performers react to what is on the tape, and according to that they select passages. And in this composition there is also the element of aleatory. And so in each performance the composition is somewhat different in one way or another.

LZ: Yes, of course. Each time when the composition is performed, it sounds different? JM: [Yes] every time it sounds a little bit different. And now when I had my sixtieth birthday, we performed this composition using three wind instruments, and instead of using a ring modulator-we did not use this setup-but we used a digital audio processor, Yamaha [probably SPX 90 II Digital Sound Processor] which was again operated by three interpreters. The instruments used were one oboe, one clarinet, and one bassoon. So an entirely new version originated. But the fundamental material remained the same. Using the same principles, I lately composed Elegický koncert pre klarinet, magnetickú pásku a digitálny zvukový procesor [Elegiac Concert for Clarinet, Magnetic Tape and Digital Audio *Processor*] where we sampled the sound of the clarinet and processed it using the digital audio processor. And to all of this there is an additional musical base in which is precisely pointed out when the clarinet enters according to the score. Here [Elegický koncert] it is not according to chance. So the clarinet begins, then to this is added the digital audio processor, then the tape begins. So this is composed in a way like a fugue. So this composition is from the latest time; it was composed in 1988. More or less I composed Elegický koncert, because here [Czechoslovakia] at the end of Communism there were many people who were directly murdered or tortured in prisons. So this composition is also my reaction to this situation. Well, otherwise this composition—approximately two years ago, or some years ago-was performed at the festival, Waršava Jeseň [Warsaw Autumn].

Well, but now I jumped too far ahead. Then, hmmm the composition entitled, *Tabu* [*Taboo*] is purely electronic, and is a reaction of when [1968] the army came here [Czechoslovakia]—the army of the Warsaw Pact—and immediately what was created [artistically] here in the former Czechoslovakia was suddenly labeled as taboo. Some people thought to have heard in this composition something erotic and sexual, but in essence in this composition there is a female voice which is in a way a moaning voice and there is also sighing. But in essence these sounds are a reaction against the situation that originated in 1968 [after the occupation]. It is a composition from 1969—in 1969 I composed this composition—when we still thought that we could somehow still "screw them [Communists] around" in some way, but it was impossible to do so. Well, this was this reaction. It is not necessary to see anything erotic and sexual in this composition even if the composition may appear to be as such at first. It is in a sense an expression of force and outrage; basically, the female sighs and female moans do not have an erotic meaning, but in essence they are expressing this attitude [force and outrage].

Then the next composition, from 1970, is *Theoréma* [*Theorem*]; theorema means theorem. I camouflaged this composition at the time connecting it with a [Pier Paolo] Pasolini [1922-1975] film who also had a movie under the same title. So this is kind of a controversy in connection to this movie. But in essence I had in mind the so-called *Poučení* z krizového vývoje [Advise from the Crisis's Development—a propagandist pamphlet], which was published by the Communist party [this pamphlet described the time of 1968— Dubček era—as a time of "crisis" in the Communist development, and also how to avoid such a situation]. And this entire composition is also a protest against the pamphlet, *Poučení z krizového vývoje*. But of course I could not state this publicly. But this [*Theoréma*] is my reaction of this situation.

Then I, after a long time—in 1975—composed my next [electro-acoustic] composition which is entitled B-A-C-H. This is a composition which borrows from Bach's work some quotes, and also makes use of the theme B-A-C-H [B-flat]. At the Bratislava Musical Festival was organized for the first time a so-called Bach Conference which was

co-organized with the Bach Society from Germany who met here [both West and East Germans met together], and there was a Bach Festival within the Bratislava Music Festival. There was performed the *St. John's Passion*. I secretly hoped that my composition would somehow make it into one of the programs, but I was unsuccessful in accomplishing that it would be performed within the realm of the festival. Well, it had its benefit that it was broadcast at the Radio Broadcast Station, and it was performed in Paris at a celebration at UNESCO and at other places.

Then in 1981-a year after my heart attack which almost killed me-I composed a composition entitled, Zahrada radostf [Garden of Happiness]; it was in 1981. And again it is a kind of ... I was so happy that I was in essence reborn. It is a composition in which all kinds of materials exist. You can hear it for yourself at the Radio Broadcast Station. They have it at anyone's disposal. There you can dub it for yourself. Well, then there is the *Elegický koncert*, and then there is the madrigal, *Prašnica* [untranslatable (1979)]. Well, this is everything that I have composed in terms of electronic music. Of course, along with electronic music I preoccupy myself with chamber music, instrumental music, vocal music; I have two symphonies, one chamber symphony, one work for orchestra and piano. Well, in terms of orchestral works, everything is described there [Kučerová, Alena. "Jozef Malovec: Hudobný skladatel. Monografia." (Jozef Malovec: Musical Composer. Monograph). A semester paper, 1989] what you have there; and also in terms of electronic music. By the way, in addition I composed a composition based on folklore music in which I used an authentic gypsy music ensemble from Čierny Balog [name of a town] who are named Bartošovci, in whom I saw very unusual folklore material [music]. And with them [Bartošovci] I created a ... In the studio I played on the flute. I played the hand bells. I used the song of a bird [and recorded all of these sounds]. And then with the splicing technique I created a folklore composition. This composition was created for a folklore competition of folklore compositions.

LZ: Yes, of course.

JM: But folklore music could be composed using these techniques [all of these electronic techniques]; but of course in my style. So this composition would also belong to this [genre of electro-acoustic music] and is also [archived] in the Experimental Studio where it was also created.

Of course, in the 1970s when 'normalization' came into being here [Czechoslovakia]-a so-called political normalization-so many who came back to political power in Czechoslovakia would gladly get rid of electronic music. So we successfully kept the [Experimental] studio alive under the pretext that, again, music for broadcasting realizations was again being created. And later, very slowly and gradually again-at the end of the 1980s—were autonomous compositions being created, and again the tradition continued. In the meanwhile, a new generation of composers emerged who feel [musically], are fascinated by this work [electro-acoustic music], because this kind of work-by a real composer, a real creator-must fascinate him. Otherwise the composer in this field does not achieve any success. That is why the discovery of the new which really exists in our country [Czechoslovakia], it is something ... I am continuously fascinated with [the discovery of the new]. Every time that I have the opportunity to be with this kind of work [electro-acoustic music], so I feel rewarded. Of course, I am not so wealthy that I can build my own electro-acoustic studio at home. So I am dependent upon the professional [Experimental] studio at the Radio Broadcast Station. Well, there [Experimental Studio] emerges a situation that more and more people [want to create their compositions]: young people, old people are trying to produce something there. Well, maybe I will live to the moment when I will be able to realize my own studio with a complete facility, including computer technology, etc. Well, something like that. I do not know if you would like to know anything else?

LZ: Yes, yes I would like ... I have a few questions. All of the compositions were realized, made at the Radio Broadcast Station [in Bratislava]?

JM: [Yes] all of them were made at the Radio Broadcast Station [in Bratislava].

LZ: Yes, all of them at the Radio Broadcast Station [in Bratislava]. Great.

JM: [All the compositions were realized] during the time when the [Experimental] studio was developed [in other words, during the lifetime of the studio].

LZ: Yes, of course. Great. And each time when you composed an electro-acoustic composition, so when you did it at the Radio Broadcast Station, you were each time invited there, or how was it? Or did you tell yourself, 'I would like to do something?' JM: Well, in that time I was an employee of the Radio Broadcast Station, so—

LZ: Ah ha, great.

JM: ... so I had [the opportunity to compose there]. I was employed there up to 1981. LZ: OK.

JM: Thus, I had a greater access to it [Experimental Studio]. LZ: OK.

JM: And now, the access [to the Experimental Studio] is done in such a way that a person has to "announce" the project [to the Experimental Studio] and then is given some kind of a time schedule. In the past, some compositions were written on commission during Communism. Now, there is no money for anything, for culture [the overall Slovakian situation regarding art], generally speaking. But we are still at least glad that we can at least still do it [compose electro-acoustic music at the Experimental Studio] in one way or another.

JM: Yes. Then I would like to ask you, each time when the composition was finished, then how was it disseminated? Over the radio via the Broadcast Station, or there was a concert? I mean specifically your compositions?!

JM: Well, toward the end of the Communist rule, the distrust of the Communist official towards everything that was new gradually declined. So we were able to organize—at least once a year-a kind of an "overview" of the compositions created at the [Experimental] studio [they could also broadcast this "overview"]. And of course, this "overview" was usually broadcast during the late evening when usually the demanding [sophisticated] listeners are available. And through this way, the compositions were paid for, because they were created at the Radio Broadcast Station's facility and they [compositions] were implemented in official broadcasting programs. During the last years of Communismsince 1980—practically nobody had any aesthetical requirements for any composer, for the [electro-acoustic] music; whatever could be created. But of course, if somebody wanted to make money off of a composition, then one would have to-in order to get from the state a special financial award—well, then one had to name the composition with a Communistic title: an appealing composition. So people who created such compositions did not compose electronic compositions, or anything like them. Every composer who composed electronic music composed it with an interest for this music itself. Well of course, when we created something [electro-acoustic compositions], we also received some financial contribution from the state, so that it could not be said that the state is not supporting art. Well, so during the last years of Communism, they [years] were not as terrible as those during the beginning of Communism [1948 and on]. The worst years were up to the Hungarian Revolution [October 1956]. The liberating process actually started from the beginning of the 1960s. There was the so-called 'Contra-Revolution' [so-called by the Communists, of course] in Hungary,----

LZ: Yes, of course.

JM: ... when at that time many people [Communist officials in Czechoslovakia] became frightened of everything that could happen here [Czechoslovakia], if the power could change hands in some way? And this happened here in 1968 [because Dubček — a more

democratic leader—became elected]. So the hard-line Communist powers [leaders] were always on guard. Well, later everything began to fall apart in the Communist Eastern Block. Slowly, very slowly, and in the end [Communism] ended with a collapse. So to work in this situation artistically was altogether possible. However, nobody could profit too much from it, but one could make a living from it without big requirements of comfort. LZ: The last question probably is, could you—I do not know, perhaps you have already talked about it—talk a little bit about your aesthetic. That is, in all of your music and electro-acoustic music?

JM: Well, overall I assume music as a communicational vehicle between people. LZ: OK.

JM: Well, of course my conviction of music is something spiritual. Simply, I have never been a materialist. During the entire existence of the Communist regime, I always proclaimed myself to Christian belief-I am a Catholic-but I am tolerant of other religions, which means that I am not some intolerant person who does not recognize other religions. But because I was raised in the Christian Catholic faith, so I held on to this Christian Catholic faith during the time of Communism. And of course because of my faith, I was not able to have a giant career. But during the 1960s and 1970s, it [religious tolerance] "opened up" somewhat if one did not say anything too much about it [one's faith]; then it was tolerated [kind of like President Clinton's Don't ask, don't tell' policy about homosexuals in the service]. On the contrary, during my employment at the Radio Broadcast Station, everybody in my management was glad that I did not endanger their careers, because I am Catholic and am not trying to get a managerial position [in other words, he could never have been promoted because he was Catholic, and thus those people "above" him were glad for this fact]. So this was the advantage for me, that they [management] left me in peace. A worse situation was during the 1950s when everything 'non-Communistic' was strongly suppressed. Of course, you are a younger man; you did not live at that time. At that time the camps in Jachymov [town in the western Czech Republic where uranium mining was done] were filled with people-with a cheap labor force [political prisoners mainly]-who were mining uranium for Russia's production of atomic weapons. In other words, this is the entire meaning of this entire terror. In all of Slovakia and the Czech Republic, there are not any families who were not at these camps [this is an overstatement, really], except those who were associated with the power structure, the elite Communists. But the rest of the people, each had a relative in whatever way affected by this [again, this is an overstatement]. I myself come from a Bourgeois family. My father was a state notary officer, which means that he was state-employed during the First Republic [1918-38]; and then also during the Slovak independent state [1938-45] he continued this employment, until 1949 [in 1945, it was again one Czechoslovakia] when the state notary offices were incorporated with the courts. Then he, for a year, worked as a bank official. Then they "kicked" us out of our own house in Nitra [city north-east of Bratislava]. Then after his death, my mother moved into an apartment which was fortunately well located on the main street in Nitra. Well, now I got our family house back after the Revolution, so that now I do not have existential problems due to the rental income.

Well, in regards to [my] aesthetic, you wanted to know about this? LZ: Yes.

JM: Well, in regards to instrumental music, I have tried to learn each composer who was worth studying in our twentieth century. Because Vienna is so close by [sixty miles] so I learned the Second Vienna School, which means Schoenberg, Berg, Webern. Webern is usually regarded as a very avante-garde, atonal composer, but in essence he thought very conservatively. You can verify this in his texts which he published. So Webern—from this Second Vienna School—is the most important up to atonality. Namely [as a matter of fact],

I personally believe that the development of the tonal system—via Wagner and Schoenberg—reached up to the final total atonality which was completed by Webern. After Webern, it was not possible to further [any more] be atonal. Simply, it was impossible [to expand this], because there [total atonality] was the end of the development. Thus, the development has to return back to tonality. It is not possible to reject tonality just because of some 'avante-garde' movement. It is necessary to perhaps search for tonality, but [a person must be] educated through atonality. In other words, the structure ... every composition that has a meaning must be somehow structured. In some way the composition has to be composed under [according to] some laws. And of course, the technique of serialism guarantees certain rules. And of course, these rules must come from the composer, from each individual composer. Each composer must be devoted to his own rules that come out from him. These he has to follow. Should he not follow these rules, then his composition would fall apart and basically would have no meaning. So in this I see the meaning. So each composition that a composer creates is something like his child, as if he gave birth to a living being which has to have its own life in order to further exist. Well, if this does not happen-if I bear a dead child-then it is not worth it to even perform it. So this is my goal and my endeavor; that I always create a being capable of living which could after a short or long period of time captivate in some way a listener's interest when performed. And this [captivating in some way a listener's interest] can only be achieved through its [composition's] own structure, through its own internal meaning which it has. You can take whatever composer from the past who is already known and respected by the broad public, every time you will find this. It does not matter if you take Chopin, Beethoven, Mozart or whomever; there are always internal relations. And when you discover them, only then will you find out how everything is structured. And of course, a[n] [amateur] listener who listens to Mozart is not aware of this, and even somebody who listens to Webern is not aware of this. But he [listener] is captivated by the composition as a whole, but is exactly captivated by the composition because there exist these internal relations. Even amongst the individual tones there exist relations, amongst individual motifs, amongst individual chords, amongst individual... The entire composition must be one unity which has internal relations. And only under these conditions is the composition interesting when it has a chance if it can step "out of the time" [of its composing] and become the universal property of human thought. So that is everything. [End of conversation.]

## List of Instruments

The following list of instruments discloses the instruments at the Television

Station's Audio Studio in 1969.15

4 tape recorders of 9.5, 19, 38 cm/sec (3.75, 7.5, and 15 in./s)

6 synchronized tape recorders (16 mm)

1 timing pulse

1 instrument for consistent change of speed for audio recording

1 mixing console (12)

1 instrument for artificial reverberation (module)

<sup>15</sup> Stadrucker, "História," 347.

2 instruments for artificial reverberation (tape module) 12 sine-wave generators 1 sawtooth-wave generator 1 square-wave generator 1 white noise generator 1 electronic switcher (Puncher) 1 1-octave bandpass filter 2 1/3-octave bandpass filters 1 bandpass filter with variable bandwidth

1 notchfilter with variable bandwidth

1 selective bandpass filter

1 Subharchord

## The Experimental Studio's equipment in 1965 consisted of the following

instruments.<sup>16</sup>

1 Tesla BM 344 RC generator 1 RFT 205 recording generator 1 Fernmeldemessegerätebau Berlin 120-121 reverb generator 1 Křižík G 571 generator of low frequencies 1 Orion 1142 square-wave frequency generator 1 self-built instrument of narrow symmetrical waves 1 self-built instrument of narrow asymmetrical waves 1 self-built whitenoise generator 1 self-built linear AM modulator 1 self-built AM pulse modulator 1 self-built ring modulator 1 self-built vibrato instrument 1 self-built nonlinear distorter 2 self-built bandpass filters 1 self-built narrow band filter 4 VÚRT CF 3 universal filters 2 VÚRT UV 1 filters of highs 2 VÚRT UH 1 filters of lows 1 self-built electronic switcher (Puncher) 1 Echolette NG 51 echo/reverb 1 reverb chamber 1 RFT reverberation plate 1 Sander-Jansen SJ 100 tape recorder 1 Sander-Jansen SJ 103/2 tape recorder 1 Sander-Jansen SJ 100 effects tape recorder (adjustable speeds self-built) 1 Tesla TM 694 E oscilloscope 1 Orion SE 20901 voltmeter

<sup>16</sup> Backstuber, "Úprava," 188.

The two studios (or rooms) that comprise today's Experimental Studio are equipped

with the following instrumentation.<sup>17</sup>

Room A

1 Studer 904/A with Master Mix MX 644 mixing console 1 Studer A 800 MK III 16-track tape recorder Dolby A noise reduction system 2 Studer A 812 tape recorders 2 Studer A 807 tape recorders 2 Studer A 730 CD players 2 JBL 4345 monitors 1 Kurzweil K 250, version IV digital synthesizer 1 Macintosh SE 1 Opcode Studio 3 MIDI interface (SMPTE, MTC) 1 ARP 2015 synthesizer 1 APHEX dominator and exciter 1 Sennheiser VSM 201 vocoder 1 AKG-ADR 68-K digital sound processor 1 Lexicon PCM 70 digital reverberator 1 Yamaha SPX 90 II digital sound processor 1 Yamaha REV 5 digital reverberator Room B 1 Studer Dyaxis 2+2 System Studer Editech 4-channel digital audio production system 62 min. direct to disc recording system (VITC, SMPTE, MTC sync.) Macintosh II ci 5/80 HD + Syquest (removable cartridge) 4 Studer A 80 RC tape recorders 1 Revox A 700 tape recorder 1 Studer 169 transportable mixing console (12/4) 1 Sony PCM 2000 digital audio recorder 1 Sony HF 950 Super Beta SL PCM 601 esD digital audio processor 2 JBL 4345 monitors 1 Studer mixing console (16/6/2)1 MacQuadra 950 (40 MB RAM) 2 Sample Cell II. cards (2x32 MB RAM) 2 Marc of Unicorn MIDI mixers 1 Marc of Unicorn MIDI Time Piece II. 1 Hewlett-Packard LaserJet Printer 4M Data Streamer Hard Disc ext. mem. (2x32 min. stereo) Software: DigiDesign SoftSynth

<sup>&</sup>lt;sup>17</sup> This data is compiled from the pamphlet, *Experimental Studio: Radio Bratislava* (Bratislava: Edition slovenský rozhlas, 1991), and from Zmeček's list of instruments that he wrote down for me in the summer of 1993.

Performer Max MacMix 3.2 (for Dyaxis) Studerbacker II. (for Streamer) Soundesigner Mniv. Soundesigner II. (for Sample Cell)

## **CHAPTER 4**

## BRNO

This chapter documents (1) the formation of Brněnské elektronické studio, BES (Brno's Electronic Studio), and (2) the establishment of the Audio-Visual Studio and electro-acoustic music program at Janáčkova akademie muzických umění, JAMU (Janáček Academy of Musical Art). Significant information about Brno's electro-acoustic music and institutions was compiled from interviews with Prof. Rudolf Růžička (composer and former pedagogue at JAMU), Ing. Alois Piňos (composer and pedagogue at JAMU), Doc. Mag. Arnošt Parsch (composer and pedagogue at JAMU), Doc. Michal Košut (composer), Ing. Ivo Medek (composer and pedagogue at JAMU), and Daniel Forró (composer and former pedagogue at JAMU), and written correspondence with Jiří Hanousek. Supplementary information about Brno was provided by Eduard Spáčil, Dr. Eduard Herzog, and Ing. Karel Odstrčil (CHAPTER 2), and Jan Jirásek (CHAPTER 5).

## Brno's Electronic Studio

The introduction of electro-acoustic music to Brno's composers was the direct consequence of the First Seminar of Electronic Music held at the Radio Broadcast Station in Plzeň. Among the attendees of the First Seminar were Jiří Hanousek and Miloš Šindelář. Because Brno composers expressed the greatest interest in electro-acoustic music among all Czechoslovakian composers, Hanousek and Šindelář decided to organize presentations in Brno similar to those of Plzeň. To this end, Studio # 3 at Brno's Radio Broadcast Station was the site of several repetitions of these seminars. The instruments used at the Radio's seminars were those that were at the current disposal of technicians of recording studios: several tape recorders with adjustable speeds, tape recorders with multi-heads, a custombuilt tone generator of sine, square, and sawtooth waves, and a switch board. As a result of the composers' great interest in this medium, an electro-acoustic studio, Brno's Electronic Studio (BES), was formed. Jiří Hanousek was appointed its Director, and Miloš Šindelář its Technical Director. Additional sound engineers such as Otakar Tajovský, František Šlechtický, and Vojtěch Veselý realized composers' compositions.<sup>1</sup> BES's facilities consisted of a standard recording studio, and a chamber orchestra, named Studio autorů (Studio of Composers). A group of composers, named Skupina A (Group A), composed music specifically for Studio autorů (Studio of Composers). BES was never an officially established studio in which commissioned compositions were realized. Instead it was a "studio" for which a recording studio's facilities were utilized. BES's unofficial status was further verified by the fact that electro-acoustic compositions could only be realized during nighttime hours when the studio was free.

As a consequence of the newly implemented Communist regime of the late 1960s, BES was abolished in 1969 upon the orders of the Radio Broadcast Station's new director, who believed that electro-acoustic music conflicted with the aesthetic of Social Realism. Most of BES's instruments were destroyed.

## The Audio-Visual Studio at the Janáček Academy of Musical Art

The establishemnt of JAMU's Audio-Visual Studio was the direct result of the abolishment of BES in 1969. Some of BES's instruments that were not destroyed were obtained for free by JAMU's professors interested in electro-acoustic music. The purchasing of instruments from manufacturers was nearly impossible, and thus only used equipment had to be obtained from other institutions. For example, a multi-track tape recorder was acquired from the Television Station in the city of Ostrava, and a mixing

<sup>&</sup>lt;sup>1</sup> In his listing of compositions, "Výroba brněnského elektronického studia čs. rozhlasu v Brně, 1964-70" (Output of Brno's Electronic Studio in the Czechoslovakian Radio Broadcast Station in Brno), Jiří Hanousek lists more sound engineers: Igor Boháček, Bohuslav Fiala, Ivan Holubář, Ivan Kadaňka, and Petr Řezníček.

console from Brno's Television Station. The electro-acoustic music program at JAMU, begun on September 1, 1969, was divided among undergraduate and graduate composition students, and was solely a pedagogic program. Undergraduates were required to study this medium as part of their compositional curriculum, realizing one composition per semester, and graduates specialized only in electro-acoustic composition. The graduate program consisted of theoretical and practical aspects of electro-acoustic music.

With the establishment of JAMU's electro-acoustic program, JAMU became the only university in Czechoslovakia where electro-acoustic music was taught. Thus, students interested in this medium from the entire republic attended JAMU. Among the composers who taught contemporary music composition, which included electro-acoustic music, were Rudolf Růžička, Alois Piňos, Jan Kapr, Miloš Ištvan, and Ctirad Kohoutek.

In 1990, school officials allocated an additional room, # 1-11, for the expansion of the Audio-Visual Studio. This room was equipped with some newly acquired, as well as previously owned instruments, such as simple synthesizers, an Atari computer plus software, reproductive equipment, and amplifiers. The collaboration between JAMU and Yamaha since about 1988 consisted of the company's free loaning of keyboard instruments, making it only the second such partnership in Europe. The future prospects of JAMU's electro-acoustic program unfortunately are not good. After the fall of Communism, Růžička was responsible for teaching older electro-acoustic music techniques of realization, while Daniel Forró taught MIDI technology applications of the compositional process. Forró's and Růžička's departures have left JAMU's electro-acoustic music program in a state of disorder.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Forró and Růžička left JAMU due to irreconcilable differences with JAMU's management.

## Transcribed Interviews

The interview of Prof. Rudolf Růžička was taped in his apartment in Brno on

Tuesday, July 6, 1993, at 2 P.M.

LZ: 7-6-93, interview with Rudolf Růžička.

[Turned off tape recorder.]

LZ: How did the studio begin [I said 'how did the studio begin' in English] at the Brno [Radio] Broadcast Station?

RR: Well, first of all, one must say that before it [electro-acoustic] got into the Brno [Radio] Broadcast Station, the main propagator of electro-acoustic music here [Czechoslovakia], who has an unforgettable credit for the fact that electro-acoustic music even came [was introduced] to us [Czechoslovakian composers] was the composer, Miloslav Kabeláč—also my teacher for many years in the field of electro-acoustic music. So at the beginning of the 1960s, he [Kabelac] sometimes went [was allowed to go] to because the regime here, of the 1950s already was "falling" [apart] a little bit, the Communistic [regime], anti-culture [regime]-so he sometimes got to go to Paris and became acquainted there at the [Radio] Broadcast Station with Pierre Schaeffer and with his work, and the entire group with whom he [Schaeffer] works there, and how they work there. And he himself [Kabeláč] was enthusiastic about electro-acoustic music so much that he decided that to all of the people interested [in electro-acoustic music] in our profession [composer] here in the Czech Republic, and all of Czechoslovakia—back then it was still Czechoslovakia-he would enable himself to familiarize himself with it [electro-acoustic music] [to the point] that he would make [organize] independent courses which he will think through himself according to instructions [teachings] that he received himself in France from Pierre Schaeffer. So it came to the point that he invited some composers—it was in about 1963, [19]64, maybe even earlier-to the Plzeň studio [to become the Experimental Studio in 1967] where were gathered all the instruments that at that time were at the disposal for this [electro-acoustic music] production. And he invited some Slovakian and Czech composers who had an interest in it, for somewhat short seminars [First Seminar of Electronic Music] where he presented it [electro-acoustic music] [and] showed it to them. The attendees expressed a great interest. And at this time, people from Brno were also interested: the chairman of our association of electro-acoustic [music]---then it was still called 'electronic' music-and that was Jiff Hanousek, and the head sound director who had a great interest in it [electro-acoustic music] was Miloš Šindelář. These two then came [returned] to Brno. And of course because driving there [Plzeň] and back [Brno] it was too far [about 150 miles], they decided that according to the conceivable interest of composers in Brno, that they would present [demonstrate] something similar with the same material, same instruments [as in Plzeň] in Brno. [They] focused upon one studio [where to give the presentation]---it was the studio on . . . still at the time studio # 3 on the former Lenin Street-[they] focused upon all of the instruments that were there at that time at one's disposal; that was a large number of tape recorders, tape recorder with changing speeds, multi-head tape recorder which also had changing speeds, and especially a special-built multi-output generators of various types [of sound waves] such as sinewave, rectangular, saw-wave, and triangular, which were interconnected between each other and were possible to change the sequence of use by using a switch board. And with this equipment, they presented and demonstrated the instruments' possibilities to the students and later also composers—I back then, as a young student, attended this seminar [at the Brno Radio Broadcast Station]—who really expressed their interest [of this music]. And because the interest was really enormously big, several cycles [repetitions of these

lectures] here [Brno] were done. And what happened was that in Brno really, as opposed to Prague and as opposed to Plzeň, was among those significant composers or among all composers of all kinds [of music] the biggest interest, and so what happened was that in Brno the composers' base of interest of electro-acoustic music was the biggest. This is actually also evident in the documents which you saw [he had shown me some documentation]. Well, so it came to the point that the official manager-the Radio Broadcast Station of course agreed with this [the formation of an electro-acoustic studio and the appointments of Hanousek and Sindelár]-and the official Director of this studio [Brněnské elektronické studio, BES (Brno's Electronic Studio)] was named Jiří Hanousek, and with the official technical directorship was named Milos Sindelár; the two who really began with this [electro-acoustic msuic] here [Brno]. And this is how the production of this music began [here in Brno]. At the beginning primitively; then it already began to expand. Additional technicians arrived [were employed]. I know that there were [other technicians] names [such as Otakar] Tajovský. There [Hanousek, Jiří. "Výroba brněnského elektronického studia čs. rozhlasu v Brně, 1964-70" (Output of Brno's Electronic Studio at the Czechoslovakian Radio Broadcast Station in Brno, 1964-70), a listing of compositions] are the initials [listed]. You have to write down yourself what these initials stand for. Tajovský, then there was [also František] Šlechtický, [Vojtěch] Veselý. Then there were also others [Igor Boháček, Bohuslav Fiala, Ivan Holubář, Ivan Kadaňka, Petr Rezníček] there, all of whom were involved in this activity with the fact in mind that the music really had a big success here [Brno]. Even festivals were done here. The festival of Exposice experimentalní hudby [Exposition of Experimental Music]-hmmm I liked that [festival]-I personally participated in all of the activities [festivals] there. Well, that was the overall beginning of the Radio Broadcast Station [here in Brno]!

And unfortunately after 1969, or already in 1969, the new Director of the [entire] Radio Broadcast Station-upon the basis of the direction of a higher authority which he back then received-attempted to liquidate the entire studio [BES] due to the reason that this music does not correspond to the music of Social Realism which was at the time absolutely unanimously preferred [dictated by the Communist regime], and was repeatedly ordered [as being the only artistic style acceptable] by the leading cultural officials [Communists] of the new regime [regime of President Husák which truly only followed the Soviet regime]. Well, and what happened was that he really set this [liquidation] through. Instruments, apparatuses had to be liquidated [destroyed]; everything [all instruments] was taken apart. Some things [instruments] were taken over by JAMU [Janáčkova akademie muzických umění (Janáček Academy of Musical Art)] where from 1969 began the teaching here of this music for composers who there [JAMU] studied the overall opus of composition [in other words, composition majors]. So they [students] also [in addition] had a curriculum of electro-acoustic music. They all had it as a requirement, with the premise that if they wanted to they could further work in it [electro-acoustic music]; if they did not want to they had the requirement to familiarize themselves with it [electro-acoustic music] and had to present one work [composition]. Just the way it is at every university: tests, papers, semester, exam. And thus, actually—to the question that was your basis, that is, how did everything work at the Brno Radio Broadcast Station?—I have answered your question, because it [electro-acoustic music production and equipment] was transferred there [JAMU]. I do not want to say that autonomous compositions were begun to be produced at JAMU. At JAMU, it [electro-acoustic music] was exclusively targeted only for pedagogic purposes, for teaching purposes.

LZ: Great.

[Turned off tape recorder.]

LZ: Questions # 1 and # 2, the answers will be repeated for JAMU [I said this sentence in English].

RR: I am following up to what I said before, that namely at JAMU some apparatuses were taken over [brought over from BES], which were necessary to be liquidated [destroyed] at the Radio Broadcast Station. JAMU took them over, back then, as paid-for inventory, [that is] for free. And thanks to this takeover, it was possible to start the teaching in the basic studio [at JAMU] from 1969. And at the same time began the teaching of the post-graduate [Ph.D.] program of electro-acoustic composition, which on the one hand consisted of a theoretical point of view, as well as from a practical point of view which was the biggest [most important], and to which [post-graduate program] all applied. Well all; all who were interested. I almost wanted to say all students. But all who were interested who already finished [completed] the basic progarm of classical composition at the university. And [students] not only from Prague and Brno [applied], but also [students] from Bratislava, because it [electro-acoustic program at JAMU] was the only possible [available] curriculum in Czechoslovakia. I even know that there were students even from Ust nad Labem [city located in northwest Czech Republic]. So it was a sort of an all-republic, from the entire republic center for the teaching of electro-acoustic music at the time, when still at no other university here [Czechoslovakia] electro-acoustic music was taught! So this was for the first time [that electro-acoustic music was taught in Czechoslovakia]. This teaching [electroacoustic program] began on September 1, 1969. So it is actually also kind of a historic date, for us [Czechoslovakian composers] very significant because, and yet the Brno academy at that time, which had its own and very respectable compositional "voice"—like compositional "school"-due to the merit of pedagogues who taught there, primarily due to the merit of, for example, [Jan] Kapr, [Miloš] Istvan and [Alois] Piños, and also [Ctirad] Kohoutek who later departed [left], JAMU was certainly famous. And really from the entire republic [Czechoslovakia] students drove [went] there [JAMU] for the teaching of contemporary composition at a time when at other schools existed, mainly beginning from 1970, certain personalities who only taught composition very traditionally, which was also true at the schools in Prague and Bratislava. And thus it was possible to realize [compose] this electro-acoustic music [at JAMU] where a number of exceptional students were discovered who later were even able to make a name for themselves in this music, and really created there [JAMU] very interesting compositions already at that time. And among them I would name—it would be very good [beneficial] even, for example, for a thesisthat there would be included, for example, Arnost Parsch, Milos Stedroň, Milan Slavický, Marta Jiráčková. These four, probably, would be ... Jan Jirásek would also be there [in a thesis] very significant. Maybe also the name of Jozef Gahér of Bratislava would be good—I may as well mention his name as long as I am already mentioning all of these names-who also was very devoted to this music. Of course, there were also those, maybe, those who devoted themselves less to this music like [David] Rehor, [Alois] Fiala, [Jiff] Kollert. Those are, for example pedagogues in Prague at the academy and conservatory; Fiala is a pedagogue from Brno at the conservatory in Brno; Radomír Ištvan and a number of other students, who absolved this [electro-acoustic music] as regular [compositional] students or then in the post-graduate studio [post-graduate program].

Now! About the technical equipment which is the second question. Except for the equipment that we received from the Radio Broadcast Station [Brno], there [JAMU] did not exist some kind of exceptional possibility to obtain any further equipment. And that was why we tried to obtain equipment already from other [sources], already old and used [equipment]; the equipment of other enterprises. Here concretely we got a multi-track tape-recorder from the Ostrava [a city in northern Czech Republic] Television Station, a new, or for us new back then, mixing console. It came here from the Brno Television Station. So this gear was gradually equipped through a certain way with instruments that were necessary [needed]. That [equipment], of course, did not allow one to work with it [electro-acoustic music] somewhat exceptionally, intensively, when it comes to a technical

output [compositions produced]. In other words, only the basic teaching of students was really the main concern [possibility]; to be prepared [to become professional composers of electro-acoustic music], who then could, upon the basis of this diploma which they received from this studio, work independently [on their own] in professional electroacoustic studios-equipped perfectly-such as was, for example, in Prague [Audiostudio] and most importantly in Plzeň [Experimental Studio] and Bratislava [Experimental Studio]. That is what the studio [here at JAMU] was aiming at. In other words, here it did not come about to the point of production of, or to the creations of autonomous compositions—some kind of superb compositions. There were however compositions [realized at JAMU] that penetrated into competitions, and successfully even took part of competitions in Varese, Italy. I also know that some compositions were awarded also in local, that is, in Czechoslovakian competitions. But again, I say that they were exclusively compositions of students, and to that end this was the goal [of JAMU's electro-acoustic program]. There was never a thought of using this studio for professional productions, because this would not have been even allowed by the Ministry of Education. A bit of a change came about after 1990, when the leadership of the school gave us [in addition] a seperate room [# 1-11] into which it was successful to obtain some additional equipment, and also put the equipment that we had at our disposal from earlier into this room. That is, some kind of simple synthesizers, a computer by Atari with internal equipment [software, etc.], and some kind of reproductive equipment and amplifiers. Of course, for example, frankly it was forgotten [by the directors of JAMU] that the computer also needs some sort of software. For that no money remained, so that the software had to be stolen—I can also frankly say that, what the heck!----and [also the software had to be stolen somewhere] for the need of school education. Well, and these difficulties remain up to today. And even what we [Růžička and I] talked about [before the taping of this interview], [that] there even is a certain proposal that the electro-acoustic music here [JAMU] in the future, which already during Communism lead a miserable existence, so in this post-Communistic period, due to some leading former comrades [he laughed] at JAMU, there is again a proposal that it [electro-acoustic music program] be liquidated; that this music and this education be abolished. That in order to have savings, that the third [question that I asked] dealing with what it is like with the finances, so with the finances for education [national educational program] I think that it is worse off than even for the national health service about which there is a lot of talk. And how the salaries of pedagogues and everything else [on the national scene], and of course the equipment [at JAMU], of which I am again talking about, is currrently absolutely unavailable. It [new equipping] absolutely in no way is being purchased. There do not exist any other options and there even is, as I am saying, a consideration [debate] of [whether or not] some fields [areas], among them electroacoustic music-due to the reason of savings [of money]-be abolished at least temporarily. And there are also opinions that electro-acoustic music could at least [actually at the most] be taught for commercial purposes; so only for accompaniment music and like hmmm-

### LZ: Pop music?

RR: Pop, yes. Even for popular music, jazz music, and similarly for [music in] cafes. But not as an autonomous, participating, contemporary composition of which I, for example, aspire, and for which was presently organized an all-republic and even international competition named Musica Nova, which would exclusively be devoted to contemporary, classical electro-acoustic music of which concerts would comprise of autonomous compositions. So this is the plan that it [JAMU's electro-acoustic program] will be liquidated! It is a shame. During the Communists it [production of electro-acoustic compositions] was somehow possible, and now even they have figured out that it could not be further possible. [As of summer 1994, JAMU's electro-acoustic program was terminated.] So I vented out my disgust for a while with the [Communists]. [Turned off tape recorder.]

LZ: We will continue just with all questions in one [I said this sentence in English]! RR: So we have come to questions # 5 and # 6, which deal with the dissemination and archiving of these here compositions. As far as I can remember, so the only composition that was released out of all those that were made at our Brno Radio Broadcast Station [BES]—and that was still at the beginning of the 1970s—a composition of Miloš Ištvan, *Ostrov hraček* [Island of Toys (1968)]. That was released on Czechoslovakian gramophone records which were released abroad. So here [Czechoslovakian] essentially it was not distributed, due to the fact that there were already difficulties during the time of 'normalization' [period after the invasion of the Warsaw Pact Armies in 1968]. And they were shipped only abroad. It [the record] was a series of electro-acoustic compositions actually one record—on which was besides Ištvan and [Zbyněk] Vostřák other electroacoustic—[Jan] Kapr, I think—electro-acoustic composers. And unfortunately it did not enter into our [Czechoslovakian] market but was only for sale abroad. So with this [answer], we [Růžička and I] have easily, with regards to the dissemination of compositions, completed the answer and are now getting into the [subject of] archiving.

With [regards to] the archiving, it was somehow much more favorable, because all of the compositions which were recorded at the Radio Broadcast Station [BES] were during all of the time that they were not allowed to be broadcast—which is probably from 1970 to 1990 or [19]89—were surprisingly, and to my surprise, absolutely in perfect condition put aside; all of them. I think so far we have only found one accident, which maybe happened due to the reason of disorder [a mess], that one tape got lost. But [the] deliberate liquidation of these recordings did not happen. That is why it was possible to realize [do] everything that I have dubbed here for you, all these recordings from the Radio Broadcast Station of the broadcasting from 1990 and [19]91; the entire series of eight or, for now only seven and three-fourths hour-long programs. Almost all compositions, which were there [BES] recorded during the 1960s and the beginning of the 1970s, were recorded so that they would be able to be broadcast. It even came to the point that the broadcasting of compositions which after 1970, when the electro-acoustic studio [BES] at the Radio Broadcast Station was abolished, so despite that fact, there [BES] continued to be recorded some compositions at the Radio Broadcast Station. Most importantly, the most active participant after that [liquidation of BES] was Miloslav Istvan, who fundamentally [adamantly] did not want to drive anywhere [another studio]—I do not want to say that he was a lazy person, but he probably was a bit more comfortable [laid-back], and for his health it may have even been advantageous—that he did not want to drive either to Plzeň nor Prague nor Bratislava to record his own electro-acoustic compositions. And so he recorded them secretly using another title for the compositions, and under various codified processes [of composing] he recorded them as normal compositions—despite the fact that they were electro-acoustic compositions—which we now heard in broadcasts at the Radio Broadcast Station. And these were compositions that could only be, or simply were realized at the Radio Broadcast Station [BES], even if not under the heading of "electroacoustic" music. And these compositions were very significant. Again, [they] penetrated abroad [even during Communism]—there everybody knew them, were familiar with them-despite the fact that, however, Brno [BES] had to ... everybody who created electro-acoustic compositions were in a small number [there had to be a few electroacoustic composers, because had there been many, they would have been caught. Certainly [Cestmír] Kadlec told you this, that [all of] the technicians had to, who were [employed] at the Plzeň [Radio] Broadcast Station, had to work in other areas [fields] of work. They could not only do electro-acoustic music, due to the fact that electro-acoustic

music was being very surpressed from the top [political regime]; superficially its [electroacoustic music's] creation was stopped, and only existed on a miserable level. I will copy you that into the computer [make a copy on diskette]; you will have there the texts which I presented in Vienna, . . . all that what you want to know about. LZ: Great!

RR: So, well, now we have talked about the Radio Broadcast Station's archives, where remained everything. And similarly actually occurred the preservation of the entire materials, of which I already looked after, in the archive of JAMU, where I from the entire time from 1969, whatever kind of compositions that originated there, that were made there, or those that we obtained from abroad—some copies—all of them I archived. Nothing came to the point of destroyment or liquidation, and from 1990 it [archive material] was again used for educational purposes. Whenever we got [received] some [a certain] composition to officially dub for the Radio Broadcast Station, we had to, due to commercial reasons, prove that it would serve only educational purposes; which was true. And there [JAMU] was, because it was an academic institution, there was a more liberal possibility to listen to these compositions. So electro-acoustic music could be, for the use of the students, practically publically [openly], whenever and with whatever discussionreally open [discussions]—could occur. I am stressing the point about open discussions, because one of the most sophisticated compositions which originated here [Czechoslovakia] in [terms of] electro-acoustic music was the composition of Kabeláč, E fontibus bohemicis, made out of Czech sources. So it was created out of Kosmas's [1045-1125] Ceská kronika [Czech Chronicles (1119)]; also based on texts of Jan Hus's [1372-1415] sermons; and also based on other texts of sermons, even some prayers from the time of Karl IV [14th century]. And all of these things [texts] were . . . and the entire composition ends how they [people] appeal to liberty, which I think was expressed for the first time by Hus. And of course at the time of its [E fontibus bohemicis] origination, there were certain problems with the fact that the composition had a big difficulty in performances. Whenever some kind of censor heard it, then of course it immediately occurred to him why this composition originated, and banned it. So he . . . this composition could not be performed either publically at concerts nor during radio broadcasts, nowhere. And it [E fontibus bohemicis] was released only in its Latin version [there is also a Czech version], I think [by] Deutsche Grammophon Gesellschaft. LZ: Yes.

RR: So here [Czechoslovakia] it [*E fontibus bohemicis*] practically did not "get into" the broadcasting until again from 1989 or from [19]90 when it was performed several times. And, I say, it just reminded me of the fact, because as I said that at JAMU, we commonly [regularly] played this composition to the students. Commonly was it also performed at concerts at JAMU, with the premise that we openly could discuss this composition and what its meaning was, which exclusively expressed for freedom and against 'normalization' [Communism]. So this was, to a certain degree, the academic institution, despite the fact that it was through a certain way restricted. Well, it was never completely restricted, and we could work there in some way, both electro-acoustic music and listening to these recordings. And all [electro-acoustic] compositions were preserved there!! LZ: [At] JAMU?

RR: [Yes] JAMU. And now we have question # 11, the aesthetic and its reasons. LZ: Yes.

RR: There is ... that is a fairly wide region which probably will be somewhat difficult to specifically describe. The opinioned aesthetic of each composer is fairly different. And I think that it be democratic, that each [aesthetic] be different, which is absolutely correct. So instead that I would pronounce [discuss] some aesthetic opinions of the act of composing and somehow of the approach of the pedagogic progress—how the approach is taken—so

rather I would say that they are opinions which are more or less subjective---mine--rather than [I discuss that] it is a somehow objective opinion from an overall solution; like the bad experiences we had during the time of Communism, in which the opinion of some high--the own opinion---of some official was entirely and definitely promoted as the opinion of the entire state [country]. And here [Czechoslovakia] not only in the area of politics and in the area of economy, but despite the fact that it was, for example, a bad [incorrect] opinion, and everybody knew that it was a bad [incorrect] opinion, so they [composers, artists] had to respect it [opinion], even in the area of culture. And unfortunately such "gentlemen" as [Jiřf] Pauer, [Lubomír] Železný---maybe you know the names; if not, I can furnish them to you---they were the leading officials of the Society of Czechoslovakian Composers, and advisers to the Minister of Culture and Education. Of course, one could name a lot more. [Josef] Palenfček is already dead. Železný is also already dead. But unfortunately, Mr. Pauer is still alive, and he is still not convictable. [Even during the newly established democratic government, Pauer is still not taken to trial for his actions during Communism.]

But we got [ventured] a bit away from the [topic of] 'aesthetic.' So in principle I view my students, from a pedagogic point of view, that I try that they aesthetically emerge with their own opinions, because after all, each personality-here [JAMU] study students from twenty years of age and up, from the age of twenty of their lives, they are simply adult, completed people----and they certainly have their own personal opinion about all aesthetical, compositional styles and processes-and in their composition-which [an aesthetic] they could obtain during their own lifetime. I try not to influence them somehow. I tell them, 'Here are these and these possibilities. This and this can be done. This and this has already been done. This would be more modern; this would be less modern. This is, for example, outdated and likewise.' But in no way do I tell him [student] that 'you must do this most modernly! You must do this in another way or the way I do it!' Basically, everybody does it according to their own [liking, choice, etc.], and I think that this attitude is even correct. Because to force unto an adult person that he convert-in a way that some of my colleagues really do it—to the thinking of their own, in other words to the thinking of their pedagogue, [I think that] it surpresses the personality a bit; his/her own [personality]. And I think that it [creative process] will arise on its own. LZ: No, no, OK. Two more minutes [left on this tape].

**RR**: Well, so I will finish during that time. So it alone surpresses the personality. And as a result will happen that the independent composer's [personality], essentially his own personality, thinks like that of somebody else and does not think independently. So when I try [attempt] that the students think of their own and that they look at the thing [composition] from an aesthetic point of view—the result of their own point of view— [then] I think that I benefit them more than if I say, 'Do it this way!' For sure it is better, but it is only my private, subjective opinion that it is better. But that does not mean that the opinion really is correct. The objective opinion does not really exist. We have democracy so that everybody can think his own matter. Well, and with that, I will also say—before it [tape recorder] stops—that in addition I always tell the students that the worst thing with electro-acoustic music, as opposed to, for example, composition of normal [acoustic, etc.] music is that which I already told you earlier, [which] is to have [to retain] a certain feeling after many hearings of the [electro-acoustic] composition-or after many listenings of the absolutely have a clear image how a listener would react to it, or a person who thinks about it and hears it for the very first time. So the aesthetical point of view of this composition is as if he [composer] had heard it for the first time. Then I also have a certain, and my own, opinion of which I was often criticized—and not only during the Communist time, back then I was especially criticized, back then there was only this overall Social Realism used which did not allow this [what he is about to talk about]—that the composer, to a certain

degree, can or should participate in the composition with the fact in mind that it will—this composition—serve not only him—to his hearing—but to a certain degree or not to a certain degree but considerably the hearing of another person. Well, and I somehow lean towards the fact, that—

# [End of tape.]

LZ: You may continue to talk, Růžička, about your aesthetic.

RR: Well, I finished with the fact that the composer, to a certain degree, should in a certain way observe the effect of his own composition unto others. And I was, as I already stated, often criticized for this fact that apparently I claim that-and I also claim this in front of students who, of course, do not have to agree with this, and ... they have their own opinion, just how I said it before—I try that the composition first of all serve me, my expression, to my, in essence, satisfaction; to the composer's satisfaction. And I do not care very much—I do not want to say that I completely do not [care]—but I do not care much about the fact how it [composition] serves sombody else, or if it will [spiritually] help somebody else. An example was the composition for which I now received a special award in a competition—I think that it was even an international [competition]—of chamber, of the best chamber composition in Czech Krumlov [town in southern Czech Republic] two days ago [Sunday, July 4, 1993], which was composed for twelve violas and solo flute. All members of the jury elected the composition [as winner], and even the chairman Mr. [Jaroslav] Krček later told me of this fact that it was evenly judged [it received the same points from all of the judges]. The prizes were not so exceptional. There were only five awards and my composition won first prize. But all [the judges]—because the condition of the competition was [that there be a] a public performance—were shocked only due to the fact of where are they going to find twelve violas?! Well, it is not even a joke in a large city.

### LZ: No, it is not.

RR: Well, I said, 'Gentlemen, that does not interest me [that is none of my business]. In the worst case, it will not be performed.' But my feeling and my effort for the composition, in order that it be created, I needed that it be a composition only for twelve violas without any additional instrument [instrumentation] and [only] for the solo instrument [only the violas]. And I liked it this way the most! And I did not care for the fact of whether 'you' [jury members] would have problems with the fact of obtaining twelve violas [violists], or if you would even be able to perform the composition. I composed it foremost for myself; for my own satisfaction. If somebody else wants to listen to it, then let him find twelve violas [violists]. It is true that it is somewhat of a heretic opinion, but ... It is an example of the fact that I, also in electro-acoustic music, when I am perhaps inspired by something as in this case by the Crucifixion [he says 'Crucifixion' in English; imitation of Salvador Dali's painting which Růžička owns], then I am concerned first of all for my own expression, and only then about the fact, 'will somebody maybe listen to it or?' I already learned this, that is to say, this here method [of self-satisfaction] from the time of the Communist regime, where the opportunity of hearing, indeed of electro-acoustic music by the public was almost nonexistent. So there [electro-acoustic music] I did [composed] compositions exclusively for myself, and for my own satisfaction!! LZ: Great.

[End of conversation.]

The interview of Ing. Alois Piños was taped in the recording studio of the Audio-

Visual Studio at JAMU on Thursday, July 8, 1993, at 11 A.M.

LZ: Interview with Piňos, Thursday, 11 A.M., 7-8-93. I will only ask you about your [electro-acoustic] compositions. What you did? When? Where? What is your aesthetic? And so on.

AP: I think that I will start to talk freely about it, and then we will see what—

LZ: Yes, great. Whatever you want to talk about, talk!

AP: ... we want to specifically talk about. Well, I would say that I studied during the [19]50s here at this school [JAMU], and that was a very bad time, a dogmatic time, and so on. And some kind of new music ... we were isolated. That is, we then, at the end of the [19]50s—our generation, here with my my colleagues—created a certain group. And rather privately, we tried to obtain recordings, scores, etc., including, as a matter of fact, electro-acoustic [music]. [Back] then, electronic music already began, already "ran" [was underway]—Stockhausen, Boulez.

LZ: At the end of the [19]50s?

AP: [Yes] at the end of the [19]50s on very primitive tape recorders, etc. And privately, because nothing like this at all was "run" [taught] at the school [JAMU]. Here. Dvořák. Smetana, Tchaikovsky were propagated. Janáček was almost "bad" for them [conservative professors at JAMU and the overall Communist regime]. So [in] this way, we ... to this group [Teamwork] belonged Miloslav Ištvan, who is a colleague here [JAMU], and Josef Berg. It was a nice cooperation; we were friends. Actually for that time, we had already created a somewhat informal group [Teamwork]. Well, and in regards to electronic music [electro-acoustic music], so I was interested in all new music---of the entire world---that which was actually here [Czechoslovakia] forbidden, undesirable, etc. And among other [music that I was interested in], [included] also in electronic music. Of course, we did not have here any opportunities, so not until the [19]60s—at the beginning of the [19]60s—it [new music scene] began to "shake" a little bit more. Well, and the first electronic studio was established in Plzeň [Experimental Studio], and courses [First Seminar of Electronic Music] of electronic music [were established], where worked [composed] for example Kabeláč. Do you also know this name? He is an older Nestor; he was the leading proponent [of electro-acoustic music in Czechoslovakia]. [At the First Seminar of Electronic Music were also present] musicologists Lébl, Herzog etc. There originated courses, and there originated the [Experimental] studio. And there, we [Brno composers] also began to work on our own autonomous compositions, including also I. Apart from the [situation] in Brno that existed here at the academy [JAMU], the atmosphere was more convenient than in Prague. Prague was too much, somewhat official [from the political point of view] and guarded. We were here [Brno] in some ways better off. There was here less financial support, less money, but it was more free here. So even [also] in the Brno Radio Broadcast Station [BES] we had here the opportunity to gradually do some electronic compositions. The Broadcast studio [BES] in Brno was never officially recognized as some kind of an independent, electro-acoustic working studio.

LZ: Yes, Mr. Růžička told me that.

AP: But, nonetheless there were very good people there—technicians [such as] Jiří Hanousek who was a production director, conductor, and composer, who was a somewhat "head" ["brain"] of the entire [electro-acoustic] movement in the Radio Broadcast Station and then a number of other directors who were sympathetic [of the formation of BES]. So we here as Brnoians back then created a number of, during the second half of the [19]60s, electro-acoustic compositions in Brno. They are also archived here in the Brno Radio Broadcast Station. Today, they could be considered documents of the time. Of course, the equipment back then was relatively simple, if not primitive, but despite this fact our curiosity was great.

Now! In regards to me, I did my first things either in Brno [BES] or in Plzeň [Experimental Studio]. Then in the [19]70s, here in Brno they [Communists] completely

forbade it [BES] during 'normalization' [Husák's regime], but in the meantime, JAMU succeeded in creating this Audio-Visual Studio. In fact, during the favorable years, around [19]68, [19]69, back then it [Audio-Visual Studio] originated here [Brno], and had the political situation developed as started in 1968/69, then it [the development of electroacoustic music in Brno and all of Czechoslovakia] would have been different. [Back] then, we already had ... then it greatly began to ... money was not given to it [electro-acoustic music], and it began to be forbidden [in Brno and Czechoslovakia]. In other words, at the very least, things were "put on ice." And yet, it was not abolished. And yet, this studio [Audio-Visual Studio] functioned here. So at least, for example, our students could work here. We had a course [program] here [JAMU] of electro-acoustic music. There was created a postgraduate program [students who had already finished their Master degree]; maybe Mr. Růžička also told you this. Růžička and I also taught there. So there were some activities in this field even during years of discomfort [1970s]. Of course, as far as professional compositions are concerned, these were not able to be very well created here at JAMU. That is, we already drove to Plzeň [Experimental Studio]. And I, for example, also to Bratislava [Experimental Studio], because in Bratislava also originated in the [19]60s a very well equipped studio which was led by Peter Kolman, who then in the [19]70s emigrated to Vienna. He was quite persecuted [by the Communist regime]. And in this studio, I in fact, still had an opportunity to realize—while Peter Kolman was still there—a number of my compositions in the [19]70s. That is, [I composed] in Plzeň and Bratislava. Otherwise, in addition I alone attended some courses in Munich at the Siemensstudio which was then somehow a part of the Darmstadt courses. I drove to Darmstadt in the [19]60s several times, and in connection with that, there were also courses in Munich. There [Siemensstudio] I was not alone; there were with me some of the colleagues of the groups from Brno and Prague. Otherwise, I would also like to say that in regards to the activities during the [19]60s, there were organized several international courses in Prague, where there was for example Pierre Schaeffer with Françoise Bayle, Guy Reibel, and so on-with his students, colleagues-that was musique concrète. Then also, from Utrecht, Koenig had lectures in Prague. And in addition also, [there existed] domestic courses. So we [Czechoslovakian composers] were cognizant [of electro-acoustic music] relatively very well, and even already in the [19]60s with very good recordings given directly [to us] by Schaeffer, Koenig, etc. And we [also received recordings] in Darmstadt where we also heard a number of things [compositions] directly from the composers, and then also in Munich, etc. Well, this was the situation.

Well, now if I were to get to my things, well then my first thing [electro-acoustic composition] was from 1964, Koncert pro orchestr a magnetofonový pás [Concert for Orchestra and Magnetic Tape], and it is actually the first Czech [Czechoslovakian] composition that makes use of the combination of an orchestra and electronic music. It is actually twice . . . it is actually a defacto-concert for two orchestras, while one is played live, and the other orchestra, actually, is arranged [edited, processed] . . . LZ: Yes.

AP: ... like ... Of course, in the score I precisely notated, or greatly considerably notated, hmmm and then created in the studio. This, fortunately, was even very well performed here by the Brno Philharmonic Orchestra, and several times. This composition still "caught" back then the favorable atmosphere [before 1968]. So it [Koncert pro orchestr a magnetofonový pás] was known. Of course, the gramophone recording, back then, was also perfectly produced. So later it was not permitted to be sold after the occupation [1968], and was released only after twenty years. It was not destroyed; it just could not be distributed for sale publicly. So the recording remained at Supraphon [Czech record company], and now the record exists. In other words, this recording is kind of a historic document, and this record exists. On it are ... there are also additional new things, not

necessarily electronic [compositions] of [Miloš] Štedroň and others. But, it was released after these twenty years!

LZ: Yes.

AP: So-

LZ: And where did you realize this composition?

AP:... and this composition, I... It was originally realized here in Brno [BES], and it is a recording of the Brno Radio Broadcast Station. But for the record, we realized it newly in Prague, back then.

LZ: And where in Prague?

AP: In Prague at the Mozarteu [a concert hall], and was produced with Dr. Herzog [Supraphon] and with [I am unable to find first name] Zamazal. He was a technician [Tonmeister] who had his own private studio [at the time]. So through this way, for Supraphon who had for it [recording of Koncert pro orchestr a magnetofonový pás] financial support, we produced it in Prague. [Koncert pro orchestr a magnetofonový pás was created] on the basis of the recordings of the Philharmonie [he does not specify which orchestra], which were, through this way, edited, and also on the basis of recordings of certain soloists who are there, basically—according to the score—needed. LZ: Of course.

AP: So this is actually an extended thing [composition]. Otherwise, other electronic things [compositions]—

LZ: May I stop the tape recorder, please? I want to check the levels.

[Turned off tape recorder.]

LZ: The other compositions?

AP: Well, the next composition then [was realized] in Plzeň [Experimental Studio]; in Plzeň I began to work [compose]. So I would name the titles, for example *Korespondence* [*Correspondence* (1971)]; that is a composition that combines vocal or voice structure, voice resources with pure electronics. Hence the correspondence, in fact, where it enters into corresponding relations.

LZ: So it is for voice and tape?

AP: That is for ... no, no. It is all for tape [he says 'tape' in English]. It is a voice that is altered, but it is a choir, in essence [in other words, out of one recorded voice, he made a choir]. It is a choir that I recorded in Plzeň, but immediately [and] completely edited. Nothing in it is live. It is an electro-acoustic composition which corresponds, in essence ...

. It is a synthesis, or no; it is a confrontation of the two components, of the so-called musique concrète and electronic [music], back then. That is, of the generators back then, and the vocal [material]. So that is Korespondence. Then I did there, in Plzeň, a music [composition], it is called Nekonečná melodie [Infinite Melody (1973)]. This [composition] is fairly interesting in the fact that it is made with electronic means plus [a] guitar, but from the sound of the guitar completely untraditionally made and edited. And the melody, therefore, is purely electronical, and it is a melody of a micro-interval system, simply calculated from certain . . . There originate [develop] intervals completely like . . . other [different] than is the semitone system. For it [Nekonečná melodie], there was a some kind of a clef somewhere, with which it took me a lot of work, a somehow divided octave hmmm nineteen semitones divided into twelve, so that there would develop other [different, new] intervals—no quarter tones, no nothing, no octaves are there. And so I transferred into this new intervallic system, into these new intervals, I transferred according to the intervallic rows [as in serialism] with which I worked with in the tempered system. That means, certain rows, twelve-tone and balanced rows with the choice of intervals. But, because the intervallic rows have their own row, which is very strict—that is, certain types of intervals only in certain proportions, hierarchies, etc.—so essentially I did this kind of an experiment of what will happen if I will bring into this new, tonal terrain. And I think

that it was shown that this row is enough understandable [comprehensible] and logical; that this melody, eventhough it [melody] is completely untraditional, is completely natural. It does not look somehow deformed, it does not appear somehow ... It appears to be unique, of course, but fairly logically ... That is, namely, the problem of the quarter tone compositions, when they are performed on live [acoustical] instruments, it sometimes appears as an out-of-tune performance. While [but] this electronic composition [Nekonečná melodie], of course, there it works precisely and logically and so on. That of some [issue of] out-of-tuness or some deformation cannot be spoken of. So this is Nekonecná melodie. Then in Plzeň [Experimental Studio] I worked on a composition that is called Metatance [Meta-Dances (1975)], which is again somewhat of an attempt to, similar to what is, for example, ... We [in general] have dances that are live, to dance to, then we also have stylistic-concert dances like the Slavonic Dances of Antonín Dvořák, etc. And this [Metatance] is an additional 'meta,' an additional step, an additional stylistic step from the stylistic [dances, a la Dvořák] to electro-acoustic expressions. I used there ... There are three movements, three dances-well, dances in quotation marks, or quasi-dances, metadances [he says 'meta-dances' in English]-in which, in the first I have as sources modern dance music; now I cannot tell you exactly which one [dance]. It is a collage, in essence. In the second, I have as the sources indeed Dvořák's Slavonic Dances, and in the third, as the sources, Bach's compositions such as Brandenburg Concertos, etc. And now, however, certain things are done with it, that one will almost not recognize it [them, dances]. It only somehow comes together a bit. It is an oscillation. For me, from an aesthetic point of view, one of the more interesting things are oscillations; oscillations between [among] something are a little bit, could be more familiar, but of course it is something totally different. LZ: Excuse me; oscillation is what?

AP: Oscillation, a vibration, a movement. Oscillation [he says 'oscillation' in German]. Oscillation [he says 'oscillation' in English].

LZ: Oscillation [I say 'oscillation' in English]! OK.

AP: Oscillation [he says 'oscillation' in English] between something, a certain movement, vibration between two or more spaces.

LZ: OK.

AP: Movement along a border.

LZ: Great.

AP: OK? As if I walked on top of high mountains' edges and would balance myselfbalance [he says 'balance' in English]. Something like that. So this is one of many means that I like to use, overall. Then I created in Plzeň [Experimental Studio]-this was all in the [19]70s—a triptych. It is called Kontrapunkty přírody [Counterpoints of Nature (1978)], in which the first—the triptych Kontrapunkty prirody has three movements—is called Živly [The Elements]; elements, elements [he says 'elements' in English]. The second is called Zoo, and the third Bel canto. So, Zivly... Oh, it [Kontrapunkty přírody] is meant to be a real [genuine], an affair of nature, but elevated into a form of some kind of electro-acoustic [music], including certain comical elements. So Živly, I genuinely take as the source the Greek idea of four elements of which are fire, water, earth, wind, which of course ... So, what is it? Water is obvious to re-create sound-wise; and for air, [it is obvious to use] wind, etc. What else is there? Earth. Well, so [to depict the earth] I used some sounds of metal or some kind like that. Well, and the biggest problem was with fire, of course, because fire is hard to record, but we "played" around with it in the composition. So this is the first movement [Zivly]; confrontation of these four elements. Each element has its own solo, etc. [Zivly] has its own form, and then it arrives to certain gradations, etc. Zoo, that is a somewhat funny ... It makes use of good comedy, this movement does. I overall like comical situations as they appear. And overall, the Brno "school," we are here far more, I would say, not so "serious" like the Pragues [composers from Prague]. They are many

times over too much serious for us. We sometimes make great fun of that fact, including in the collages, etc. For example, here [Milos] Stedron is greatly [involved with] banalitytolerance of banality, etc.---of course in the meaning of a parody, etc. Or Josef Berg, who is dead, so we did parodies, and so on. So in Zoo, there the animals ... Well, the sounds. indeed we have sounds, recorded sounds of certain animals, and then of course, [sounds of quasi-flutes, etc. And of course, all of this is succumbed to electronic [means]. So out of this, again, originated some kind of a, of course, form. I do not like chaos. I like that a composition have its form; even that an aleatoric and electronic composition have, in the end, some sort of its own form. Well, and the third [movement], Bel canto, which is an artificially created name in essence with the fact that, of course, there is no bel canto, but there appear some people. That is, the world of elements symbolizes the lifeless world. The world of animals, etc. symbolizes the world of life still without people. And then there is Bel canto. There [Bel canto] is used human voice and various ... Well, it is [made] out of the voices actually, and it is based on the fact that a chorale is "woven through" the entire movement and appears and disappears sometimes by being interrupted by certain negative and positive episodes, including cruelties such as scenes of conflicts, etc. It can, of course, all of this can also have meaning other than musical, for example, or as a chronological meaning [he was making a comment against the political situation of the 1970s]-[End of tape.]

LZ: ... the more, no, no, that is great! Piños continued. Can you repeat the last [comment]?

AP: Well, I talked about the composition, *Kontrapunkty přírody*, and namely the third movement is named Bel canto. Well, the meaning of this movement is that the chorale represents something noble in humanity, which is constantly interrupted, absorbed, but is never permanently destroyed. This is the basic idea. Well, then still in Plzeň [Experimental Studio], the last thing that I did there—that was in the [19]80s [1984]—was *Kantiléna* [*Cantilena*]; *Kantiléna*, a lyrical composition, which is made out of string instruments. I think that it was a success [it "gelled"]. It was also then frequently performed. It has also an orchestral version, chamber/orchestral, but the original version was the electro-acoustic version.

In addition, I did a number of compositions in Bratislava [Experimental Studio]. So if my memory allows me to remember, so there was a composition; it was a composition, Adorace [Adoration (1972)]. So the word probably itself suggests what this composition is expressing. It was made out of a lot of certain bells, little bells. I like this kind of material. Well, I do not know what I would add to that. Then we [Piños and the technicians of the Experimental Studio] also made Adorace in a version in which, to this recording [tape] we also played in addition live on these various instruments. Oh yes, the *Metatance* also. The Metatance have various versions in which, to the electronic recording [tape] are added-in live instruments, such as all kinds of different live instruments, such as a trumpet, or an ensemble consisting of piano, percussion instruments, and the like. The composition Metatance, by the way, is one of the most performed compositions. Again now it will be performed in Austria. In Darmstadt we performed it. Well, everywhere. Also in America it was performed by some Americans; the name now ... a duo, young people, such a sympathetic duo. I have their photographs, but now here [where our interview was made] from memory I cannot tell you. At home I would have the names, all of them. Well, the Metatance in their variants [forms] were frequently performed. So now I will return to the other compositions.

LZ: In Bratislava?

AP: [Yes, realized] in Bratislava. Then I did a composition there-

LZ: Excuse me. The first composition [*Adorace*], what year was that? AP: The first was . . . in Bratislava?

#### LZ: Yes.

AP: Well, I would say that I began to work in Bratislava then when here in Brno they [Communist regime] abolished it [BES], and things for me were very bad at the time. And Mr. Kolman invited me there, which was very nice of him. So the first composition is from [19]71, [19]72. Now the second, it is called, Konfluence [Confluence]-Confluencia which means confluence—from 1974, and it is based on the confluence of sound. It is originally from eight sources, from eight sources [he uses another word that also means source], eight objects, of which four of those objects are electronic and [the other] four are concrète. And now they converge to the gradual confluence, to the gradual confluence of the individual streams [sources], as if little "streams" or little "rivers." Not until the end does it all confluence into one "stream." Well, and it was also somewhat of a technical problem—what mainly fascinated the technicians—was how to, technically, this here ... first of all, how to differentiate these eight—which are not eight "streams." They are acoustically difficult to differentiate. Of course, they are not always there [present], those eight. But there are moments when the beginnings of those eight sources are present. [Second] and then how to meaningfully combine, to arrive at the combining at the point so that it be this intention [aim] which is completely clear [obvious]-now while I am talking about it—that it be clear just from the listening, just from the music. Well, then I also did in Bratislava—when was it? I will remember it. Wait! You can stop it so that I can remember it.

#### LZ: Yes.

[Turned off tape recorder.]

AP: The composition was—another one in Bratislava—from 1976, and it is named *Speleofonie* [*Speleophony*]. That means, music of the cave, Hölle [he says 'Hölle' in German which means cave].

LZ: Yes.

AP: We have here near [fifty miles north] Brno the Moravian Karst, Mährische Karst [he says 'Mährische Karst' in German] with caves, etc. In fact, my family originated from the area, from the countryside, my mother and my father. It was always of interest to me. And there are stalactites and stalagmites which reverberate very beautifully. A number of stalactites have [a great] sound. Well, and I arranged there ... We were there with the Radio Broadcast Station [Experimental Studio] technical staff, and recorded two hours worth of beautiful sounds of the stalactites. Well, and that became the basis of the composition, Speleofonie — which is eight minutes [long] — in which are used these sounds of the stalactites. And it is also an interesting composition which, as a matter of fact, was performed concert-wise directly in the caves—also for the visitors of the caves. But otherwise it was, of course, performed [broadcast] at the [Brno] Radio Broadcast Station, and so on. It is a regular electronic composition which I created in Plzeň [no, in Bratislava] and not in Brno, because in Brno it was impossible. Well, and the last one [realized] in Bratislava—then already in the [19]80s, I think in [19]85-I made another triptych. I mentioned the first triptych [Kontrapunkty přírody]; that one was made in Plzeň. And this was a triptych which is named, Panta rhei [1985]; Panta rhei more with a question mark. Panta rhei, and again you have these three movements. The first one is named Antifona [Antiphon], the second is named Metamorfóza [Metamorphosis], and the third is named Katarze [Catharsis]. Well Antifona, that is obvious what is going on there. The second, Metamorfóza is based on the fact that it begins, this movement, very, I would say, consonantly, pleasantly, lyrically, joyfully. And gradually it metamorphosizes into a fairly horrible, catastrophic vision, to about a point of, well, cataclysm. Well, and Katarze, then, returns it backwards. Katarze begins were the cataclysm ended, with a certain terrifying, terrifying sound, and it [the sound] gradually dissolves. Again it was an interesting "homework" assignment for the technician, and I always try to engage my colleagues, the

technicians. It [the sound] dissolves, and the composition then ends with a certain variation on the chorale, Te Deum—[an] Ambrosian chorale—which at first [the beginning of the ending of Katarze] appears from the distance, but never . . . not until it comes closer until the end [of Katarze]. It [Ambrosian chorale] actually sounds as if it were played on an organ. So this is this composition. You may stop it again! LZ: Yes.

# [Turned off tape recorder.]

AP: ... now still, still from the most recent time. After the upheaval [end of Communism, November 1989] here, we could again drive abroad, etc. I must say that before [this], I could not drive out [of the country] at all for probably fifteen years, etc. So in 1990, we were invited to Lyon, where we already had some contacts with them; that is Groupe de la Musique—

LZ: Recherche?

AP: No, no, no. They are called 'live music'; 'Lyon's live music.' Musique Vivante. Musique Vivante Lyon, hmmm Groupe de Musique Vivante Lyon it is called [actually, Groupe de Musique Vivantes de Lyon, GMVL Lyon]. And they are very active. They have their own nice studio. They organize concerts, etc. So we were invited there; three people [were invited]. Then [in the end] two of us drove there, because the "poor" [Miloslav] Istvan died in the meantime [January 26, 1990]. And I was there with Mr. [Michal] Košut—you also have his name on your address list [address list of Czech musicians]. We were there for a month in Lyon, and each of us realized there some kind of a composition. The stay there was very interesting. They, in turn, then drove here—from Lyon—etc. And the cooperation [collaboration], in general, continues. Well, the composition that I made there is called Lux in tenebris; so light in darkness. [It is] based on the fact that a certain sound #7 [I was unable to determine what a 'sound #7' is], where at the end a strong neon-light is continually [constantly] absorbed more and more by the powers of negation; to the point that it [sound # 7] disappears, this symbol of light [sound # 7]. And then happen various dramatic activities, but at the end emerges, already spiritually altered [sound #7] such as a positive value. So this I did in Lyon.

And in the meantime, I must say that in Prague was created [formed] a very good Audiostudio [in the Radio Broadcast Station, Prague], where we also began to drive [to go] to. I [did] also, because I am, of course, in the organization [SEAH] for electro-acoustic [music], etc., and thus am in best personal contacts. The organization is also very good, and [is good] from the point of view of cooperative[ness, helpfulness], friendly[liness]. We do not have there [SEAH] any people who are unpleasant [Communists]. That is also due to the fact, that in the field of electronic [music] worked [certain] people, essentially, who were mostly against the regime and nonconformity, etc.; that is, people who were officially compromised Communists did not do it [compose electro-acoustic music]. So we [SEAH] amongst ourselves, such people—two such people were there who fell aside [left]—we do not have. And unfortunately, in other [musical] organizations, in big [organizations], then there are a lot of these type of people [Communists]. But there are big social and human difficulties, etc. and that would be another question. Well, so in the Audiostudio I did a composition called, Advent in 1991. This is a little composition. It also can be performed purely as electronic [tape], or to that can be added a live trumpet. Well, [it is] Christmas music, I would say, sounding a little bit intentionally genre-like [stereotypical]. Well, and then we did there with Mr. [Daniel] Forró, together in addition, two adaptations of my compositions that are chamber music. One is called Mříže-Cross [he says 'Cross' in English, which actually means bars as in a jail]. It is a symbolic [title] from the time of Communism. And the other composition is *Geneze* [Genesis]. So they received, now, an electronic complexion. I think that the composition Mříže turned out successfully, I think. It was originally for piano, and we, with Mr. Forró, put it in an

interesting acoustical form [shape]. So these are the last three compositions that I did in Prague. Well, now again please turn it off while I think more! LZ: Yes.

#### [Turned off tape recorder.]

AP: I as a composer do not make a fundamental difference between the aesthetic of, for example, orchestral or chamber compositions and electronic [compositions]. I think that certain intentions . . . More important is the fact that for me, electronics begin there where instrumental or vocal music end. It makes no sense to me something, for example ... I do not like, for example, in electronic [music] to use the synthesizers in a way that it be music that can be normally played, also on the piano for example, or the like. So for me, it is more an acoustical domain, there where for me indeed these media would not be enough. But if a certain creation, for example, is concerned from the point of view of thinking [thought], from the point of view of the intention of composing, or formally [traditionally] or so, then there [in that case] I do not make such differences. I also discover something in the music of non-electronic, I mean new music, modern of course. I do not like something [music] that is already known; or I try to invent some new aspects and new methods. What is useful [of value] to me to apply in electronics, I do in electronics. That what is useful to me to apply in non-electronics, so I do there. But I am very happy when I have the opportunity to work in studios. So for me it is a matter, of course, that is very interesting and tempting. And there exists, also, the possibility of tonal sounds [new sounds] and various experiments that with live interpreters a person sometimes does not achieve. I would also like to say [mention] one more curious thing, that during the time of Communism, when I did not at all have the chance that they would play, for example, some of my orchestral things, etc.—the most that was performed was one of my smaller compositions, and then somewhere in the countryside—so electronic music enabled me to develop some concepts; and I had immediately, in essence, the opportunity to acoustically realize them which would compensate, for example, significant concepts that I would normally, for example, do symphonically. So for example, these two triptychs for me are from a thinking point of view as important as, for example, a traditional composer would write a symphony, for example. Well, and electronics has an added benefit that the author is there alongside [the process of realization], and controls the form himself. And some interpreter cannot ruin [it], which happens often of course, when you get interpreters who "brush it off" or perform it [only] after two rehearsals, and then you do not even recognize the composition. And this cannot happen in electronics. Once the composition is recorded, then the composition is in the way that the composer does it—successfully from the composer's pen.

#### [Turned off tape recorder.]

AP: . . . as far as all of Czech electronic [music is concerned], I would say that, of course, the equipment of our studios—up to the recent time—was not somehow the best. Of course, from the point of view of the technical side, few times can we compete with rich studios—the Parisian, or American, etc. But instead we have to here [Czechoslovakia], or should at least, think that the composition be perfectly thought-out, perfectly invented; that it be about something, that it be attractive. Because there is not a person who would be needlessly modest, I think when I hear a lot of foreign things, many composers have at their disposal perfect technology and the compositions are, in the end, very boring or they totally do not spark my interest. And yet at the same time, where there is everything at one's disposal [in terms of technology, equipment] and even the accessibility to literature [music] is perfect, then the [good] results are not there. [Here in Czechoslovakia] a person has to fight for what possibilities he has. Otherwise . . . Well in addition to the subject of aesthetic, I do not like compositions that are long. I like succinct [compositions]. I like [compositions] without some artificial adornment added to it. Then I have in addition to this

some kind of my own certain methods or certain procedures which are suited for me. Some of them [methods] include, for example, in the field of the selection of material, for example the intervallic structures with rhythm. I tried a number of things which I have theoretically worked out, which I am also teaching here at JAMU. I have to formulate things, because I also have my students here. And by the way, a number of Czechoslovakian composers of electronic music here are actually my students, such as Mr.

Jirásek, Mr. Forró-

LZ: And you teach here at JAMU?

AP: [Yes] I teach here at JAMU.

LZ: Like Mr. Růžička?

AP: Yes, but I [teach] composition. He, Mr. Růžička, only taught electronics [electroacoustic music]. But I teach normal composition.

LZ: Like Allen [Strange]?

AP: Yes, yes. But in the scope, of course, I work very closely together with this studio, and of course . . . But now, I only teach composition. I have my own composition students. Now.

LZ: Now?

AP: [Yes.] In addition, I also taught theory classes, etc. But now after the upheaval [end of Communism] when they finally changed the university rules of the curriculum, I only teach composition, because I consider it as the most important [subject to teach]. But now, we have here [Czechoslovakia] better [conditions]. Mr. [Ivo] Medek, for example, was able to come here [JAMU to teach], who is also very favorable to all these things [electro-acoustic music] and is knowledgeable, etc. I think it—the situation—is very advantageous [favorable] as opposed to the situation of five or ten years ago, when it was very sad. [End of conversation.]

The interview of Doc. Mag. Arnost Parsch was taped in his office at JAMU on

Thursday, July 8, 1993, at 12:30 P.M.

LZ: 7-8-93, interview with Parsch. And I just want to ask you what your electro-acoustical compositions are? What their names are? Where did you do them? And if you could talk about a little bit about your aesthetic, and things like that.

AP: For the first time I worked at the studio [BES] at the Czechoslovakian Radio Broadcast Station in Brno on the [my] first electro-acoustic composition, Poetika c. 3 [Poetica no. 3] which is based upon work with micro-intervals. The entire intervallic system is based in a way so that [the] complete tonal system does not form traditional intervals. That means, no octaves, fifths, and the like; which means, it is absolutely without usual intervallic systems. The actual [compositional] process was done via the so-called multi-serial technique. That means, there is a certain program [compositional logic], and to that was then added a recitator which, of course, has essentially nothing in common with the musical part. Later, I preoccupied myself rather with *concrète* music, and even with, for example, in combination with electro-acoustic compositions [concrète music in combination with electronic and acoustic music]. And my kind of, it can be said, aesthetical interest-or how, why I use electro-acoustic music—originates from a kind of opinion that I have termed as "transformation of concrète acoustical [sonic] processes," which does not have to always be only sonic cases as such, but can be transposition, for example, of a graphical score into musical form. Or it can be a transposition of whatever process, which either I observed somewhere, or I will invent it. That means that, for example, according to some mathematical formula or simply whatever. This opinion resulted from the fact that especially by the things that are ... by the activities which are discovered [through

observation] directly somewhere in nature [in other words, he looks to nature for inspiration], [termed] "avante-garde concept." Poets sometimes call it "discovered poetry." So for me it has a kind of hallmark of naturalness, that even when the processing appears God-knows-how avante-garde-like and new and modern, so nonetheless it is based upon a certain natural foundation. During the time when I began to preoccupy [myself with this philosophy]-that is at the turn of the 1960s to 1970s-and I composed several compositions which I titled *Trasposizioni* in Italian. They are numbered one [I], two [II], three [III]. And they were processed [arranged/composed/created] in a manner, back then, which any Radio Broadcast stations' studio would be able [due to the availablity of equipment] to process, actually. This means, change of speed, transformation of characteristics of sound with the aid of a filter, circular modulator, or simply technology [equipment] that was available [to Czechoslovakian composers, Tonmeisters, etc.] at that time. Today perhaps, such intentions would be possible to realize via much better [instruments]. This means, with the aid of the computer's technology and so on, which unfortunately is still not here [Czechoslovakia] frequented, even if we are directly trying to [introduce the new technology] during the education of electro-acoustic music at JAMU in Brno; and in order to introduce this [new technology] so that we can teach this new technology to our composition students. And in this spirit, or with this [compositional] opinion [aesthetic described above] are linked all of my following ['following' refers to the compositions composed after the compositions mentioned above] electro-acoustic compositions, of which there are probably on the whole ten. I will not name all of them. Some were composed for the Radio Broadcast Station's [broadcast] purposes [where he realized the particular composition], some for concert purposes, and some also as, for example, originally film music, or for accompaniment of an exhibition, and the like. This means, simply these compositions were created due to varying reasons. LZ: OK.

AP: For example, when I was talking about film, then it is a composition called *Kuře krákoře*—in English *Chicken Music*—which Miloš Štedroň and I composed jointly to a film, to an instructional film, for a Dutch company, for a chicken farm—Big Dutchman [he says 'Big Dutchman' in English]. And then out of that we created—out of that material we created an autonomous composition. And just now, I have several such topics which I am delaying on purpose, all those that belong especially to the genre of transformation of *concrète* sonic processes, for which I would like to already use a computer's technology joined together with MIDI technology. And I hope that I will be successful in realizing something very soon. I will tell you, at least, the name of one composition: *Hlas řeky* [*River's Voice* for which I am unable to find the date of composition]. For this name I got the inspiration from a book of the author, Herman Hesse [1877-1962]. [Turned off tape recorder.]

LZ: Mr. Parsch continues to talk about his composition[s].

AP: Also, I should mention in which studios I worked [composed]. So in the beginning, as I told you, I was working in the studio [BES] of the Czechoslovakian Radio Broadcast Station in Brno. Other compositions I composed at the Czechoslovakian Radio Broadcast Station in Plzeň [Experimental Studio].

LZ: When you are referring to the 'beginning,' which years do you have in mind? AP: Well, the first [electro-acoustic] composition named *Poetica c. 3* is in 1967. LZ: That is [composed] in Brno [BES]?

AP: [Yes] that is [composed] in Brio.

LZ: At the Radio Broadcast Station.

AP: Then for the first time, I worked in 1969 in the [Experimental] studio of the Radio Broadcast station in Plzeň. This is the composition named *Trasposizioni c. II*, and it is a combination of electronic and *concrète* music. Then [there are] several projects of which I created some in Plzeň and some in Brno. This project [which consists of several compositions] was named Polyfonie [Polyphony], differentiated by consequent numbers. And these are compositions not only electro-acoustical, but also, for instance, instrumental, in which [all of them] the meaning is a certain alternativity of the composition. This means that a composition [all four Polyfonies], named Polyfonie is made out of two, different at least, that is, out of two different layers, and then directly out of two different compositions. So that, for example, Polyfonie II which I made at the Radio Broadcast Station's [Experimental] studio in Plzeň, so that one is made out of an independent concrète composition which is named Ve vysokých horách [In High Mountains], and to that is, as an additional layer, a piano part from an instrumental composition Quatro pezzi per quatro stromenti [Four Pieces for Four Instruments]. In other words, this is a sort of an example of the "alternative" solution. I wrote four *Polyfonie* altogether, while some of them are purely instrumental. And the last thing that I did as an electro-acoustical composition is the composition with the title, *Proměny času [Changing Time]* which I did in Plzeň [Experimental Studio] in 1988, whose musical source is to use a synthesizer, Yamaha [probably the SPX 90 II], and the sound equipment [electronic equipment] of the already existing new type. Essentially, it is an electronic composition using these these new sonic instruments. LZ: Great!

[End of conversation.]

The interview of Doc. Michal Košut was taped in a cafe near JAMU in Brno on

Wednesday, July 14, 1993, at noon.

LZ: 7-14-93, and I am talking here with Mr. Košut, and he will tell me everything about his electro-acoustic compositions and his aesthetic, and all those kinds of things. MK: So I hope that it will be everything and that I will not forget about something. My first encounter with electro-acoustic music was during my time of studies at JAMU---which means, in the years sometime in 1973 to 1978---where theoretically [music theory] I took lessons from Prof. Piňos, and practical realization [composing] from Rudolf Růžička. Of course, the technical equipment of the electro-acoustical studio [BES] in those days---back then there still was not a studio at JAMU, all compositions were created at the Czechoslovakia Radio Broadcast Station's studio [BES]---was fairly simple, and so that the compositions [his compositions] of the time are more of a student's character. They are compositions of which I would not consider to opinionate about them further [do not want to talk about them]. Probably then, from 1984, I worked together with the Radio Broadcast Station's electro-acoustic studio [Experimental Studio]--Bratislava's Radio Station---which was at that time, one can say, the best equipped studio in Czechoslovakia. LZ: The Radio Broadcast Station [studio] directed by Janík?

MK: [Yes] Bratislava. Back then, I worked together with Mr. Duriš, and it was in 1984, probably [on] a nine-minute long composition, *Katedrála v Coventry* [*Cathedral in Coventry*]. Before this [composition], there preceded a kind of a small study [etude]. One moment, turn it off! I have to remember what its name was. [Turned off tape recorder.]

MK: The study's name was Zátiší [Retreat], and it was also done in 1984, probably two months before Katedrála v Coventry. Katedrála v Coventry is, I would say, my first electro-acoustic composition about which I will talk to you. And its aesthetic lies probably in the fact that there is, essentially, electro-acoustical material handled, which is derived from various noises—possibly hits—in the way as if, let us say, a form of a large orchestral composition were constructed. OK? Also, the domain of my compositions is foremost in orchestral music. This means that for me electro-acoustic music more or less is more a form of chamber music. While here [Katedrála v Coventry ] it is more built with various long sections, various long movements, without pauses; in other words in the way that an orchestral composition is composed. And I think that this approach to electroacoustic music has remained with me practically up to now. Later, I also worked with the electro-acoustic studio in Bratislava [Experimental Studio], but rather on, one could say, various mixed compositions [mixed media], for example folklore music arranged electroacoustically or the like. The next part [opus] of my compositions are compositions that I, essentially, made at home on a four-track tape player/recorder and synthesizer. These are rather compositions that have for me personally a somewhat, one could say, instructive or developing meaning in that I tried out various things. It cannot be said about me that I am exclusively a composer of electro-acoustic music, but I tried to [in all of his electro-acoustic compositions] make use of synthesizers and some principles of electro-acoustic music together with normal instruments, which means, in instrumental music primarily [electronics] together with instruments, for example into a symphonic orchestra. It can be said that this [style was with me] up to 1990. In 1990, I spent some time-together with Alois Piños—in France in the electro-acoustic studio in Lyon. The organization to which it [the studio] belonged was named, Musique Vivantes ... No, no, turn it off! Hold on, what is the name of it?

[Turned off tape recorder.]

MK: Musique Vivantes Musique de Lyon [Groupe de Musiques Vivantes de Lyon, GMVL Lyon] where we were probably for a month. And there I made a certain preparatory material for a subsequent electro-acoustical ballet, *Mimiky* [*Mimicries*]. It can be said that back then originated a kind of a theatrical version of it [*Mimiky*] which was probably thirtyeight minutes long. This [theatrical version] however, was never realized. Then in 1991, I—I changed this material and made out of it—made a version for television— [End of tape.]

LZ: We can continue. We're on, yes.

MK: In 1991, I realized the sound version [radio broadcast station]. In 1992 then, the visual television version was released and broadcast, and copies of this version were sold to several countries. It was fairly successful, including the fact that SAT 1 [Austrian television system], a satellite station, bought it for the rights of broadcasting. It probably has been already broadcast there [Austria] twice, so for me it is very good financially. As far as the aesthetic in this ballet is concerned, electro-acoustic music is primarily used again especially in terms of various noises. Apart from this, there are little pieces of orchestral music-music that is through an electro-acoustical way [method] processed-and real percussive instruments. That is, it can be said that it, again, is some kind of a synthesis, and the material is again handled as if it were not electro-acoustic music but instead usual instrumental music despite the fact that it works with other material [electronics]. Well, finally in 1991 and the beginning of 1992, I created for the Vienna theater, Brett [Theater Brett] an electro-acoustic opera, Valerie. It [the libretto] is based upon Vítězslav Nezval's book, novel Valerie and a Week of Wonders. It is kind of Nezval's "dark" novel written in 1931, which has certain serialistic elements. The entire plot takes place in a dream of a fourteen-year old girl named Valerie, who is on vacation at her grandmother and imagines in this dream certain things such as that her grandmother has a secret lover, that there are vampires and similar scary things. It has a very poetic story. It is not an opera in the classical sense of the word. It has a number of scenes like, let us say, in a numbered Baroque opera. But in it singing is at a minimum. Instead, the expression of the characters progresses according to a *Sprechgesang*. Hence the sound text is very accelerated [in terms of time. So there is eliminated that which in opera extremely bothers me personally which is the enormous unfolding [in terms of time], and the like. It can be said that the dramatical,

theatrical time span, and the operatic time span are enormously disproportional; the dramatic time span is very short, the operatic time span is very prolonged. So there [Valerie] they are very tightly brought together. Well, these are the [vocal] roles of the voices. The electro-acoustic music is again developed like in the previous electro-acoustic composition [Katedrála v Coventry]. In other words, it is again somehow a compilation of electro-acoustic material, just as if it were a normal classical music. Valerie is performed in the theater that the sound—the electro-acoustic material—is performed quadrophonically, so that the sound sources are projected from the ceiling. That is about it. LZ: Well OK.

MK: So I, in essence—it could be said—told you about the compositions which I would consider worth talking about. Plus I talked about [my] aesthetic. But I could tell you that my aesthetic about my normal music—instrumental music—it could be said, is a collage, a mixture of styles, which means that I use old Baroque music in confrontation with the newest compositional techniques with the purpose of trying to eliminate the differences. It is not the approach of Stravinsky who, on the contrary, exposed the differences. But I always try to achieve the homogeneity of the entity. It can be said that this approach is also expressed in my electro-acoustic compositions.

LZ: OK, great.

[End of conversation.]

The interview of Ing. Ivo Medek was taped in his office at JAMU in Brno on

Wednesday, July 14, 1993, at 1 P.M.

LZ: 7-14, at 1 P.M., and we are talking here with Mr. Medek.

IM: Well, in essence, I have ... if I should start from the beginning ... so, [I like] electro-acoustic music also due to the reason, [because] my first profession is that of computer engineer. So with these "little" instruments I have played with since high school. And after high school, I studied music privately, and then here at JAMU with Prof. Piňos, and now I teach here. And, I am interested in electro-acoustic music predominantly in combination with live music! That is, I very rarely in compositions-probably only two that are among the first of my electro-acoustic compositions-have them done in a somewhat of a classical [typical] version for tape [he says 'tape' in English]. But all others I have, in essence, always done them in versions either of live electronic plus live instruments and nonelectronical [instruments], or that is, for live instrument plus tape possibly an instrumental ensemble with tape, in other words a larger ensemble—up to the incorporation of electro-acoustic instruments, or electronic instruments to be more specific, into an orchestra. So these are the main things in which the electronic [music] is of interest to me. So this is the difference from the pure electronic [composer]—well, I call them "studio composers"----who are "playing" around with a sound, and from one [sound] create other sounds using equipment, such as electronic filters and modulators; in other words, using all kinds of technology. So instead, I am interested in electronic equipment as if it were another instrument, as if it were an ensemble. The reasons for my belief are on one hand due to my background with percussive instruments and similar instruments, and on the other hand that it has performance advantages. Because the concerts of pure electronic music-only listening concerts-according to my opinion, are to a certain degree depriving the audience of the visual aspect of music. So in that case when-I also did a number of audiovisual performances, including what was organized in the fall of last year [1992] named, Krajiny s Pietou [Countryside with Pieta] in Brno's planetarium with an exclusively visual aid, and with fractals, a number of fractals, together with a film, with laser, and with such things to which, of course, electro-acoustic music fits well together

perfectly. And it [the visual aspect] adds a further dimension to the musical aspect. So there is created a more complex effect for the viewer. And something similar happens when electro-acoustic music is combined together with the live performance, especially when they are . . . I compose a lot for percussion instruments. I would say that percussion instruments—

LZ: Percussion instruments [I asked him, because I did not understand the Czech words for 'percussion instruments']?

IM: Yes... [in percussive instruments] there are, as in electro-acoustic music, there are coloristic possibilities which were rarely used. And in essence, the real use of percussion instruments was begun by Varèse.

LZ: Varèse?

IM: Yes. And since that time, there has been continued work in this area, but there are always possibilities to develop new and new instruments. And we here [Brno] have a superb percussion ensemble, Dama Dama. They have also been awarded prizes at many international competitions. And one of the directors of the ensemble builds his own instruments—many of them, hundreds of types.

LZ: A number of different percussion instruments?

IM: Yes, yes. He really does. He has a composition which he wrote by himself, named *112*, because there were 112 different percussive instruments used. So I indeed compose a lot for this ensemble, and for other percussionists. And of great interest to me is the mixing of percussion instruments with electronic music. And if I take this concept, if I should start from the end [his most recent composition], this year which means 1993, about two weeks ago I completed in the Prague studio [Audiostudio] in Karlín by Jan Jirásek a composition named, *Tamtamania*, which is composed exclusively for one tam-tam—a huge tam-tam—of which we sampled most various sounds on the sampler, variously performed [was the tam-tam], various mallets, and all of kinds of things. And out of this sampled sound was produced a musical base of some type, to which in addition was recorded a layer of live performed tam-tam.

LZ: So it is for tam-tam and tape?

IM: Well, ... yes. There are two versions; one for broadcasting which is purely for tape which originated from the unification of these versions [musical base and a layer of live performed tam-tam], and also there exists a version for live performance and tape consisting of the musical base. So this is the typical system that I use. So there is always an end product where for one there is a purely tape version, and the second is a version consisting of tape together with some kind of a live performance.

LZ: So this [second] version is for concerts?

IM: Yes. So this is the composition of 1993, *Tamtamania*, because there is the exclusive use of a tam-tam. Last year [1992], I composed a similar composition. However, there it was a little bit different. In it the basis of musical sounds was created using pure electronic instruments such as synthesizers, samplers, and various additive instruments [such as reverberators, effects, etc.]. And again there was created a musical base to which a quartet of percussion instruments are performing. So this music was created which was composed on a commission as music for a ballet. And in essence there is also the possibility of it being performed [live]. *Tamtamania* is fifteen minutes long. And this composition which is named *Krajiny s Pietou* [*Countryside with Pieta*] is probably twenty-one minutes long. LZ: The music for the ballet?

IM: [Yes] music for the ballet. So it is a kind of a quarter-evening ballet [it will only take up a quarter of an evening's concert]. And it was composed in cooperation with Igor Vejsada, who is a choreographer, momentarily one of the directors of Kibbutz [Kibbutz Contemporary Dance Company], a contemporary dance ensemble in Israel. LZ: In Israel? IM: [Yes] in Israel. So this was a quartet of percussion instruments plus tape, last year. The year before that [1991], if I would say so—

LZ: Excuse me really quick. What was it for? I did not understand for which instruments the composition was for?

IM: For percussion instruments [he did not realize that I wanted to know specifically for what percussive instruments the composition was for]. A quartet of percussionists. A quartet of—

LZ: Oh, again?

IM: Yes. Four, four.

LZ: OK. OK.

IM: Four, four. So a lot of playing on percussion instruments and tape.

LZ: Yes.

IM: In the year before that, which means in 19...

LZ: One?

IM: . . . [yes] one, I composed a composition named *Hypertenze* [*Hypertension*]. And this composition was created, I would say, using different technology. There are used two synthesizers, a live wind instrument which is fairly randomly, alternatively chosen, either a flute, saxophone or trumpet—for multi-instrumentalists, [they] may change the instrument during the course of the performance, etc.—plus for tape, which is exclusively made using human breath, breathing—that is, it is recorded via microphone—and some very small percussive instruments such as the triangle, two or three little colored [sound] bits here and there. And to that is added the two synthesizers and a live wind instrument [the first version consists of one live wind instrument plus tape, and the second version consists of one live wind instrument plus tape, and the second version consists of one live wind instrument plus tape, and the second version consists of one live minutes long, and again can be alternatively performed either the purely tape plus the wind instrument, or they premiered it in the live version, in which Eduard Spáčil and Mr. [I am unable to ascertain the first name] Semranticky [played the two synthesizers] plus one live trumpeter from Prague.

LZ: Ah ha, so you said wind [brass] instruments, so you mean trumpets?

IM: As I say, it [the choice of wind instrument] is alternative. One time, if the performer transcribes it himself, then he may use [whatever wind instrument].

LZ: Ah ha, great.

IM: So for example, the performance that was done for radio broadcasting, the live instrument is a flute, which is changed by the performer to—

LZ: OK, great. I just wanted to be clear.

IM: The next composition is from 1989 and is named *Rozpomínání* [*Recollecting*], which is composed for . . . in essence it has a completely alternative possible orchestration. Either it is composed for completely live—percussion, piano, and trumpet—or there also exists a full autonomous version for electronic instruments; that is, a synthesizer, electronic percussion. In other words, a drum machine; and the piano is the only live performed instrument. So out of percussion instruments and the trumpet [parts] was created the tape consisting of the musical base, and to it the piano is performed. So it is named *Rozpomínání*. Again, Eduard Spáčil performs this composition in his repertoire very frequently.

Well, and then I would like to mention one more composition among the most important ones that I have composed, which is a composition from 1992 [his resume shows 1991], and is entitled *Uplývání* [Fading]. And it is composed for orchestra, mezzosoprano, and sampler. And it is an interesting composition from the point of view that in essence the electronics are used very discretely, actually only as another voice of the orchestra; actually another solo part of the orchestra. And the composition is fairly simply composed by the fact that a woman's voice is sampled to make a vowel and a choir "singing" a choir. And in regards to the part of the singer who sings words and she sings during the entire composition—in solo—and she does not sing for only sections, but sings practically from the beginning up to the end. The composition lasts for probably twelve minutes or eleven minutes. And the sampler together with the singer play in quasi-unison, [or] some kind of heterophony. So there are created shifts, primary [shifts], which means on the same tone there are shifts of entrances. And the heterophony sometimes [the entrances of the singer and the sampler] is delayed, and sometimes they meet during the same time, and sometimes they are totally apart. So a kind of a duo emerges between the electronic instrument—the voice— and the live singing voice. By the way, for this composition I received the prize of the best composition here [Czech Republic] for 1992, an annual prize from the Czech Music Fund. But this is not so important. Instead the construction of the composition is interesting, because the possibility of the confrontation of the live voice with the sampled voice fascinated me; in essence, with the "dead" electronic voice.

Well, in essence these would be the most important compositions. Otherwise, I have additional compositions which are live electronic music, which are performed live on synthesizers. One of these compositions is named Zlomený kříž [Broken Cross (1990)]. Again, it is composed for the ensemble Dama Dama; in other words, for three percussion instruments. Well, two percussion instruments and one piano and a synthesizer. Well, and of these types of compositions I have some more in which the electronics, in essence, is an additional performer. Well, these would be about the four, five most important compositions from recent times. I will not spend time and talk about my compositions of my youth. I am not so old yet [born 1956] that I will "touch" upon my history. But just a side note, that in essence from my beginning of my compositional career, I have incorporated these kinds of instruments into my "little" compositions, because in 1986 we formed—still in the time of hard totalitarianism here [Czechoslovakia]—an ensemble, the first ensemble here [Czechoslovakia] in essence that preoccupies itself exclusively with contemporary music and with the performing of contemporary music, which was named Art inkognito. It performed for some years including a performance at the Darmstadt courses and at some foreign festivals. Unfortunately in 1990, the ensemble fell apart, because due to financial reasons it was impossible to keep it together because it was not possible to make a living with it [performing contemporary music]. And the ensemble transformed itself into the quartet of percussionists [Dama Dama] who remained out of it. It [Dama Dama] broke off, and now they go on and very successfully. I just want to say that in that previous ensemble [Art inkognito] we already back then had an independent section of electronic instruments which was led by Karel Horký-back then that was his name, alias Daniel Forró-with his instruments. And it [Art inkognito] performed his compositions. That is, we try to "do" electronic music perhaps a little bit differently than perhaps the way Prague or Bratislava does it [he is specifically referring to the studios of the two cities]. They are laboratories. I call them "experiments on laboratory rats," and what bothers me about it is for one ... What bothers me about—overall—the worldwide electronic music as I know it, is the absence of rhythm. Basically, the majority of composers of electronic music are afraid of pregnant rhythms. They are afraid that they will fall somewhere into some category of non-artificial music. And thus, they enormously impoverish electronic music.

LZ: What does 'impoverish' mean [I did not know/understand the word in Czech]? IM: To impoverish; basically that it is lacking in the music. LZ: Ah, OK.

IM: Actually, the parameters of music are clear [obvious]. There is melody, rhythm, tectonics, form. All of these are possible to specify. But the majority of electronic compositions do have a perfectly made form, perfectly made timbre—color, everything is

based upon this—it is a precise work in terms of being pure in structure, pure in form. But [the majority of electronic compositions do have] rules of absolutely arhythm. As I know a lot of compositions from the first experiments which were done with the first synthesizers-Moogs-and even before Moogs, with computer music and so on. Either it [music] is-whatever rhythm there is-it [rhythm] is based on principles of chance, or it [rhythm] is completely missing. Well, and what good does it do, because eurythmics that does not have parameters of rhythm-which means some changes, absence here and there of sound, and sound in whatever pulsation-so eurythmics changes the rhythm. Basically, some three sounds that appear here and there do not yet create a rhythm. Instead, it is rather a coloristic matter than a rhythmic [matter]. This is one thing that bothers me in it [electronic music]. And the other thing that bothers me is that to a certain degree, it [electroacoustic music] inclines me to whatever illusionism of the coloristic possibilities. The spectrum of colors is enormous, gigantic, it is unattainable. And it is very important to make a selection, to make a choice for each composition elect only a little bit [sound material]. And the less, the better I would say in fact, because most of the time there is somewhat of an "intoxication," an enormous enthusiasm for color, in other words, all that it [color] can do, all that it can achieve, all that I can do with it. And the composition loses, in essence ... It [the composition] is only a quasi-exhibition; an exhibition without the colors that would in some way be interestingly arranged. So these are the things that my relation to electronic music consist of: first of all rhythm and eurythmics, and in whatever moderation. Other than that, I think that electronic music should be composed in essence in the same way that non-electronic music is composed. I have a large distaste and intolerance of the overall computer music [he says 'computer music' in English] done in the same type as my colleague [Rudolf] Růžička-this I say out front.

LZ: You do not like it [computer music]?

IM: No.

LZ: No.

IM: No. I consider it a fraud, I will be frank. I tell him this honestly, without some kind of backstabbing.

LZ: No, no, that is quite alright.

IM: This is so [I have this belief], because I know computers and I know how to program, and I have been programming for fifteen years, in essence, almost professionally. He never programmed; other people always did his programs for him. So I know what is in them [Růžička's programs]. I looked through them, and reached this conclusion. At the very moment when, basically, I am creating a composition in a way that for each measure I have to provide a collection of data which determines what tessatura, what densities [volume], what span of octaves, what instrumentation should appear in that measure, how many beats should the measure have; and for each measure I have to provide data in some numerical form, and then I "shove" all of this [data] into the computer, and the only thing that the computer will do is that it will change this data into a visual score, and the generator with chance numbers will "spit" out notes [on the screen] in the way that it [generator] "thinks it up," then I am of the opinion that if, in regards to the measure, I already beforehand know so much about it that I am able to create the data myself, so I will write the notes essentially much more intelligently than the generator with chance numbers. Well, and the fact that it will not print it out for me, well I can let that be photocopied on a Xerox [machine]. So this use of the computer I completely do not accept! I understand [accept] that the computer can enormously help, [such as] with sequencers. With all of that it can help me very much. When I have some rhythmic group, I put it into the computer, I allow it to play it for me, I allow it to play for me all variations of it [rhythmic group] that it can produce and I select the best one, then in that case the computer is helping me. But the computer cannot compose for me. That is stupidity! It totally has no meaning at all. Either the composer

knows where all of the "notes" have to go, and thus they are "right;" and no computer up to now will do it for us. And a generator with chance numbers will absolutely not do it. It has no knowledge of some kind of a "music" [it does not know what music is]. So this [use of the computer] I do not accept. I would call it 'alibi.' Do you know what alibi means? LZ: Well alibi [I say 'alibi' in English]?

IM: Yes, 'hiding behind something.'

LZ: Yes.

IM: He [the composer of computer music] is hiding behind something that is called, 'computer music,' and that it is great [he says 'great' in English], and we all sit down on our asses [because we, the listeners, are supposed to fall on our asses due to our amazement of the music] that it is computer music, and instead it is a bunch of bull! So no! I do not accept this [computer music]. I accept the use of the computer in analysis. I accept the use of the computer as computer edit composition [he says 'computer edit composition' in English]. So all the matters of help [which are] perfectly developed. The connection via MIDI in a studio, that I am able to write [notate] everything there, it plays it for me, I am able to hear everything, it helps me very much. But a computer will never compose for me! If that would happen, then they would have to invent a more intelligent computer than am I, and that will never happen!

LZ: I think so, too.

IM: This is an attitude [computer music] about some activities that appeared here [Czechoslovakia] in this direction, but I think that rather it is or was [an approach] of the 1980s—around the end 1970s—[beginning of the] 1980s that it was a more of a fad, a trend that everybody did computer music. And so what? Actually, all of us are doing computer music. When I am sitting next to the computer and am writing [a la a sequencer] down the notes, and am writing down the precise notes what I want. And the only thing that I allow it [computer] to do is to play it back, allow it to permutate it [notes] and make out of it [notes] various layers, then the computer helps and it is still [only] computer music. In other words, the various competitions that occasionally still exist in the world to which one is able to apply only computer music, well that is a bunch of bull. Every composition practically in the present time made, as long as a person still does not do [compose] it with a paper and pencil, is a composition of computer music. According to what do they want to recognize [distinguish] it? I always say that, 'you claim that it is computer music, then tell me by what it is distinguished?! What is it distinguished by, when the music is composed by using another way [method]? What is different in that music?' In the end, it is [only] sound. I listen to the sound; I judge it. I am completely not interested in what way it [sound] was created. This should interest the musicologist, and the theorist who take it apart. But I as a listener, do not give a hoot. And should I listen to it [composition] with a greater interest if it has some kind of a celebrated title [categorization such as computer music] than with a lesser interest if there is no title, then I think that this is a completely out-of-the-ordinary theory. So this is my, I would say, overall [point of view of electro-acoustic music], and sort of my opinion. Well, what else? That is enough, perhaps?

LZ: Great. Hold on!

[Turned off tape recorder.]

LZ: [I probably asked him about the overall aesthetic at JAMU during the time that the tape recorder was turned off.]

IM: I had an [certain] experience two days ago. We had a concert at Schloss Mittersill [name of a castle] during a festival which was organized by the Mozarteum in Salzburg the musical school in Salzburg. And there originated actually an interesting situation, in that we had the first half of the concert; that is, composers from our [JAMU] department which means, [Leoš] Faltus, [Alois] Piňos, I, Radek Ištvan, and Jiří Bárta. And the second half

belonged to the pedagogues from the Mozarteum; that is from the Austrian side. Well, and an interesting confrontation originated. And to a certain degree I can argue [debate], because I have also had presentations at the Darmstadt courses—at other festivals—where there were tens of concerts; where, basically, a person could hear about all kinds of things. So [I can comment about] the presenters as well as about the music. And I have a certain feeling that the western European [electro-acoustic] music—in whatever way—has fossilized. It fossilized into a somewhat of a post-Webernism; into a decadent, introverted spirit.

LZ: [In other words], that the music has remained the same [and has not progressed]? IM: Yes, it has remained the same. It has remained, I would even say, almost archaic. [In other words], that if Webern would today rise from the dead—the poor guy—that he would maybe be fairly surprised, and would do the whole thing [his compositional theory] completely differently. Serialism reached into an exhaustion, and now [today's electro-acoustic compositions] are more or less creations of the same idea. So when I hear compositions by the composers at Darmstadt and these composers who fall into the category of the orthodox Darmstadt school, and to a certain degree perhaps, the Austrians from the concerts of two days ago also belong into this categorization— [End of tape.]

LZ: Mr. Medek continued.

IM: Well, the interesting confrontation [during the concert in Salzburg] lay in the fact that more spontaneity, vitality is more in the eastern [European] music-now I am not only referring to only Brno, but overall in the East, in the music from our borders in the direction to the east [in other words, the entire former Eastern Block]-than in the music of the West [western Europe]. If a person thinks about it and will not take into consideration the almost conservative trends that appear mainly in perhaps English music, where ties to "post-Britannic" and Tippett's influences still exist, so the tendency of the rest [of Europe's electro-acoustic music]—as long as it has not fallen somewhere into complete minimalism-then it [electro-acoustic music created in western Europe] still falls under the category of post-serialism. And even the reaction of the audience was fairly striking, because it was an international symposium where people from the entire world [attended]---some 150 people—and to them, our music seemed to be completely unfamiliar. They said that they had not heard anything like it, even though it is European music; but it is not European music [in other words, it was made in Europe but does not sound European]. And I think that basically there [in our music] are elements that indeed I think to be domestic, partially of the Slavic "branch," partially of the folklore influences; may it be the Hungarians who have folklore influences [in their electro-acoustic music], or the Rumanians who have folklore influences [in their electro-acoustic music], or of all these ethnicities. Basically, the remnants of spontaneity whose rules go via some "side-route;" and at the same time, and as a result there is more of a musicianship of life's activity. This is only somewhat of an observation of recent days [from Salzburg]. This observation was verified, and the reaction of the audience was fairly striking precisely because the concert was divided into the two cultivating sides, where from each side emanated completely different music.

[End of conversation.]

The interview of Daniel Forró was taped at Studio Zlatnická, Yamaha's outlet store

for the Czech Republic, in Prague on Friday, July 16, 1993, at 10:45 A.M.

LZ: 7-16-93, I am talking here with Mr. Daniel Forró in Prague. [Turned off tape recorder.]

DF: OK, let us try it. So in regards to how I even came to electro-acoustic music; well, in essence, it is interesting to me in terms of film music. I became acquainted with it [electroacoustic music] as a little boy, and electronic instruments for me represented in a way a completely different world, aesthetically. And all of this, of course, in the middle of the 1960s when I first heard all of this, there existed nothing [in terms of instruments]. All that we [Czechoslovakia] had here were electronic organs-Hammonds-and, what else was capable of being heard were various other electronic organs. Here were manufactured, for example in East Germany, were Jonika was its name. So many composers used this instrument here; so it was heard a lot in movies. Well, later film music and scenic music were done, perhaps, with acoustical instruments and the music was echoed a lot, and the like. For example, a harpsichord was a typical instrument used and was variously edited. So all of this, of course, interested me very much, and I came to it [electro-acoustic music] actually not until I was fourteen years old, when I began to play pop music. And it was there [pop music] where I played and began to play keyboard instruments. So all kinds of [electronic] organs, and so on. I even built these instruments myself starting from the age of twelve. Electronics is my hobby so that today I am able to repair even the digital things [instruments]. And I am interested in software programming and all of these things here [he was pointing to all the instruments, specifically samplers]. But now I have "taken a turn." Well, then I went to the [Brno] conservatory, because from the age of fourteen I began to compose music and I wanted to do composition [be a composer], and I decided that I indeed will be a musician. So—I decided this fairly early, about sometime when I was ten vears old-so the direction was clear. And I went to Brno-I am from Jihlava, which is located between Prague and Brno-and I went to Brno to the conservatory. I began to study the flute-I did that for a year-and then I transferred over to the pipe organ-pipe organ [he says 'pipe organ' for me in English]—because there are a bit more pipes there [than the flute has]. So this somewhat interested me. And it is actually also an instrument that is also capable, in essence, to synthesize "colors." There it is possible through combinations of stops to create new sounds, which somewhat it [organ] is similar, in essence, like synthesizers. This is what fairly interested me; that is the orchestral possibilities; that is, an organ as an orchestral instrument. Later-I was at the conservatory for six years. During the meantime, I again played with all kinds of bands—pop music bands—and also with professional bands. Here [Prague with the band] Progress 2, and in Brno with Brom [Orchestr Gustava Broma]. We [all the groups that he was with] recorded records, and the like. And I did this to about 1979, when I finished the conservatory, and then I went to JAMU. But in the meantime already from 1975, I went to Mr. Piňos for private composition lessons, and indeed electro-acoustic music interested me the most. And because I knew that he does it [electro-acoustic music], I went to him. Well, then I was accepted at JAMU for composition, which I did in all kinds of ways [styles] too long of a time, up to 1986. So seven years instead of the usual five years, because I needed to prolong this due to the Army, and so on [he wanted to avoid going to the Army], and I had an individual plan [at JAMU], and the like. And in the meantime already since 1983, I began the project, Forrotronics. Still up to 1984 I played rock 'n' roll music; then I stopped that, and during the meantime I started the project, Forrotronics. The reason why I started this was: I told myself, 'I did not have good experiences of how interpreters performed my compositions, basically, and also on acoustical instruments.' The biggest problem is the technical abilities [or inabilities] of performers, or technical abilities [or inabilities] of even the instruments. Two, the technical abilities of the interdependence of synchronization. Some people just are not capable to perform some things, and this bothered me! I wanted to, for example, have quintuplets against septuples or have combinations—phase shifts and things like that with rhythm, because I work a lot with rhythm. Or all kinds of things, for example have a quintuplet beyond a 4/4 barline. You have a bar, in 4/4, and you take a

measure-and-a-half which is six beats, and beyond the 4/4 barline you place a quintuplet. Instead of six you have five [beats], and it goes over a 4/4 barline. Well, nobody is able to perform this for me. And this bothered me. And that is why I started to get involved with electronics [instruments and music]. And in addition I am also interested, of course, in electro-acoustic and artificially created music of the fact that there is the possibility, on the one hand the imitation of classical instruments, and on the other hand innovative sounds completely new sounds—which in essence nobody on acoustical instruments can, not even on an organ, not in an orchestra, cannot be reproduced. So this also interested me. This was the second thing. And the third thing why I was interested in electronic [electroacoustic] music is space—the work with the space, an artificial space. I can basically create with the help of the instruments echo, reverberation, whatever kind of space. LZ: What does 'space' mean [I did not understand the Czech word for space]?

DF: Space [he says 'space' in English].

LZ: Ah ha, great.

DF: Space effects [he says 'space effects' in English]. In essence, a large cathedral, or an enormous cave, or I can make a garage-you know all of this. Basically, I was interested in the processing of sound; sound modulation and all kinds of things like that. Gradually, I was successful in [he completes the sentence later]—under fairly difficult conditions, because electronic instruments were not sold here [Czechoslovakia]. It had to be smuggled in through all kinds of ways from the West, and had to be bought used, and to buy, frankly, "a rabbit in a bag" [a Czech proverb suggesting that a person cannot have the opportunity of knowing what is in the bag that he had just purchased]—how the saying goes—because we did not know what we were buying when we ordered something. And more or less, it always somehow worked out. And so I somewhat exchanged a number of instruments, and in the end-basically after ten years-I managed somehow to put together a studio, where on the one hand I have analog equipment—old equipment, old instruments, old synthesizers all of which interest me very much, because I think that they have superb capabilities. Today, it [analog instruments] is coming back into fashion, and most importantly, there is the capability to create sounds. They are not prefabricated patches. And then, of course, I have also there digital instruments. But I prefer instruments made by Yamaha, because from the beginning they have always been satisfactory [beneficial] to me-in FM synthesis and things like that-because other companies began early to work a lot with sound examples—with samples. And that [factory patches] is basically boredom, that is uniformity. There one cannot—

LZ: Sampling [Forró meant that patches are boring, not sampling]?

DF: [Yes] sampling [he answered to sampling being good, beneficial]. There [factory patches] one cannot . . . Sampling is good when one can work with it well. But what I am talking about is ROM samplers: where an instrument, in essence, is finished. It has in it—oh, I do not know—three hundred samples, and with which one only needs to mix the sounds, to only combine the samples. And nothing new cannot be created there. And so I am not interested in this!

LZ: Yes, of course.

DF: That is boring.

LZ: So you are interested in the fact when you can yourself edit the sample? DF: [Yes] when I can work with it, edit it; or when I can create a sound, for example by using FM synthesis, all the way from the very beginning, from a sine wave. This is interesting to me!

So all of this was of interest to me and that is why I started to get involved with it [electro-acoustic music]. Oh, and then I have also since 1985, in essence, been using a computer. First, it was a Commodore 64, and then came Atari ST, and today I am switching over to a PC. And, ah of course MIDI. Then came MIDI in 1983. It is probably

symbolic that my project, Forrotronics—that is actually made up of Forró' plus 'electronics'—began in 1983 when MIDI also started out. Although I did not use MIDI from the very beginning—it came to us [Czechoslovakia] later, about two years later [1985]—but that was what I was waiting for! That was exactly that what benefits me. And I basically, consistently eliminated the cooperation with human interpreters, I would say, basically with performing partners. It does not interest me to work with people. I am rather closed up at home and do everything myself on the computer. Now at the present, I have sixty-four MIDI channels—one can work with that somewhat, already. On the Yamaha C-1 [displayed in the store] are even 128 MIDI channels. So I can have, in essence, a terrific orchestra. So this benefits me the greatest.

Ah, aesthetic. Why did I even get started with it [electro-acoustic music]? So most importantly, because I am interested in new sounds.

[Turned off tape recorder.]

DF: In addition, I like the work with space. And the work with computers is, of course, very enticing to me from a controlled situation point of view [in other words, he has complete control over his music].

LZ: Hold on! Can you again start from the beginning in regards to your answer of aesthetic?

DF: Yes. Aesthetic. So the work with electronic instruments and with a computer is advantageous for me from several points of view. First of all, of course—in regards to the instruments—so these are new sound sources. That is, I can obtain whatever kind of sound; whatever kind of sound that I will imagine, basically I will get it. I can also imitate a classical instrument, if I should need it without any problem. But I can basically create totally new sounds that are simply fantastic, that inspire me and transform me, in essence, into a new world. I like the kind of music that creates an atmosphere, moods, spaces, and—

[Turned off tape recorder.]

DF: So the new sound sources. The second thing is the work with space. I would emphasize this, because this is the fifth element [parameter]. We have overtones, we have time. Music is basically, in essence, an oscillation [he probably learned this from Piňos!!!]. It is all a 'vibration' [oscillation]. Either an individual tone is a vibration, or all of it [music is]. Or even the entire musical from, which is in essence, for me a transformation dynamic matter, which progresses through time. That is, I work a lot with time and rhythm, and with space; in other words, time-space, that is what I am interested in. I am interested in, in essence, a philosophical phenomenon that can be beautifully transformed also into music. Fairly frequently, I use nonmusical programs or [a] nonmusical inspiration. And I fairly frequently even work with, for example, such things as that I transcribe graphics into music. There even exist computer softwares for this. Or— LZ: Xenakis.

DF: Yes. Or Kandinsky Music Painter for Atari, and the like. So with this [transfering graphics into music, etc.]. I work fairly often [with this concept]; this interests me. Or transposing literature [into music]. Or I tried it with the game of chess, for example, the moves of chess. Or Rubik's Cube: how the moves work. I basically systemized the moves, and from those I created a composition. This one I will record for you, it will be on the cassette [he dubbed some of his compositions unto several cassettes for me]. So these are the type of things that interest me—even nonmusical things. This is also written about a lot in the biography [he gave me a printout of his biography].

What I am interested in [now he is talking about his fundamental aesthetic/style] is in the disconnection of the, or the distortion of dance ties [to music]. My style could be called poly-style or multi-style. I basically borrow something from everywhere. Today it is called by the not-so-nice word, postmodernism, which I do not like—the word—because it is nonsense, because in essence it is all relative. The modern always exists; it progresses with us always. And in the medieval period there was the medieval period only because we today feel [consider] it that way, but when they [people] existed back then, then it was modern. When Columbus discovered America, it was a contemporary act. And today, we—with the distance of time—see it as the medieval period [he is still talking about the medieval period as an example]. But the same holds true with the modern. So my opinion is that postmodernism is nonsense. It is only a label. It is a terminology. But in principle I use, of course, these things in combinations, perhaps even direct citations sometimes, but not so much like Miloš Stedroň [composer from Brno]. He explicitly likes to do this very much. I rather, perhaps, borrow a lot from ethnic music from the entire world. For example, I will take Japanese instruments—oh, I do not know, perhaps a Koto, or a Shamisen, or a Shakuhachi—and I then I will, perhaps, take—oh, I do not know—an African melody and European Renaissance harmony and I do not know what else, and I combine them together. So I am rather interested in the syntheses than mixtures. Well, I am interested in the fact that through this way I actually distort the traditional mind-set of various styles, which are always set into a kind of categorization—that it all [gets mixed into the] category. I try to interconnect them. And not only from the point of view of space—that is, that I take something from Java or from South America or from music of North American Indians which I connect together with the music of Lapps [native people of Finnland], and I play all of this, perhaps, on a Gamelan—but I do it because it even interests me also from a point of view of time. So I go back in time [and borrow music from] to the medieval period, up to Gregorian chants, up to the music of old Greece. So my music is fairly colorful, it could be said, very colorful. And, of course, I make use ofand due to this I am probably known a little bit as being exceptional, that is, in the context of other composers such as for example in Brno or these countries here [former Eastern music, and such simple, even such primitive structures as a means of contrast; or as one layer, and on top of that I do something else. So this [his style] is not so typical. They [anybody] talk about a stylistic "purity." And that I do not like; something like that [is my approach/style, I would say]. So this is this thing. Well, and the third thing that interests me in electro-acoustic music is, in essence, the interpretation. I do not use the computer in a kind of way like, for example, Rudolf Růžička does it [computer music], because I think that that is nonsense. The [computer] program functions on only perhaps the principle of chance. I am writing a book about this right now, so I am studying this fairly a lot. Either there is only the element of chance only [he never finishes the response of 'or']; that is, through this way the associative function of the brain is simulated. But of course the brain does not work according to chance; the brain works associatively. And for now, the [computer] programs do not have this artificial intelligence. Well, some of them already do [have it] a little bit. But nonetheless, they are only programs that a person created. So again the result will not be good. It is too mechanical. So I do not use the computer for composing [in the compositional process]. The computer interests me as a "directing element"—as a master controller [he says 'master controller' in English]—which in essence, as a sequencer, directs my orchestra. And I have him [computer] under complete control. And I think up everything there [computer, studio, music]; I do everything. And he [computer] only plays it back for me. So I do not even use the computer as a sound instrument, as a tone generator. This is done a lot in America. Here [Czechoslovakia] are not yet such good [software] programs available for now, and the sound cards are weak. The multimedia [cards] for now I do not like. They are of low quality. So perhaps once it will reach a higher level, then one will be able to work even with this. What would interest me would be hard-disk recording for these things [multimedia sound cards], but for now there also is not a lot of that here [Czechoslovakia]. So this is also the third thing that

interests me very much, that I can eliminate, in essence, the human interpreter with all of his deficiencies. Should I want these deficiencies and imperfections, then I will program them into it [computer]; [then I will program] the element of chance, or basically the rhythmic imperfections. I can do that. And if, on the other hand, I want the mechanical precision, well then I have it there. And this machine [computer] will also give me some and all kinds of incredible inspirations, that I for example tried [out]. I have a composition [he did not name it] which I will also record for you there [on the tapes], where I tried phase shifts. I have there [in this composition] essentially something like combinatory points. There are only measure lines; measure lines---which was always a combinationand between that [measure lines] there always unwound various combinations. I had, for example, repeated notes [he plays four triplets and an eighth on a synthesizer next to him]. And I had, for example, fourteen against seven against three—in one measure. That is, one played three even beats-the measure being divided into three even beats-the second layer has seven, and the third has fourteen. And this I did up to perhaps ten layers. And each various period, as everything "shimmers" together, it creates interesting phase shifts, and it always meets only on the measure line. So nobody could perform, for example, this for me—a human interpreter [could not perform this]. Or a similar principle [that] I used [were] fractals; I use them a lot. And I used them in a composition that is named Preludio metallico. It is two years old [1991]. It will also be on the cassette[s]. In it I made forty bells, and within four minutes, the bells also are beating; they are ringing. One of them, the highest [pitched rings] forty times—that is forty times within probably ten seconds—and the biggest one only once. And the whole thing lasts four seconds [he meant four minutes]. And again, there originate interesting, combinatory points, because the third [bell] perhaps rings three times, the fourth four times, the fifth five times, and so on; the twenty-fifth twenty-five times. And when this [Preludio metallico] is drawn up-I have made up something like a score—it actually creates, in essence, curves—there are shifts [in the score]-and it [score] looks like a bell; the [final] curve does. So in this composition the graphic was successfully transposable into, in essence, the music. And basically I have tried other such various things. That is, sometimes I do the compositions explicitly as sound-studies; that is, the composition may be perhaps in only one "color." It is not colorful. And it is a sort of a sound-study in which I basically try out certain things; well something like that. So this is probably everything that could be sort of said about it [aesthetic].

LZ: Great.

DF: So I am basically concerned with the distortion of the traditional time-space. So I also make use of [the music of] the medieval period; from ancient Greece, on one hand. And on the other hand, it is the space. That is, music in essence, world music [he says 'world music' in English] interests me, but not popular music like New Age [he says 'New Age' in English] and such. No, that is weak. But certainly, I borrow elements of ethnic music from the entire world. So this is basically the "horizontal" integration, and also "vertical" by which I am referring to time. So I go back all the way to ancient Greece, to Gregorian chorales, to medieval music, to Gothic music, to Renaissance music, up to somewhere such as Bach. Very rarely do I, for example, borrow from the Classical period or from the Romantic period. With this, I cannot really make much use of; about two hundred years back—there it ends about. And then in the twentieth century interests me, of course, especially the things [music] in which math is used; so multi-serialism, serialism, dodecaphony. I very frequently use these elements, for example, when I have twelve-tone rows. I use well-balanced twelve-tone rows. This I actually learned from Piños; this I did. I went [and took lessons from him] to him. And Piňos is a very interesting person. He is tolerant as a pedagogue. He is a superb pedagogue. And this fact is recognizable by the fact that each of his students is totally different [each of his students has a different

compositional style/aesthetic]. And probably what was good was that I was very close in this [outlook and use of all types of serialism] to him; that we understood each other [in] the mathematical structures. So this was fairly interesting to me, and I "took" a lot from his method. But I use it [different techniques of serialism) liberally, completely liberally. For example, I will use a twelve-tone row and to that I use a rock 'n' roll rhythm. This he would not do; he is afraid of these kinds of things. It is a different generation [between Piňos and Forró]. Or in one layer I make use of, again, some kind of worked-out twelvetone row—perhaps an intervallic row, an all-intervallic twelve-tone row. And from its basis I again derive—on each tone—perhaps additional rows. And so in such a way it complicatedly entangles itself. And so all of this comprises the first layer. And against all this a second layer is going which consists of—oh, I do not know—perhaps a Japanese Shakuhachi playing, for example, an Indian scale, a raga. These things interest me. Perhaps it sounds crazy, but the results are sometimes interesting.

I do quite frequently concerts. Ah, let me add to the project known as Forrotronics. So during the ten years . . . this year, I have anniversary concerts [because Forrotronics is ten years old]. I have already done three or four. One was even at the Brno Planetarium. There it was very nice, because along with the music we had stars projected, and basically we used the technology that was available there. And I will do some additional concerts there sometime in the fall [of 1993]. And during the ten years, there have been probably seventy concerts; so seven a year, which is not that much. So basically one per month if I do not count vacations. But I made each concert basically an event-that each concert be an event. For each concert I had great advertisement, and usually I did these things [concerts] by myself. And these concerts were usually in Brno. And every time the people who came-there were a few of them, there were perhaps one hundred people only, or 200left the concert, I had a feeling, that the it "gave" them something, because each concert was different. Each time I played different compositions. I did not repeat compositions [from one concert to the next]. Rarely do I repeat compositions for [numerous] concerts. I try to make new compositions for each concert. So the concerts are interesting for people just from this point of view [that each concert features new compositions] alone. And the concerts are also very colorful. And when I do the program of the concert, I do it in a way that it be interesting; that is, I alternate the moods. I alternate the compositions, styles, genres. And for people it is interesting. In between [performances of compositions] I also talk a little bit. So I host the concerts myself, and this is also pleasant in that a contact with the people is established. The concerts are not as sterile as classical music with basically academic ties, and so on. So from this point of view [having contacts with people] it is pleasant. So these are the concerts. Otherwise, there is more to Forrotronics. I also have basically a private school of music, where I teach both small children and older ones. Otherwise, I provide expertise, consulting about these [Yamaha and all electronic] instruments, about MIDI, and about computers.

LZ: Well, you are their [Yamaha's] consultant, here [Studio Zlatnická which is located in Prague]?!

DF: Here [Prague], but not only here; but in essence for all of Czechoslovakia. And with Yamaha I also work for Poland and Slovakia, perhaps even also Lithuania. So this [consulting] is only for Yamaha. But I have already done this [consulting] earlier, of course by myself, when I still did not yet work for Yamaha. For Yamaha I have been working for the last year, externally of course. So all of this is interesting. Otherwise I write books, studies. Now a book about MIDI by me will be published—in essence the first [book about MIDI]—in Czech. Currently I am writing about computers and music—a second book and at the end of the year, three more are supposed to come out. I will send them to you [he never did]. So [the three books will deal with the issue] about the programming of synthesizers; and these kinds of things interest me. Well, otherwise I am currently also

Well, otherwise what else is interesting in Brno [JAMU] where I teach this [electroacoustic music] in the department of composition [is the fact that] so Yamaha lent to JAMU instruments; that is, to the only school here [Czechoslovakia].

## LZ: They lent them?

DF: [Yes] they lent them; something like a lease or leasing [he says 'lease' and 'leasing' in English] or something like that, but for free—

LZ: And where is it [equipment] there [I asked this question, because I did not see any of these instruments while I visited JAMU earlier in the month]?

DF: ... for about five years! We have the instruments upstairs in the studio—it [studio] still is not completely finished.

LZ: Is this in [room #] 1-11?

DF: 1-12, I think something was there, perhaps the big electronic organs. And I, in essence, also teach courses there [# 1-12] for other departments, such as keyboard players [who not only learn how to play the standard piano]. This year maybe, the studio will also be open to externalists; that they will pay a fee and be able to make use of it. So all of this is good, because this is the first school here [Czechoslovakia] that offers these courses in Brno [JAMU] thanks to Yamaha. It is a sort of cooperation. The second school in Europe [that has this cooperation with a manufacturer of electronic instruments] is in Holland in Enschede [a city]. In Enschede they already have it for twenty years, in other words that they teach music on synthesizers, improvisation and all these kinds of things. So I also teach all of these things, programming [programming and the use of software], and things like that. So it is an interesting thing that essentially Brno [JAMU] is in this area fairly progressive. So that is about it.

LZ: Great.

[End of conversation.]

### Written Communication

My letter to Jiff Hanousek and his subsequent reply were written in Czech, and are

here translated.

Libor Zajicek 4452 Mattos Dr. Fremont, CA 94536 U.S.A.

Mr Jirí Hanousek August Webel Strasse 7 D-6454 Bruchkobel bei Hanau Deutschland Tel.: 510 - 791 - 1756

31 October 1993.

Dear Mr. Hanousek,

With this letter, I would like to introduce myself to you, and at the same time allow myself to request the following information from you:

I am studying musical history of the twentieth century—concentrating in electro-acoustic music—and at the present time I am working on my Master's degree at San José State University in California with Prof. Allen Strange as my main professor. The title of my dissertation is *History of Electroacoustic Music of the Czech Republic and Slovakia (former Czechoslovaka)*. This year I was in the Czech Republic and Slovakia collecting information for this dissertation, where I visited probably 25 of the most significant composers. For reference I am citing, for example: Ing. Syrovy of AMU; Prof. Ruzicka of JAMU; Dr. Odstrcil, Chairman of SEAH; Ing. Kadlec, Plzen Radio; Ing. Jirásek, Prague Radio; Jozef Malovec, Bratislava.

I obtained your address from Mr. Prof. Rudolf Ruzicka who recommended you to me very sincerely, and herewith I am allowing myself to contact you with the following request. Mr. Ruzicka informed me that you were the director of the electro-acoustic studio at the Radio in Brno. For my dissertation, I would need the answers for the following questions which deal with the history of this studio:

1. Why did this studio exist, and how did it originate?

2. What was the administrative organization of this studio?

3. Who financially supported the activity of this studio? Questions of finance?

4. How was this studio technically equipped? When were these instruments obtained?

5. The recordings recorded in this studio—how were they disseminated and distributed?

6. How were these recordings archived?

7. In case that you have some /any kind of written published information about this studio, I would be very glad to obtain from you copies, even copies of photographs.

8. In case that you have some/any of copies of electro-acoustic music realized at this studio, would it be possible to obtain their copies? In case that not, would it be possible to obtain information of who could have them? (I will glad pay for them).

9. Could I obtain your description of the aesthetic of the music realized in this studio?

In case that you released some publication in Germany, please include those, also; I speak and read German and Czech.

I hope that I have not greatly surprised you with this letter, but I will be very indebted to you for your cooperation which will be priceless!!!

I kindly request a quick reply for which I am sincerely thanking you in advance.

Sincerely, Libor Zajicek. Jirí Hanousek

158 August-Bebel-Str. 7 63486 Bruchköbel Tel.: 06181 - 76782 Deutschland

Mr. Libor Zajicek 4452 Mattos Dr. Fremont, CA 94536 U.S.A.

15.11.93

Dear Mr. Zajicek,

I do not know who you are, I do not know you, but perhaps it should be known in the world about the "wooden" ["stone age"] times of Czechoslovakian electro-acoustic music, and thus am sending you a few "leftovers" which are of that time and I possess. I remember how at JAMU we calculated frequencies on logarithmic rulers, and only later the Soviet computer, Minsk, which was a computer the size of about two large rooms, did this for us [located] at the Brno Institute of Technology, and out of it "came out" the same [result] which I was later in Germany able to accomplish by pushing three buttons on my pocket calculator.

As is evident from the sources [included with this letter], BES (Brnenské elektronické studio [Brno's Electronic Studio]) was a semi-private assembly of several enthusiasts within a government-controlled agency [Radio Broadcast Station]. Because we were not able to assert ourselves in the official musical culture due to political reasons, a semiofficial modern musical assembly with an electronic studio was created which was equipped with the usual recording studio, and also a chamber orchestra named, Studio autoru [Studio of Composers], which was used instead of the [Brno] State Philharmonic for which the [politically] opposed group of composers, named Skupina A [Group A] wrote music. The production of BES was almost exclusively done during nighttime hours, when the studio and recording studio were free. The results (for example, 1 minute of the realization often took the time of several weeks [to make]) were paid miserably. Rarely were the compositions broadcast or used for public productions (look up our festivals, Exposite experimentalní hudby [Exposition of Experimental Music]), and because I kept up written contacts with foreign studios (Paris, N.Y., Utrecht), we exchanged our recorded compositions for foreign recordings. I think that you can dub at least a certain amount of the compositions from Brno's Radio and aesthetically evaluate [the music for vourself.

By the distruction of the "blossoming" culture during the early 1970s, the flights abroad, and the Normalization at home, everything ended. It was a great time when the development of the western world was really tried to be caught-up. Today's "free" country will not be able to repeat this.

Sincerely, Jirí Hanousek.

### List of Instruments

Brno's Electronic Studio had the following instruments.<sup>3</sup>

8 Tesla BM 344 sine-wave generators 1 Philips sine-wave generator 2 Tesla BM 371 square-wave generators 2 Tesla BM 370 saw-tooth wave generators 1 BES white noise generator 1 Tesla generator of low frequencies 1 Tesla XG 110 tone generator 1 Ionika synthesizer 1 electrophonic organ 2 electrophonic guitars 1 studio with musical instruments recording microphones of all kinds contact microphones mobile equipment for fieldwork 3 Tesla ZK 020 universal filters 3 Tesla F 400 b adjustable filters 1 VÚRT ORF 2 fine-tune filter 1 Klein-Hummel UE 100 frequency filter 1 RFT high- and lowpass filter 1 BES ring modulator 1 reverb chamber (large) 1 reverb chamber (small) 1 EMT reverberation plate 1 VURT spring reverb 1 tape recorder loop 4 Tesla audio systems 1 Tesla BM 370 oscilloscope 1 Tesla BM 354 universal counter 1 Tesla BM 363 programming counter 1 mixing console, stereo/mono (12) 1 BES patchboard 1 RFT limiter 4 Sander-Jansen SJ 100 tape recorders 2 Sander-Jansen SJ 103/1 tape recorders 1 Sander-Jansen SJ 103/1 tape recorder (adjustable speeds by BES) 2 Studer stereo tape recorders 1 Studer four-track tape recorder 2 Tesla, Sonet tape recorders

1 Philips tape recorder

<sup>&</sup>lt;sup>3</sup> Jiří Hanousek, "Technická výstroj brněnského elektronického studia čs. rozhlasu" (Technical Equipment of Brno's Electronic Studio at the Czechoslovakian Radio Broadcast Station), a list of instruments.

As of summer 1993, the instrumentation of JAMU's studio # 1-11 consisted of the

following instruments.<sup>4</sup>

1 Atari 1040ST; Software: CuBase, Notator 3.0 1 Roland W-30

1 Jolana Rytmatik Professional pulse generator 1 Alesis MIDIVerb III

1 Oberheim Matrix-1000

1 Oberneim Mainx-1000 1 Tascam MM-1 mixing console 1 Yamaha MT 3x tape recorder 1 VÚRT Antares 2 synthesizer 1 VÚRT program-control synthesizer 1 Tesla BM 430 oscilloscope

<sup>&</sup>lt;sup>4</sup> A compilation of the instruments that I made with the help of Prof. Růžička during my visit in the summer, 1993.

## CHAPTER 5

# PRAGUE

This chapter documents (1) the history of the Electronic Studio at the Výzkumný ústav rozhlasu a televize, VÚRT (Research Institute of the Radio and Television), (2) the history of electro-acoustic studios, R-52 and the Audiostudio, at the Czechoslovakian Radio Broadcast Station, Prague, and (3) the Audio Studio at the Akademie muzických umění, AMU (Academy of Musical Art). The interviews of Mgr. Jan Jirásek (Director of, and a sound engineer at the Audiostudio), PhDr. Milan Slavický (pedagogue at AMU), Vlastislav Matoušek (composer), Doc. Ing. Václav Syrový, CSc. (Director of the Audio Studio at AMU), and Doc. Ivan Kurz (pedagogue at AMU) provided information about the studios in Prague, and are thus included in this chapter. Additional information was granted by Eduard Spáčil, Dr. Eduard Herzog, Ing. Karel Odstrčil, Prof. Dr. Václav Kučera, Ing. Aleš Krumphanzl, Ing. Miroslav Mandík, and Ing. Miloš Bláha (CHAPTER 2), and Ing. Alois Piňos (CHAPTER 4).

# Electronic Studio at the Research Institute of the Radio and Television

The purpose of VÚRT's Electronic Studio, formed sometime during the early 1960s, was the building and testing of various electronic instruments, such as synthesizers, tape recorders with variable speeds, and loop reverberators. In addition, in order to make the Electronic Studio operational, the staff helped in the processes of building and maintaining other studios, such as the Experimental Studio in Plzeň, the Audio Studio at the Television Station in Bratislava, and the Electronic Studio at Prague's film studios, Barrandov.<sup>1</sup> Perhaps VÚRT's most important employee was engineer Miloš Bláha who not

<sup>&</sup>lt;sup>1</sup> My research did not yield any published documentation about Barrandov's Electronic Studio.

only designed and equipped the Electronic Studio, but also designed many instruments that were built there.

The first composer to utilize the Electronic Studio in realizing electro-acoustic music was Miloslav Kabeláč. He recorded and composed the fundamental sound material of his compositions, *Svatovítský zvon (Svatovítský Bell*), as well as *E fontibus bohemicis*.<sup>2</sup> The most active composer in the Electronic Studio was Jaroslav Wolf,<sup>3</sup> a choirmaster of the opera in the city of Ústí nad Labern. In addition, Dr. Vladimír Lébl produced the important record, *Elektronická hudba (Electronic Music*), at the Electronic Studio.<sup>4</sup> This record accompanied the book under the same title. Perhaps the most significant composition to be realized at the Electronic Studio was Jan Hanuš's opera, *Prométheova Pochodeň (Prometheus' Torch*).<sup>5</sup> The opera was not entirely electro-acoustic, but also utilized orchestral music. VÚRT published its own journal, *Rozhlasová a televizní technika (Radio and Television Technology*) in which the Institute's technical activities were documented.

# R-52 and the Audiostudio at the Czechoslovakian Radio Broadcast Station in Prague

An electro-acoustic studio in room R-52 at the Radio Broadcast Station in Prague's suburb, Karlín, was also established during the middle of the 1960s.<sup>6</sup> In 1969, a large recording studio, Studio A, unfortunately burned down. Because the technicians at the Radio did not have new equipment at their immediate disposal, they took the instruments

<sup>&</sup>lt;sup>2</sup> In the listing of compositions, "Přehled výroby ve Studiu electronické hudby, VÚRT" (Overview of the Output of the Studio of Electronic Music at VÚRT), Miloš Bláha lists the date of *Svatovítský zvon* as January 17 to March 9, 1966.

<sup>&</sup>lt;sup>3</sup> Bláha lists three compositions.

<sup>&</sup>lt;sup>4</sup> Produced in 1966.

<sup>&</sup>lt;sup>5</sup> In "Prehled," Bláha lists the date as 1966.

<sup>&</sup>lt;sup>6</sup> I was not able to find any documentation about R-52.

from R-52 and put them into the rebuilt Studio A. Thus, not only was this the end of an electro-acoustic studio at the Radio Broadcast Station in Prague for some time, but Prague composers now had to compose electro-acoustic music in Plzeň's Experimental Studio, which in essence became a "Prague-controlled" studio.

Not until the last years of Czechoslovakia's existence under Communism, sometime in 1988/89, was the Audiostudio with electronic instruments formed. This studio originated from Communist officials' desires to have their annual meetings at Prague's Palace of Culture recorded and broadcast. Thus, a studio was formed at the Palace of Culture with purchased expensive Western equipment for a justified cause.

After the collapse of Communism, the Audiostudio was relocated to the Prague Radio Broadcast Station's building in the suburb of Karlín. In 1990, electro-acoustic music production was begun at the Audiostudio which consists of two sections: literary and musical. The Audiostudio is financed by the Czech Radio and produces electro-acoustic music which is broadcast by the Czech Radio. The studio is serviced by a technical staff of the Radio Broadcast Station. Jan Jirásek is the studio's Director and Antonín Němec is the *Tonmeister*. The studio's instrumentation is continually being upgraded. The music is currently disseminated through radio broadcasts, although efforts to produce a CD are also in progress. The compositions are archived with a label and number at Prague's Radio Broadcast Station. Unlike the "sound" of Plzeň's Experimental Studio, the Audiostudio's "sound" is primarily that of live electro-acoustic music. The studio's staff has two important goals. One, they would like to improve the level of the Audiostudio's equipment to that of other European studios. Two, by inviting composers who have never before composed electro-acoustic music, the staff hopes to raise the awareness of this medium, and increase the number of composers producing electro-acoustic music.

# The Audio Studio at the Academy of Musical Art

The origins of the Audio Studio at Prague's university, AMU, date from 1967, when Doc. Ing. Václav Syrový, CSc. was hired as the Technical Assistant to record concerts. At that time, Syrový only had commercial equipment, such as tape recorders and record players, at his disposal. In about 1970, an electro-acoustic studio was formed on the grounds of two bases. One, the studio's instrumentation, besides the already owned recording instruments, needed to be expanded and improved. And two, the graduate student, Ivan Kurz, insisted that he be able to study electro-acoustic music during his Ph.D. studies at AMU at the beginning of the 1970s. Inevitably, Syrový and Kurz not only were the "driving forces" behind the development of the Audio Studio, but the most interested pedagogues of this medium at AMU. Their first electro-acoustic composition, initiated by the interest of a composition by Ivana Loudová, was Preludium, chorál a toccata pro generátor a klavír (Preludium, Chorale and Toccata for Generator and Piano) of 1970. Perhaps the most important compositions realized at the Audio Studio were Kurz's Five Concrète Etudes of 1974, and Five Electronic Etudes of 1975. From 1970 until 1980, electro-acoustic music was taught informally at the Audio Studio to composition majors who wanted to familiarize themselves with electro-acoustic music. Not until 1980 was a course offered: "Technical Foundations of Electro-Acoustic Music."

## Transcribed Interviews

The interview of Mgr. Jan Jirásek was taped at the Audiostudio in Prague on

Friday, August 6, 1993, at 2 P.M.

LZ: I am here with Mr. Jirásek at the Czech, hmmm here in Prague at the Radio Station. [Turned off tape recorder.]

LZ: Shall we try it again? [I mistakenly did not record the interview during the first time, and thus had to tape the interview for a second time.] Unfortunately, because I made a mistake, we will try it again, and quickly. Why does this studio exist, and so on? The first question.

JJ: The studio emerged some years ago, then at the Czechoslovakian Radio Broadcast Station [in Prague], and from 1990 we began to predominantly make use of the

Audiostudio of the Czech Radio Broadcast Station [Prague], which has two parts—literary and musical—and we, in the musical part, are only preoccupied with electro-acoustic music.

LZ: OK, great. And can you tell me about the financial, that is, support? JJ: Can I make it brief [that is, talk about all the questions in one answer]? LZ: Certainly; and always state the number of the question!

JJ: Well, in addition to the first question, actually the financial sources which are there [which exist], so basically the only financial source comes from the Czech Radio, because we are its part. And the aim of the studio, actually, is to record [electro-acoustic] compositions which are then broadcast, that is, broadcast over [the] entire state's broadcast, because the Czech Radio is a state broadcast station [organization].

Now here, in response to the second question—I think that we talked about the technical support, about the technical background—this [technical support], the Radio Broadcast Station [Prague] has a kind of its own group, servicing [maintaining], which attends to all possible, hmmm to all studios that the Radio Broadcast Station [Prague] has. As far as the administrative aspect is concerned—I told you about it—the director, in essence, of the studio, of the musical section, so I should be the one [I am the one]; or that is me in the musical section [I am the director of the musical division].

Now in regards to the third question—what is the history of the technical equipment? what equipment was supplied and when?—so in essence, our possibilities are a little bit limited to only the analog recording equipment, although with the fact that we have, of course, also DAT, but are only capable of AD or AAD. That is, we do also have the restricted opportunity of digital editing [recording], as long as it is necessary, for example, during acoustical arrangements of sound, or the like. Then, of course, our goal is to have hard-disk recording. Otherwise the equipment of the studio, you have it listed on the list [a list of instruments of the Audiostudio that he gave me].

LZ: Yes, yes, I have.

JJ: As far as the fourth question is concerned [he seemed a bit puzzled] ...

LZ: Oh yes, when did you buy, when did you buy all of these instruments [second part of question # 3]?

JJ: I do not know, of course, exactly in what year it was [when each instrument was bought]. That I would have to look up. But, for example this MasterMix Studer, that is a good mixing board which is here, I think, from 1988 or 198... 1988 in the Radio Broadcast Station [Prague]. And the rest of the equipment of the racks which you photographed is gradually being added or modified. When something newer is discovered, then we try to sell it [their instruments] and with hopes at least, again, that we can add something and buy something more new.

LZ: Yes, I understand.

JJ: That is, we do it in this way.

Now! In regards to the fifth question—how is the music distributed and how it is distributed?—so it is essentially the goal, or the primary goal is the broadcasting. Another goal is, for example, to introduce in some way some composition, for example, on a CD. We have unfortunately not yet been successful in realizing a double CD [like that of the Experimental Studio, Bratislava] which would categorize the level [standard] of the studio, and its aesthetic aim. But here and there, perhaps, individual compositions do make it unto a CD, sometimes; that is very sparingly. I think that Vlastík [Vlastislav Matoušek, who was in the control room next door] does also have a thing [released] on Panton

[Czechoslovakian record company] on CD. I have one thing [composition, Looking West (1991)] that the Germans took over [a German record company released the composition], Erdenklangmusik Verlag in Hamburg. And now again will be [released] in Munich another of my thing [a CD of his music by] Filmkunstmusik Verlag. And I know that some other

composers negotiate about the prospect that some [record] companies could at least release, perhaps, one of their compositions as in a compilation of others [a compilation CD of numerous compositions by various composers]. We support this activity [the release of electro-acoustic compositions of Czechoslovakian composers] very much, because we [Czech record companies] are willing to offer the composition/record essentially for a "symbolic price." [That is, Czechoslovakian record companies can only charge the lowest amount of money for the production of a composition. In other words, Czechs compose the composition, Czechs record the composition, but foreigners release the composition.] LZ: And the archive; can you tell me about that?

JJ: The archive. Well, we [Audiostudio] are basically... our things [compositions] are accessible in the archive of the Czechoslovakian Radio Broadcast Station [Prague]. This means that if we record the composition, then we label it with our kind of special signature [label] and number. And basically, anybody who—which is basically the [department of] musical editiors—who wants to find the composition in the archive and listen to it and use it in a broadcast, [can]. We, of course, are interested in the fact that it [all of the activities of the Audiostudio] get to all kinds of studios [in other words, that other studios get the word what the Audiostudio is doing]; that what we do be known about.

LZ: And lastly, # 11, about the aesthetic; and what will be done [future plans] with the studio as you talked about earlier [during the first unrecorded interview]?

JJ: Ah yes, the aesthetic of the [Audio] studio essentially as opposed to the one of the [Experimental] studio in Plzeň, which originated in 1965, and which in essence [was an aesthetic inclined] to [towards] the creative philosophy of the time, on one hand, the overall philosophy which in those years in Europe, for example, was dominant. And [the Plzeň's Experimental Studio's aesthetic was also defined] from the point of the view of technical possibilities of the time, because there they used the technique of slicing tape, for example, according to centimeter by centimeter, by etc.; slices containing different sounds being put together. So there emerged, in essence, specifically the genre, music for tape [he says 'music for tape' in English], or the style of electro-acoustic music, music for tape [he says 'music for tape' in English]. So on the other hand, our [Audiostudio] aim is, in essence, totally different, and is oriented towards the end [goal] that the music can be performed live, because we want to use it [music], on one hand, in broadcasting. And then we also want to help the composers in the possibility that they can perform the music live; not only on the bases, for example, a computer basis or the basis of a DAT cassette or on diskette. But it [DAT tape] has an additional benefit for the composer in that he can already take the recorded composition and present it [at a concert], because as long as he takes some kind of project [composition] which is notated in some kind of a specific symbolism, then unfortunately it [the notation] cannot "say" anything to an editor or producer. He is simply interested in the end result [end product]-

LZ: 'Here you have the DAT and this is my composition!'

JJ: Exactly, exactly, exactly; exactly like that! Exactly like that! And the last question,— LZ: About the studio's future.

JJ: . . . about the future, there are a number of aims. Well, a "number" of aims. [No] there are several. Well, one of the first such [aims] would be to complete this studio from a point [of view] of technical equipment, so that we would arrive at a certain European standard. Another thing is to actually maintain the genre, as the saying goes, "above water" [to keep it alive], because except for really small exceptions, there is a shortage of young composers here [Czechoslovakia]. But at the same time, there is an interest from the point [of view] of the public's listening of this genre here [Czechoslovakia], because even for the people, for "yesterday's" public—the technical equipment is perhaps mutual [identical] both for popular music and for this [electro-acoustic music]—there are a number of identical points. Popular music is perhaps close to their hearts, and now all of a sudden with surprise they

discover that it is possible to do something completely different and interesting with it [technical equipment, instruments], because a number of, for example, young people are absolutely annoyed by the stereotype, both by the technological stereotype and expressive stereotype, and by the content stereotype of popular music. And now they have the opportunity to discover, familiarize themselves with something different, with something new. Unfortunately, here [Czechoslovakia] I would say that the "artistic" schooling [the teaching of arts, in general] is not adequately progressive in the way that it would lead people to it [electro-acoustic music]. Here [Czechoslovakia], Czech music "sits" a lot on tradition, unfortunately.

LZ: Yes, I have noticed that. I have noticed that.

JJ: And sometimes on a tradition of a kind of, a little bit, narrow-mindedness, one could say. One could say that the people are—

LZ: Which means what?

JJ: This means that people receive, and I do not mean now, perhaps the amateur public there it [the acceptance] is of course very diverse—but people receive it [electro-acoustic music] sometimes with distrust, immensely. I mean, perhaps people who should on the contrary support it. These are, for example, professors at academies who look upon it very distrustingly. But only during the moment when you return from an international competition with some kind of a prize, then they kind of condescendingly look; but they cannot overlook it [the fact that a prize was won]. But otherwise, at the present time they have the image [he says 'image' in English] that it is perhaps necessary, and it is being done, so we too have to do it. But they themselves do not know it [they do not know how to compose it, how to use the technology]. But not that they would not be capable of learning it, but they do not do it! It is not interesting to them. So today when I can, for example, overlook the fact that I criticize it a bit harshly... Brno is, for example, far better off in this regard. There [specifically at JAMU] teaches Růžička. There teaches Piňos, ... LZ: Piňos, Parsch, Medek, Štedroň.

JJ: So ... Yes, Štedroň, Forró. So these are people who have an interest in it. And Brno was—I too am a Brnoian absolvement [graduate]—so there is, has always been a lot wider [greater] interest than, for example, here in Prague. However, unfortunately the "centralism" that exists in this country up to today, so what counts is what is performed here in Prague [Prague is the artistic center, though it may not be the artistic leader]. I am not a Prague-born person; that is, I do not have these feelings [anti electro-acoustic music]. But it is a reality [Prague being an insufficient artistic center] which is being removed, or which is changing only very gradually. And when I think of people [students] who absolve [graduate] from AMU, they absolutely do not have an interest in it. In fact, there are a number of people who express themselves completely with despise—

LZ: Yes, yes, of course.

JJ: . . . that 'everybody knows how to do it' [he is sarcastic].

LZ: "That it can even be considered music?"

JJ: Yes, 'that it—'

LZ: Yes, yes, I understand! We at home have the same stereotypes.

JJ: Yes, yes, yes, yes, yes. So that I return to the topic of [the Audiostudio's] aims. Our aim is, essentially, to occupy ourselves also in obtaining the interest of the professional level [composers].

LZ: Ah ha, to awaken them?

JJ: Yes, yes. That is, to awaken the interest of the good composers. Or that [what makes a good composer] is subjective. This I realize absolutely; the composers who we do consider to be good. Or one even recognizes this [qualities of a good composer] according to [his] activity, according to reliability; one can recognize this [these characteristics]. [On can also recognize a good composer] according to the mental energy which the person is capable

and willing to put into it [the act of composing]. So we try to stimulate this kind of composer through any way to the genre. How successful we are or not, that I cannot say. You can judge that only when you will, perhaps, hear the tape [cassette of dubbed electro-acoustic compositions produced at the Audiostudio. He never sent it!], and some composition.

LZ: Mr. Jirásek, I will steal some more minutes away from you. I have to ask you about your electro-acoustic compositions. If you could quickly tell me how many, what their names are, how long they are?

JJ: Well, I, from the genre of electro-acoustic music, have relatively little, because I compose chamber and symphonic music for children's ensembles . . .

LZ: Great, but do tell me about the electro-acoustic [compositions].

JJ: Well, I have two such compositions which I perform. There are more [electro-acoustic compositions], but of the two the first of them is *Labyrint* [1986] which is for flute, untrained male voice because it is for my voice, and electronics. And this is a composition which was selected on the basis of the competition [First Colloque International] at UNESCO, and was at the competition at UNESCO; or it was the first colloquium of electro-acoustic music, UNESCO in Paris in 1990. And the composition will, next year, it should be released in Munich on a CD, and—

LZ: And how long is it?

JJ: Fifteen minutes, exactly.

LZ: Ah ha, great.

JJ: Fifteen minutes, exactly. And the second composition, this is named Variace na rockové téma [Variation on a Rock Theme (1986)]. But it does not make use of any sort of rock 'n' roll theme. It is this [it makes use of] what we basically talked about, that there exist certain commonalities—I do not want to say that there are even technological commonalities, even if also technological [commonalities do exist]—but rather commonalities of material. Or there are certain common technical or instrumental fundamentals, orchestration for popular music and also electro-acoustical. And thus this composition, it was a kind of ... how one [parameter of rock 'n' roll music or electro-acoustic music] "touches" another parameter and goes into another. So this was a kind of experiment. Then I have also composed other compositions that have a lot in common. That is a composition—to satisfy curiosity .... Two years ago I composed music for the American Pavilion at Brno's Exhibition [a big

"mechanical fair & trade show" organized annually in September]—it is a big fair—and it . . there was a large space that was "sounded up" with the composition. And I made it out of really natural sounds—from human breathing, from walking, and— LZ: Yes, I understand.

JJ:... and in essence, all kinds of such sounds that a person eminates; that is, sounds that do not offend.

LZ: Great, great. Does this composition have a name? Or-

JJ: No, it is about an hour long.

LZ: It is only background music [I say 'background music' in English]?! Only in the background?

JJ: Well, it is done with the aim in mind that it will not be background music [he says 'background music' in English], but I want to use sections [of this music] for the creation of an autonomous electro-acoustic composition.

LZ: OK, great, great.

JJ: And now, when I, for example, did *Babilonská věž* [*Babylon's Tower*]—the project so there are, for example, also sections that are exclusively only electro-acoustical. But not only [electro-acoustical], because it tempts me, for example, when it is such a big project, and it is possible to construct the genre of electro-acoustical music into a neighborhood or into contra-position with something completely different, perhaps with something totally acoustical. OK? And it is very enlightening to me, for example, to have a section be of traditional sound—but I do not mean traditional music—but traditional sound and connect it, perhaps, with something electro-acoustical. Only the development of the genre [in the course of the composition] can be very interesting.

LZ: Excuse me however, but this *Babilonská věž*, this is also an electro-acoustical composition? Or . . . Tell me what it is!

JJ: No, it is sort of an international project in which six actors act. One is from Australia, from Japan, from France, from Greece, one from the Czech Republic, and one from Germany. It will also be performed in America sometime during next year, but I do not know exactly where.

LZ: Great.

JJ: So I would remind you of it in due time [he never did]. And essentially each actor speaks in his own language. It is about certain tolerances, about the ability to communicate. So each person talks . . . [For example], if you will speak English and I will not know how to speak English but only Czech, so then in something we will understand each other and in something [we will] not.

LZ: Yes, yes.

JJ: But it is not only due to the language. It is due to behavior. It is due to everything possible. And from this ability to communicate is the . . . You know, of course, the history of the Tower of Babylon [Tower of Babel]?! That is, it is inspired by this; from all this. LZ: OK, great. So I will let you go.

[End of conversation.]

The interview of PhDr. Milan Slavický was taped in the Rudolfinum, Czech

Philharmonic Orchestra's concert hall, in Prague on Thursday, August 5, 1993, at 4 P.M.

LZ: Thursday, 8-5-93 with Mr. Slavický.

[Turned off tape recorder.]

MS: OK, I have done, altogether, four electro-acoustic compositions. Otherwise, I devote myself predominantly to instrumental music, symphonic, and chamber. The four [electroacoustic] compositions emerged from a span of fifteen years. The first of them is, Chvála cembala [Praise of the Harpsichord]-in English it is translated, In Praise of the Harpsichord-which is a composition which I composed in 1977, back then in the Radio Broadcast Station's electro-acoustic studio [Experimental Studio] in Plzeň with Engineer Česmír Ježek, hmmm Česmír Kadlec [he corrects himself] and Václav Ježek; so sixteen years ago. It is a composition that is nine minutes long, and is made exclusively out of the sound of the harpsichord, and [the sound of the harpsichord] is only in small instances edited. In other words, only out of montage and mixing; but through the layering of several musical tapes which were performed by an interpreter of notated material and the like [the harpsichordist played a score which was recorded unto several tracks]. This composition has [an] arch progress [form], and was, in 1979 by the Czechoslovakian Radio [Czech Radio]-back then it was still the 'Czechoslovakian' Radio-mailed [submitted] to the International Tribune UNESCO—that is, International Rostrum of Composers—UNESCO in Paris, where it acquired a placement of probably, oh I do not know, among the top twenty compositions or something like that. And [it was] also [submitted] to Prix dItalia in Italy. The Radio Broadcast Station [Czech Radio], back then, mailed [submitted] it as the Czechoslovakian submission. Oh. this [Chvála cembala] was intended as a purely electroacoustical composition for broadcasting or concert performance. The second composition I created five years later, in 1982, and that one at the Radio Broadcast Station's [Experimental] studio in Bratislava, where they, back then, invited me with the intention

that I realize some composition there. That is named, Variace na laserový paprsek-Variation on a Laser Ray-and it works completely opposite than the first. First of all, it works with a very diverse audio material-which I found there in the archive and/or probably also recorded some there—consisting of vocal phrases, sounds of string instruments, sounds of percussion instruments, and of sounds of a synthesizer. And the opposition [difference] also exists in the fact that while in the first composition-Chvála cembala—I did it according to an exact, determined plan, which I made out of sounds, first with a harpsichordist who performed the musical segments [which where recorded], and then according to that I made the montage and the mixing. So here [Variace na laserový paprsek], on the contrary, I came with a specific expressive imagination, and to it I wanted to adapt both a range of sounds and also form. In other words, I tried to do it the second time [Variace na laserový paprsek] in an absolutely opposite manner. That was fairly interesting, because the material was varied, and I think that the large variety there was beneficial. The expressive intention was one of: I worked together with the audiovisual group, Via Lucis in Brno, which used my first [electro-acoustic] composition, Chvála *cembala* at several tens of audiovisual performances. And with their founding and artistic leader, with engineer [I am unable to find out Doubek's first name] Doubek, I was on a very close, personal relationship. He was an outstanding human. And he, back then, died tragically. And this composition—the second [Variace na laserový paprsek]—was basically a composition "in memoriam" music, for his memory.

LZ: So Laser Ray?

MS: Laser Ray, yes.

LZ: Yes.

MS: Yes. That is why I "stepped" into the [Experimental] studio [in Bratislava] with my expressive imagination in mind, where I looked for, in the archive, what could be appropriate for my expressive imagination. The group Via Lucis exists up today, even after his death. So even this composition, they made out of it an audiovisual adaptation and performed it in a number of various countries, even at a festival in Zagreb and the like; in short, in Poland, Germany and wherever. That is, both of these compositions were adapted by this audiovisual group.

Then I, probably for eight years, did not do any electro-acoustic compositions, mainly only symphonic and chamber things. Not after 1990—after the fall of Communism -did I return to this genre, and then on the basis of a commission by the former stateowned Czechoslovakia's Radio [Czech Radio] that I compose an electro-acoustic composition [Prosvětlení V aneb Pražský podzim (Lighted Through or Prague's Autumn)]. And back then, we were all full of happiness as a result of the fall of Communism, and in addition [due] to the fresh memories of how everything here [Czechoslovakia] proceeded [during Communism], because we also freely and vehemently engaged in it [the Communistic rhetoric]; and either as spectators directly or participants of the demonstrations/manifestations. For example, I was here a member of a four-member board of the Society of Composers, which [this four-member board] was here [Czechoslovakia] after the fall of the old Communistic leaders, elected that it simply lead the organization further. And thus similarly—that is, quickly—we were deeply engaged in this activity. And in this composition, I tried a little bit to summarize the chronology of the entire development that led to the downfall [of Communism]. And I had the opportunity, because at the [Prague] Radio Broadcast Station's technicians were very skilled guys who were with tape recorders at all possible sites where something was happening [during the Revolution and before]. So they had a relatively rich collection of documentary recordings, including of the demonstrations still before the fall of Communism, and from the outsetting events [Revolution of 1989], and so on. So I had at my disposal a relatively large [amount] of documentational material, and out of that I used several recordings in this composition.

In it you will hear [he dubbed his electro-acoustic compositions for me], for example, a speech of the last Communist leader, Miloš Jakeš, who was a person who possessed remarkable low intelligence and whose speech reflected this fact. And I selected numerous phrases out of his big, celebrated speeches which conflict and dispute each other. These I used there [*Prosvětlení V aneb Pražský podzim*]. Then, [I also used] recordings of the demonstrations against [the] Communists of 1989—

LZ: In the revolution?

MS: Yes, and still before; still before [the Revolution]. Yes, yes, still before; and then from these revolutionary events [1989]. In fact, there are, there is a sequence that makes use of the recordings of the encirclement [by the police] of people in the Národní Třída [name of street] on the 17th of November [1989] in the evening when the policement simply beat the students.

LZ: I heard about that.

MS: And out of desperation, they shout 'No,' and 'Why are you beating us?', and so on. And I used all of this in this composition. But of course, it is not only like a sequence which would line things up chronologically—events as they progressed one after another. I also attempted that it be a tightly built musical form where there are certain relations, and the like. The composition then ends with an explosion of excitement from the Wenzelslav Square, and then with the [Czechoslovakian national] anthem that is sung by Hana Hegerová [famous singer of the 1960s who sang protest songs against the Communists, and was forbidden to perform for a long time] of which I only used a portion, and then with sound of bells which were rung again; because it is perhaps not well known that the Communists, for example, forbade the ringing of church bells.

LZ: Yes, I know about that. Such bullshit!

MS: Yes. So in other words, [the ringing of the bells in the composition] as a symbol of a new start of a normal, human life again. It symbolically ends with the sound of the human heart again beginning to beat.

LZ: Yes. And where did you realize it? In Bourges [before the taped interview, he told me that he had visited Bourges earlier]? Or ...

MS: No. I did it in Prague, here in the Audiostudio-

LZ: At Jirásek [Director of Audiostudio]?

MS: [Yes] at Jirásek, yes. But in Bourges it was premiered at the festival, Synthese '90, in June 1990.

LZ: OK, yes I understand; there at the festival?!

MS: Yes, yes. There was also *Chvàla Cembala* performed. And the fourth, most recent composition is named *Adventus*, and was made this year in the spring in 1992 [he said 1992]. [It is] made of a part done here again at this Audiostudio, Prague, and from a part done in Bourges—in GMEB, Groupe Musique de Bourges—

LZ: Excuse me Mr. Slavický!

MS: Yes, yes.

LZ: So the third composition of which you spoke, ...

MS: It is called—

LZ: . . . how long is it?

MS: Fourteen minutes and probably ten seconds.

LZ: OK, great. It is written there [liner notes of cassette that he gave me]?! MS: 14'10".

LZ: OK, great, great. Just so that I know.

MS: 14'10". So it is the fourth composition. It is named Adventus. And it is a composition ... Well, in the preceding composition, in the Prosvětlení V aneb Pražský podzim

[Lighted Through or Prague's Autumn; name of the third composition], that was essentially a reaction against the concrete historical events. This one [Adventus], on the other hand, is

a kind of look at heaven, because I was and am, and I hope that I will continue to be a person who is anchored in the Christian conviction-and which exactly was not common here [Czechoslovakia]—and one who also inspires himself with the world and its compositions. And I was very fascinated with the melody of Czech rorate masses, which is from the Renaissance period. Rorate [Rorantists' Rorate caeli], that is from the period, from the time of Advent, from the four weeks before Christmas which are called Advent. At the time [Renaissance], these were done in Bohemia early in the morning during daybreak Mass—these were the rorates—and they had a special [specific] music to them which was specifically used during these Masses. And this music which was the rorate of the sixteenth century, is very interesting in the way that it has an unusual intervallic structure: it begins with a major second, then with an interval of a fifth, minor third, and then again with a third [he did not specify whether a major or minor third]. And that is, the musical incipit was very interesting. And apart from that, underneath it, the text which the incipit uses is a kind of unusual poetic moment, and that is "Break through Dear God and descent to Earth." I liked this very much, because in it is the [symbolic] awaiting of the arrival of Christ. That is, the idea of "Break through Dear God and descent to Earth" is kind of, almost, a moment which could be used by a poet of the twentieth century and not of the sixteenth century. So this, I was-the combination of the unusual intervallic structure and the poetic moment--very enthusiastic about. And at the same time, I tried to [make use of] something somewhat different than up to now, namely a synthesis, or the unification of two things that are essentially very far apart; namely, historic musical material, and at the same time modern technical means, because everything else there is [made] from the sound of a synthesizer. I let it [the Rorate] be sung by the choir, Duodena Cantitans—I wrote here [his notebook] Duodena Cantitans. So I had the original Rorate melody be sung by a men's choir and by a women's choir [which was recorded]; sections [of the Rorate] transposed, and the like. And with this then, I work, that is at one level of things—the purely vocal material which I did not edit in any way by filtering—and then I work with the sound of a synthesizer which, at the beginning of the composition in essence anticipates the [he does not complete the phrase] ... it prepares the incipit of the vocal entry. And also further [in Adventus], the intervallic structures emerge from this musical material, essentially the entire layer of synthesizers. That is, essentially they are two totally different worlds, from the point of [view of] musical material, originating five centuries apart. But I try to create one organic unit [entity]. Well, the composition is about eleven minutes long.

LZ: Yes, I see [from the liner notes to the cassette]. Can you now tell me a little bit about your aesthetics of your music? That is, do you have one for electro-acoustic music, or an overall one, or whatever?

MS: Well, as far as the electro-acoustic compositions are concerned, so as far as the third and fourth [electro-acoustic compositions are concerned, they] use in the ending [coda] the same idea of the sound of bells. So otherwise, they do not have a lot else in common, because as I have already said, for example, that the first and second [electro-acoustic compositions] I did intentionally completely opposite; one out of homogeneous material and precise plan, the second the other way around, out of disparate material and more out of expressive imagination.

LZ: That is *Laser Ray*?

MS: Yes, yes. And similarly also these [last] two, essentially. Each is made out of a different "keg;" that is, from the point of [view of] material and method, there is a large variety. A fair amount of similarity is in the element of form, because all four have a certain, one-movement arch form.

LZ: Arch [I say 'arch' in English]?

MS: Yes. And all my other one-movement chamber compositions also have this form: and some orchestral compositions. That is in essence a type of shape that basically fits a certain type of form. And to me it is greatly beneficial, because I am also convinced of the fact that it is also a form that, in essence, for centuries we find again and again in music in various stylistic trends, because it corresponds to more or less a certain physiological duration, psychological action [aspect], certain excitement, calmness, energy and so on. And in the end, [it corresponds to] the process [duration] of life, which of course culminates and then life's energy declines and ends, and so on. So I see something timeless in it that symbolizes, in this way, human existence. But first and foremost it is a musically effective form that corresponds to a certain dynamism of human perception; and I also see that the listeners often react positively to it. That, in short, they are aware of this formal development and "go" with it and can identify with it. [While] for example, compositions which are composed, for example, in a nonperiodic [way] or that "stack" uneven layers on top of each other with a surprising form of development and the like, so there often the public looses through a certain way the contact that it [audience] cannot orient itself in the overall formal construction, and then quite often turns off the attention and cannot find a connection. While on the other hand, I observe that basically these arch-composed compositions hold up the attention of the listener via a certain way, earnestly. This, of course, is a thing of personal opinion, so that if you will interview fifty composers, so they can tell you fifty different things.

# LZ: Of course.

MS: To me personally, it is well suited and I do [use] it. And I also think that the possibilities [of the arch form] are not exhausted, and that it can still, in various ways, be done. For example, a composition that I had last year commissioned from the Berlin Festival Chrono, so this one is named *Portace lidf* [*The Portability of People*], and is a similar composition, a one-movement orchestral composition, about a fifteen minutes long [composition], and is composed in a similar way. It, by the way, won a prize of "Czech Musical Criticism" some several weeks ago for last year, for the year 1992. So, so far my electro-acoustic compositions are, on the other hand, connected fairly closely to that [compositions] which I do apart from them [electro-acoustic compositions]; that is my chamber and symphonic compositions, because they share similar formal forms. LZ: OK, great.

[End of conversation.]

The interview of Vlastislav Matoušek was taped in his apartment in Prague on

## Saturday, August 7, 1993, at 9 A.M.

LZ: We will talk with Mr. Vlastislav Matoušek, and he will tell us, he will talk about his electro-acoustical compositions and whatever he can. When? How? How long? How long each composition is? Where he composed them, and so on.

VM: So I came to electro-acoustical music via Big Beat which I have played since my youth. And I was interested in the opportunity in processing sounds via an electronic path. As my first work in the studio, experimental studio [Audiostudio]—there where Jan Jirásek is the director of—so he invited me that I basically could compose a composition there. LZ: There in Karlín [suburb of Prague]?

VM: Before its present location, it was still located at the Palace of Culture. But it is the same studio which is only relocated there. And he could record it for the Radio Broadcast Station [Prague], and I could test various interesting things. [This is probably one of those attempts that Jirásek spoke of when he said that the Audiostudio's staff was trying to

persuade/invite various composers to become interested in and compose electro-acoustic music.]

LZ: So that was three years ago?

VM: That was indeed three years ago when it [Audiostudio] was being organized/started up. Otherwise, I have known Jan from earlier via some competitions where we competed against each other. I had some songs for children and so on. This is not important. And I had a composition conceived which was named *Hlasy 6 stěn* [Voices of 6 Walls (1990)]. I had it [originally] conceived for symphonic orchestra. But the problem—to write something for symphonic orchestra—is that it is essentially a half-years work, almost. Only to write the score takes three months just sitting each day and writing for eight hours. Certainly you have also done something like this?

LZ: Of course.

VM: Well, in this case the opportunity tempted me to basically do the same thing in the course of only days. So the composition . . . the concept that I had—*Hlasy 6 stěn*—I did it essentially completely electronically and really had it done in five days. And of course, something totally different originated [came about], because the possibilities of the studio, again, bring about totally different "paths." So this composition lasts thirteen minutes. What else do you need to know about it?

LZ: Well nothing. OK.

VM: Here you have from me a kind of program [notes] with it. What the aesthetical problem is, well, the enclosed space—six walls actually limit a jail cell exactly in the same way as any other closed space. A cube always has six walls. Well, and from each of the walls "sound out" some voices. Well, and I tried to transform them via some way into the music. The problem lies in the fact, the isolation is a problem of how, in the moment when somebody "closes" himself out of fear, for example. So also when one is "closed in" from the pressure of external conditions. This is the problem of "closed in-ness" of space. Otherwise, already back then I essentially began to work with that which is, I think, for my electro-acoustical compositions especially characteristic, [and that] is my love of ethnic music, including the fact that I also teach ethnomusicology and perform actively on numerous exotic instruments in the ensemble Relaxace; for example, the CDs that have been released and that I showed you, and so on. So it appears interesting to me somewhat, as sources of sounds, to use these ethnic instruments. So there [Hlasy 6 stěn] are entire layers of Tibetan bowls. Then there is a Gaita which is actually a flute from bagpipes which is, for example, played in Slovakia, and the like. Various such things [instruments] are used there. There are also various sung passages, then things done on the computer via MIDI editing, and such things. When you, for example, take a piece of finished music and you put it through, actually, MIDI editing, then from it [the piece of music] it [MIDI] will select certain [actually, he means that the composer will select whatever he wants to select] random, that is, fragments, sections, which then, if one puts them into a synthesizer, then from it come out things in which the original pattern, actually to a certain extent, you recognize, but is totally different, completely transformed. And such layers you will also find there [Hlasy 6 sten] when you will listen to it.

LZ: OK, great.

VM: So you can turn it off!

[Turned off tape recorder.]

VM: Then I did a composition there [Audiostudio] which is named *Široká stezka* [Wide Path (1991)]. In this work, exclusive electronics are used somewhat relatively very little. It is, essentially, a composition which is, in which there are added certain reverberations. It is a composition where dominates this [he points to it], Fujara: a kind of bass, pastoral flute from Terchové [name of area in Slovakia]. [He plays something for a little while.] Hmmm, this brought back memories! And in the middle [*Široká stezka*], there is ... It [*Široká* 

stezka] again has three sections. It begins with a somewhat slow, actually a somewhat thundering on Tibetan bowls and gongs. From that arise certain, such prolonged sounds played on the bass flute [Fujara]. In the middle [section] there is a somewhat percussive interlude. There [middle section], in essence, the electronic expression was in the fact that I made somewhat of a percussive combination on Tibetan bowls, inverted [the Tibetan bowls were inverted] you will hear. And I made it twice, and played both of the very long combinations. And one I detuned very little; that is, a somewhat of a phase shift, one done like, for example, by [Steve] Reich and the like. And here the two models were shifted against each other. And again the middle section is limited by the fact until they shifted and joined, in essence, into an [one] identical phase. And into this there is a kind of an improvisation again on the bass flute, and ends again with a certain return to the stretchedout introduction. So again a three-section big form of a higher type [I do not know what he means]. The composition is seventeen minutes long.

LZ: Great.

VM: What else in addition to that do you need to know?

LZ: That's great, that's great.

VM: Well, and otherwise a 'wide path', it is a certain, somewhat of a paradox: the beginning of the end and the ending of the beginning.

LZ: Yes, yes, yes. Great.

VM: So you can stop it!

[Turned off tape recorder.]

VM: These [compositions which he had just described] I did in 1991, and I think that— LZ: No [I said 'no' because I was holding some documentation that cited different dates]. VM: Maybe even in 1990. Gosh, I do not know! Well, anyway, in 1990/91. Then I composed a composition named *Návrat* [*Return* (1991)]. It is nineteen minutes and fortyeight seconds long. And in it, on the contrary, I work with a lot of electronics. All sounds are variously sampled [he says 'sampled' in English] and the like. And again, philosophically for me it was a certain, one could say, way through some labyrinth or some maze. And the way ultimately would lead one to the place from where one started. That is the 'return'. The paradox is, 'if I have not already been here sometime, and there right now?'

LZ: OK, great.

VM: How long it is, I have talked about. Otherwise, specifically there are once again, one could say, layers of gongs. And these gongs change according to a unique algorithm. And like this, it goes all the way to the middle of the composition, and from the middle of the composition, it essentially goes retrograde, the gongs go backwards. And it [the use of the gongs] is mixed in such a way that one should not even be aware of it. All of a sudden, one discovers—during the course of the composition—that everything goes actually backwards.

LZ: Great, great.

VM: Well, and into this, there one could say are put such [certain] layers of sampled flutes and such things. There [Návrat], the number of ethnical instruments [used] is, in essence, at a minimum. It [Návrat] is . . . the majority is purposefully electronics.

LZ: Great.

[Turned off tape recorder.]

VM: Here we have [he is looking for some notes] . . . that is already from 1992, it is a composition known as . . . [he is still looking] . . .

LZ: Here it is! Here it is!

VM: Yes. And with that, I am sure that I gave you some commentary [notes].

LZ: [Now I am looking through the material that he has already given me up to that point.] No, so far I only have the score andVM: Hold on! In that case I only have-

[Turned off tape recorder.]

LZ: OK, you may [proceed]!

VM: 108 vln větru [108 Waves of the Wind (1992)]. It is also, probably, eighteen minutes [and] thirty-six [seconds long], I think. And it is a composition—

LZ: What year? 1992?

VM: 1992, for sure. And it is a composition for, in essence, electronics and exotic flutes. The entire source of sound is there, in essence, a stream of the air. That is why it is named—

LZ: Of course.

VM: ... 108 vln větru. The stream of the air is either in the form of differences of some flutes, or human voice. There [108 vln větru] the principle which it is based on, is essentially a principle of augmentation. And there always appears some sort of element which later is transposed an octave lower. Through this way, it [the element] prolongs itself twice as long, so that each subsequent section is twice as long as the previous one. And to that, there develops a new counterpoint which is used again, in essence, as a twice as long augmented section, always. And on top of it [counterpoint/texture] there again develops an additional and additional, new counterpoint. Through this way it builds up, and each section is, through some way, determined by [the number] 108. It is always somehow divisible by 108 or multiplicative by 108, so that it has a somewhat characteristic construction. And then there is there a somewhat of a central section, which is entirely sampled [makes use of sampled sounds] on the computer. Again, they [sampled sounds] are of flutes—sampled flutes—but created on the computer, so that there are such, somewhat shifts absolutely nonflute-like. This you will, ultimately—if you will listen to it —hear there [he dubbed two tapes of his music for me].

LZ: Yes, of course, of course. That is on the tape?

VM: And-

LZ: Is it on the tape?

VM: Yes, it is on the tape. And at the end of the, in essence, longest section, there are then gradually, on top of each other, and all of the 'the-more-the-work-progresses-the-shorter-the-section-become' sections, which are actually from the beginning of the composition. So at the end, there is a sort of reprise where they all actually come together at one time [simultaneously]. So it is a sort of synthetic reprise of all the material that came before. LZ: Great, I will hear that.

VM: And it [108 vln větru] all returns to a kind of a sonic section which created the introduction.

LZ: Great, great. I am curious.

[Turned off tape recorder.]

LZ: Say it [something that we had discussed during the time that the tape recorder was turned off] again!

VM: Then I composed a composition Bez návratu [Without a Return (1992)], which is for magnetic tape and harp. It had its premiere exactly a year ago sometime in August [August 22, 1992], again at the Mladé Podium [Youth Podium in Karlsbad], just like I will do now with Trigramy [Trigrams, another one of his electro-acoustic compositions]. Well, and there [Bez návratu] again is a layer of gongs that proceed in a certain algorithm, slowly. Into this are [interjected] entrances of sampled, somewhat 'spherical' flutes of many types. Well, and to this plays a harp that again has similar models, in essence, derived from the electronic part, and now they communicate with each other. The composition is, about, nine and half minutes long, and—

LZ: Also 1992?

VM: [Yes] it is [composed in] 1992. It is also a kind of recording of, in essence, the Czech Radio Broadcast Station [Prague]. All of these compositions [so far mentioned] are also both recordings and are broadcasted.

LZ: Great, and all of these compositions you made here [Prague] at the Radio Broadcast Station [Audiostudio]?

VM: [Yes] I did everything with Antonín Němec [Tonmeister at Audiostudio].

LZ: Great, great. That is all that I wanted to know.

VM: In essence, we always do it together. I, as a matter of principle, always play everything [all the instruments] myself, or I do it via some way. And essentially together with Antonín we think up the electronic subtleties with which it is possible to create [the specific composition], and so on.

LZ: He is a *Tonmeister* [I say 'Tonmeister' in German]? VM: Antonín, no.

LZ: Tonmeister [I say 'Tonmeister' in German] is the technician there. VM: Ah, yes. Of course, Tonmeister [he says 'Tonmeister' in German]. So here [Czechoslovakia] it is known as 'sound expert' in Czech.

LZ: OK, great. Like Mr. Kadlec in Plzeň?

VM: [Yes] with him I am also acquainted. Over there by him [I think that in this case, the Radio Broadcast Station, Plzeň, as opposed to only its Experimental Studio is referred to], we-by the way-recorded the CD that I showed to you, also; a record with Big Beats [Big Beat music] and the like.

[Turned off tape recorder.]

VM:...Bez návratu ...

LZ: [Bez] návratu [I repeat the title for my benefit].

VM: Hold on a second! Now, there [on one of the cassettes that he dubbed for me] is 5 minut před [5 minutes before (1992)], I think. Let me see!

[Turned off tape recorder.]

LZ: 5 minut pred [again I repeat the title for my benefit]. OK?

VM: Well, I composed this, in essence, last year in the fall [fall of 1992]. It is five minutes long. And the entire composition is created from the sound of an alarm clock [made out of metal). There the points to it I have a Russian alarm clock of which we recorded a quiet 'tik-tok', and then I slowed it down several times. I made out of it two, somewhat, models [recordings] that "fall" [again, it is a phase shift a la Steve Reich] rhythmically into each other. And in essence, nothing happens in this composition. The entire five minutes it is like this [phase shift], and the only thing that happens is that time proceeds through a various space. That is, the space enlarges and reduces, and moves from one [audio] channel to another. And-

LZ: I want to hear this!

VM: ... it is a composition which actually, philosophically, resolves the problem that man always expects something. That is, man waits what will happen, and in essence, nothing happens. And at the same time that nothing happened was essentially the important thing that the person waited for, and simply missed it.

LZ: That it happened?

VM: He completely did not notice it.

LZ: Yes, of course.

VM: That is the problem when man, at the end of his life, realizes that everything, in essence, was wrong. So I would gladly try to avoid this!

LZ: Yes, great.

[End of tape. Turned side of tape.]

VM: You know what? I will make you another tape!

LZ: That is all right.

VM: So that you will have more of it [electro-acoustic compositions].

[Turned off tape recorder.]

LZ: ... 5 minut před [he will talk more about it].

VM: [He reads the following notes accompanying this composition.] 'Stale jenom očekáváme. Cosi mimořádného, velikého, významného, zásadního . . . , co by přidalo smyslu našemu omezenému bytí. A ono se pak většinou vůbec nic nestane. Není právě toto nic tím nejdůležitějším, co jsme ve skutečnosti neměli minout??? Třeba jsme jen v pravou chvíli nedokázali pochopit . . .' ['Continually we only expect. Something extraordinary, big, significant, fundamental . . . , what would give meaning to our limited being. And ususally nothing happens. Isn't namely this nothing the most important, which in reality we should not have missed??? Perhaps we weren't able in the right moment to comprehend

. .']

LZ: Great.

VM: This is a kind of philosophy of essence. So stop once again! [Turned off tape recorder.]

VM: [In the background, the following composition which he will discuss is playing.] So during this year, I also composed a composition which is named Ze střechy světa [From Earth's Roof (1993)]. And this is, in essence, made entirely from the sound of Tibetan bowls. It is thirteen minutes long. And when I perform it live, then I often sing with it an [mantra] Aum, or I play on additional Tibetan bowls, according to what kind of mood I am in and whatever comes to my mind. Otherwise, electronics in this composition are used in a way that I, in essence, out of the five bowls that I had at my disposal, I multiplied them about five times so that the shift, each time, that in the shift the bowls would play at one tone higher or one tone lower, and on various additional intervals as I needed to obtain the [desired] sound.

[Turned off tape recorder.]

LZ: What year was this composition? What year?

VM: Also in 1992.

LZ: 1992, great.

[Turned off tape recorder.]

VM: [In the background, the following composition is playing which he will discuss.] LZ: Ah ha, now I hear it [something that he pointed out to me].

VM: Praga '93 is its name. And the Czech Radio Broadcast Station [Prague] commissioned it from me, and they requested [of] me that it be kind of a characteristic composition which would, through some way, convey Prague.

LZ: Yes, yes of course.

VM: So I walked around Prague and recorded various characteristic sounds.

LZ: I understand.

VM: Specifically, the singing fountain in the Belvedere [a garden] which is one of the most famous sights, from the Renaissance, a bronze fountain that emits unique sounds. Then [I recorded and used in *Praga '93*] characteristic bells in Prague of St. Augustine [church], [in the background] Loreta [famous church whose bells perform a melody], and other such things. At Orloj [famous clock in which twelve turning apostles appear on the hour] I recorded when people are 'ahh-ing' when the rooster crows, and things like that. Then, I used in this composition . . . I sang [and recorded] the oldest version of the chorale, St. Wenzelslav. And of course, there are not missing various citations, deformed [edited] in every which way. Vltava [The Moldau from Bedřich Smetana's *My Country*] is in reverse, of course the most famous citation where Prague appears. And Vyšehrad [also from *My Country*] of Smetana [is also used]. And everything is, through kind of a grotesque way, kind of assembled according to a certain logical architecture. When you will listen to it, then you will hear that the singing fountain is actually [playing] underneath all of it, that it

creates a kind of "spine." And into all this are [interjected] these grotesque, in essence, matters, citations, and so on. In essence, throughout all this I imagined a typical American tourist, who wants to run through [see] Prague within a matter of some hours, and see here all that is interesting.

LZ: Yes, yes, yes. And it is five minutes long?

VM: [Yes] exactly five minutes. They commissioned it, and so it is five minutes and one second long.

LZ: OK.

[Turned off tape recorder.]

LZ: Trigramy [Trigrams (1993); I mention it again for my benefit].

VM: Trigramy, those I have done most recently; probably one month ago [about July]. I finished the electronic part, and to that I plan on adding additional instruments. So it will be the electronic part that you will have recorded there [on one of the two cassettes]. One moment! Turn it off!

LZ: OK.

[Turned off tape recorder.]

LZ: We are talking about Trigramy.

VM: OK, so this is *Trigramy*. I did this there [Audiostudio], and most recently. Two girls [women] commissioned it from me: one a harpist, and one flutist, who are here [Czechoslovakia] one of the few who preoccupy themselves exclusively with contemporary music; and do it as a hobby-hobby. And [they] perform exclusively contemporary music, or mostly, which is a big rarity with interpreters [performers]. So they wanted some kind of composition. [And] so it crossed my mind to form these Trigramy. And of course, I always try to "smuggle" into it [a composition] my beloved electronics. So it is ... The number of trigrams is, in reality, eight. It is taken from the Book of Changes which you mentioned [I Ching]. And the trigrams are, in essence, certain symbols of fundamental elements which, according to old Chinese ideas define this universe. So there [Trigramy] is heaven, earth, fire, water and lake, thunder, and so on. Each trigram has its own characteristic. Well and the trigram is created from three lines. It is either interrupted or complete. Complete is Jang, and Jin is the interrupted. And each trigram, essentially, represents a different combination of these lines. Altogether, there are eight [trigrams in Trigramy] like I said. And I did... One of the three layers will be made up of the electronic tape. That is what you have recorded here. This here [the part of Trigramy that was at that moment playing in the background], for example is mountain: here are such stony—from stone—sampled, simply, elements that dominate. Otherwise, in all the four versions [trigrams] that result from the Jang, actually, ... With the Jang section [part] that is at the bottom [contrapuntally] and is the electronic part, so in each there are four layers. One of them are comprised of flutes. And in the case of the trigram, wind, then the flutes are highlighted—they dominate. In the case of the trigram, for example mountain, then there is a minimalism derived from the [sampled] sounds of [the hitting] stones. And [all of the Trigramy are arranged] in such a manner. If it is thunder, then there is a certain pounding unto a metal bar, and Chinese marbles that clink, and the like. Via this principle is this [only the four Jang] done, in the way that there is always everything [all the material] there. But there are four variants [four different movements of the Jang], and in each variant there is always a little bit something [musical material] placed at the front [highlighted]. And the others [the other three layers] are at a specific moment, in essence, surpressed. So there are four and four variations [four Jin and four Jang] which are in essence the same, only always in a different hue; as if you would look at it from a different angle of view.

LZ: Ah ha, yes, yes, yes. And so now tell me a little bit about your general aesthetic. I see that it is all ethnomusical, but tell me whatever!

VM: A lot of it is, of course, inspired by the Orient and exoticism with which I occupy myself in ethnomusicology. And philosophically I am also drawn to it. I, in essence— LZ: Excuse me, I am now talking about all of your electro-acoustical compositions; that is about all your music. Not only about this composition [*Trigramy*]; that is, in general. VM: Of course. In general. Not only electro-acoustic music that I do, but also all other [music] is essentially influenced by my passion of the oriental thinking which to me enormously seems inspirative. I think that "hectic" Europe already essentially exhausted its possibilities, and it is necessary that it be enriched with other thoughtful concepts that are not as much materially based upon the rationale, but are oriented . . . [In other words], there are other possibilities.

LZ: Of course.

VM: So I—immediately after puberty—in essence, went through a period during which I looked for, philosophically, how to grasp this world and be able to answer oneself questions. And I went through Europe's entire philosophy—from ancient times of course, antiquity and so on. And then I began to investigate others. And Yoga began to "speak" to me, so that I began to excercise. And to this day I essentially [excercise]. In prison [before the taped interview, he told me about the time he served in prison during the early 1980s (probably for defying the Communist regime)], I sustained [remained sane] myself by standing on my head each day for half an hour—*shirshāsana*. And Yoga enormously kind of gives you incredible advantage [inspiration]. For example, in prison it is really rough to live there; at least in a bolshevik prison it was during my time! And—LZ: The year and a half that you were in prison?

VM: Yes, but when you have something like this that gives you inner strength, then, in short, it [imprisonment] is yet another life experience that enriches you. From this [imprisonment] you extract for the rest of your life enormously much [a great amount]. LZ: Yes, of course.

VM: For that I am grateful to them that they locked me up. Normally . . .

LZ: Yes, I have already heard that somewhere before.

VM: It made me . . . it completely opened up for me new horizons, . . .

LZ: I have also heard of this before.

VM: And it [imprisonment] enormously strengthened me. I met there a lot of magnificent people, including Václav Havel [Czech playwright who today is the Czech Republic's President] with whom we always debated questions of existence—

LZ: Oh, you really where there with Havel?!

VM: Yes, certainly. So even only an acquaintance with such a person is a great enrichment, let alone the other [experiences from prison and Communism]. Well, in the end—via Yoga —I got to Buddhism, which most greatly benefits my nature. I have a feeling that it is an enormeously tolerant teaching which, in essence, does not preoccupy itself with the existence of a divine principle [being, such as a god in Christianity], and such things that really are things based on faith, but resolves practically how to decrease the suffering in this world. In other words, let all beings on this world be happy. This is the fundamental basis of the Mahajaran Buddhism in Tibet. And this is the thing [this fundamental basis] with which I really most of all identify. Through some kind of my own "pebble" [my own way] I contribute to the decrease of the suffering of this world. And I have a feeling that I was, in some way, called upon to do this through music. So I try to put this into my music. LZ: Great.

[End of conversation.]

The interview of Doc. Ing. Václav Syrový, CSc. was taped in his office at AMU in

Prague on Friday, June 24, 1994, at 9 A.M.

LZ: 6-24, and Mr. Doc. Syrový will tell us about the entire history here [AMU's Audio Studio].

VS: Well, "history?!" I am at this school basically, at the Musical Faculty AMU, actively working from 1967. At that time as a student I studied at a technical university, and I worked here [AMU] as a so-called "technical assistant," which means that I was in charge of recording concerts and the overall sound production. Back then the best equipment basically at the school here were a couple, a few commercial tape recorders/players and record players; no studio technology, no professional technology [did we have at our disposal]. And already during this time, I acquainted myself of course with a number of people, a number of students with whom I later basically worked together on projects which, about which we will also talk about. One of those [relationships that I] created was with Ivan Kurz, [a] student [back then] of the composition faculty [department], with whom [he does not complete the phrase]—about 1970; in other words during a time when I was in essence employed for one year directly on the faculty with being in charge of equipping a professional studio. So back then, we [Syrový and Kurz] began to work together, and we were actually provoked by a composition—also actually by a back then [female] student, respectively a graduate student of the composition faculty, Ivana Loudová, who studied composition with Prof. Kabeláč. It was a composition for four tape players. And I have to admit that when we heard it back then, that it was probably one of my first contacts with autonomous electro-acoustic music, despite the fact that I had already been involved in that time, of course, in the technical aspects of electronic instruments very intensively. At that time I had actually already behind me the building of the first electronic organ and had built others. And-

LZ: What was the name of the composition with those four tape players? VS: Unfortunately I already do not remember that, but it is no problem to ask here Mrs. Loudová who is employed here at this school today. So there is no problem in asking her. [Turned off tape recorder.]

VS: Back then, specifically after listening to this composition did we, with Ivan Kurz, say to each other that 'there probably would not be a problem in creating something like this, and approached this, I would say, very half-seriously. Rather, we probably underestimated the entire affair at the beginning, and we tried out some things such as recording a piece of a Mozart's composition from a record and then doing [editing, processing] something with it. But very soon did we find out-of course with the use of absolutely primitive technology, because back then the [Audio] studio was only still being built physically back then in 1970. Actually its activities were not started until 1971, so the equipment at this school was indeed minimal. And ... but the first encounters were such that one could not possibly make a joke out of them, or one could not possibly underestimate the creation. As long as it [an electro-acoustic composition] has a meaning, then suddenly I must involve myself with it relatively deeply, I must devote a minimal amount of time, not only the practical [time] but also the theoretical [time], which means I must first find out what is going on here, what does this field actually mean. And this was indeed the first encounter with electro-acoustic music, that it is not only a servant to some sound effects which can be done in whatever way, which in essence [sound effects] have no meaning. There were even some articles of this time, I can remember, that poked fun at this fact. It [electroacoustic music] was [in these articles] noted as being something that will never be listened to anyway, and something that at the most can be only tolerated in some science fiction films. And that is why we suddenly said 'no like this' ['no' to a semi-serious approach of studying, composing, etc., electro-acoustic music]. Either it can be done right, or it cannot essentially be done at all. And so we selected a way, I would say, a little more serious-like approach, and we came up with an idea to create a composition which through some way would be possible to be realized even with the minimal technical equipment. This is

Preludium, chorál a toccata pro generátor a klavír [Preludium, Chorale and Toccata for Generator and Piano (1970)] which was exclusively created on generic, commercial, at the time measuring generator, and recorded unto a tape player, Grundig TK-27. This was actually all of the equipment with which the composition was realized. When we listen to it today, then we realize that already the joke [lighthearted approach of composing electroacoustic music] is not there anymore, the underestimation, the ignorance, as I would say, of seriousness. And probably I would say that for both of us it had a great amount of meaning that we made this thing jointly together, because when Ivan Kurz entered after the finishing of actually his [graduate] studies-I do not remember exactly when, he would be able to tell you exactly when-when he entered his Ph.D. studies, that is to say the continuation. So his Ph.D. studies . . . actually in his Ph.D. studies he *himself*, I have to say, set through to the leadership [of AMU] that he will also do [study, compose] electroacoustic music, and that he will do it with me. I did not know just as much about it [electroacoustic music] as he [did]. We actually educated ourselves on those instruments. We relatively often drove to Plzeň to the Experimental Studio at the Czechoslovakian Radio back then. And actually the first equipment of a studio that existed at this school, already operating in 1971, already allowed us to realize the first set of *Etudes*, the *Concrète Etudes* [five Concrète Etudes are subtitled: Metronome, Water, Human, Cymbals, and Clarinet (1974)] that were actually realized back then. We discovered somehow a foreign music. The interest of this field of music, the interest from the point of view, I would say, of the faculty was not too great. For one, it was a field [of music] that unfortunately during that time was connected, on one side, with a number of excellent names, but also actually even names that were after August 1968 [invasion of Warsaw Pact Armies], I would say, pushed away from the artistic and public life. And of the entire genre of electro-acoustic music, at that time it was again looked upon as something that "smells" too much of Western musical culture. So after the [political and cultural] height that existed during about 1969—actually the Experimental Studio in Plzeň was established in 1967— [Phone rang. Turned off tape recorder.]

LZ: We are continuing.

VS: So Ivan Kurz set through [at AMU] that we indeed could preoccupy ourselves with electro-acoustic music, despite the fact that I would say, there did not exist so entirely favorable conditions—whether the internal [conditions] at school or all-around external [conditions] in the musical life of back then—so the "green light" was also given to these things [development of electro-acoustic music]. The paradox of our [AMU's] entire development of our entry into electro-acoustic music which is primarily connected with the two series of etudes-Concrète and Electronic Etudes-actually was due to the interest of a person who never wanted anything to do with electronic music, who was even, I would say, a sad persona in Czechoslovakian music from the point of view of politics [in other words, he was a communist composer], and that was the composer, Prof. Václav Dobiáš. I personally knew him and must say that he was one of the few people who through some way took sides with [cheered, applauded] the building of the studio, [and] he was interested in it. I think that nobody so frequently went upstairs [that is where the Audio Studio was located in the old building] near Rudolfinum [AMU was located next to the Rudolfinum at that time] on our premises where the studio was located like him out of all the pedagogues, and who was also actually greatly interested himself of what actually [was done] there; of how we together with Ivan Kurz are actually doing it [composing electroacoustic music]. And so I think that he was also one of the first people who always heard these completed things [compositions]. Well, I did not know him so well that I could, I would say, look for certain connections of why he behaved this way, but he was in essence I would say, a national composer of that time, famous for his own, I would say, completely associated with the political "in tune" compositions. Of his, I would say, other

qualities, certainly compositional and humanitarian, Doc. Kurz could tell you more about them, because he was in a far closer contact with him [than I]. And after all, after his death which up today is a bit covered up with a certain secrecy, he actually requested his inheritance. So he [Kurz] could tell you much more about him. But I myself, if I should speak for myself, so he was one of the few people who was for one interested in the [Audio] studio, of how the studio is "growing," and what is going on in the studio, despite the fact that his profession *never* connected him into this field in some way; that he was never in connection to this field.

After the composing of these first compositions [Toccata and Etudes] which were [composed] in the first half of the 1970s, actually there also began a simple interest in this field by students. It is necessary to state that the [Audio] studio was respectably equipped from the point of view of recording equipment and the reproduction of sound, but there was no specific equipment such as synthesizers or various processors and the like. So notably the first things [compositions] were created on indeed exclusively classical methods: scissors, tape, various dubbing, speeding up [of tape], slowing down [of tape]; as were also done in the same spirit all of the *Etudes* which deliberately process one signal, one acoustical object [each Etude deals with a different signal, acoustical object, etc.], predominantly with one technique [each Etude is made with a different technique]. And this actually allows, up to today, to use these as instructional, educational material, because it is possible to document them of how it [technique] is indeed done or how it was done. Of course, today the approach of the process of creation is a little bit different. But the musicianship, actually the content should not change [and should not have changed over the years]; it should be present there in some way for sure. We also know that the reality was that close to one minute of pure time of the final result of the composition we did for nearly ten to twelve hours. And about the style of the work. That is very important. We know that the general plateau differentiates the approach of the so-called Cologne school, Paris school. So not only in the work [is there a differentiation] of the electronic music and *concrète*, but in the sense of the approach to the realization of compositions. So if I could consider the Cologne school of perhaps Stockhausen's projects, [which are] perfectly prepared projects that were realized, then of course the French approach-the Paris school—meant a little bit of a looser approach, and the compositions actually got the definitive similarity only during the realization [process]. So they were not, ... there did not exist anything like realization scores, but then the scores were done fairly after the listening. We could, or certainly for Ivan Kurz, but even for me, it was far more closer [comfortable] the approach of, in the sense of the Paris school, that in essence the composition was borne not until the concrete work. This actually allows, I would say, for the least dependance upon too great of knowledge-or not knowledge-of possibilities of the technology, because I let myself—not that I would let myself somehow negatively be influenced by it [technology], or even to restrict myself-instead, I rather let myself be inspired by it. If I would want to plan out the composition ahead of time which I then realize precisely according to a realization score [he does not complete the phrase], and these kinds of experiments were of course done here at school. We have compositions here [Audio Studio] of this type which were recorded [realized], I would say, in this style of work [compositional process]. So it requires great demands of knowledge by the composer that he know, for one, what it is that is in a studio [that he know what the instruments are and how to use them], and what it [the instrument] concretely is able to do. So not every generator identically produces the identical tones for that the composer not think that every generator produces the identical tones] in the same way; every modulator actually behaves differently. So as long as I have to realize exactly that which I envision, then for one I have to know how exactly it will be done, on what instruments it will be done. And I also have to have a certain certainty, I would say, in the characteristic in respect to the behavior of the

technology. And that is a fairly big risk. I still think that it is never possible to realize the composition the same in that it would sound as what it looks like [notated] in some symbolic notation.

So Ivan Kurz always came in with some idea, or I would say that we [jointly] discussed some things. I have to admit that despite the fact that I at that time already actually had a compositional education behind me, and so there was no problem in talking to me about whatever kind of compositional "question mark." So I suddenly actually began to recognize a genuine point of electro-acoustic music. And on the other hand, I actually devoted [directed] Ivan Kurz to the technical possibilities in the sense that This rather yes, and this rather no, because this could in certain circumstances perhaps play badly and so on.' And it came to a point that we ... even until today actually, whenever whatever we do together, so one always talks into the others mind. So Ivan Kurz will say, 'No, I want you to do it exactly like this from a technical point of view!' And I on the other side will tell him, Hey, I am not so sure about this section. It should be longer, shorter, or more expressive like this.' So it is a somewhat of an optimal relationship between a composer and his realizer [Tonmeister], which leads to, perhaps it could be said and certainly, a successful ending; at least in our case. I think that I do not know of a composition that we created with any problems, and always the composition in essence succeeded. The least that we always had [from a composition] was a good feeling about it. So even in essence the individual *Etudes* were created in such a way that we actually discussed for one, out of what the etude, what will it "stand" on; on what sound objects [will it "stand" on]? Where will we get the [sound] material [what will the source of the sound material be] so that it [the sound] will not be repeated? But that it will also at the same time be able to be identifiable. That it is possible to identify that, 'Yes, this is a sound of a metronome; this is a sound of water,' and so on, because we did not want to pretend, or I would say camouflage that it [sound source] is [taken] from something totally different. And the second thing is that when we basically discussed this sort of first, I would say, approach of what sound to choose, so it was actually then when I began to learn from Ivan Kurz, because all of a sudden I began follow his cerebral train of thoughts of what he will do, from a compositional point of view, with the sound. And all of a sudden I saw what he wanted to do with it, or what kind of vision does he have what the sound should suddenly, as I would say, through some way be depicted. And he looked for ... I began to look for him for the adequate technical means [techniques] which could lead to the depiction. So the composition was indeed created, I would say, directly in the [Audio] studio with the minimum [amount of], I would say, papers of descriptions [of the composition] with which we entered the studio. I do not remember that we would make some big project or some kind of a preparation. On the contrary, based [directly] upon the sound, we-directly when we would hear it—so then we basically thought about it, and with it or out of it we created an additional, I would say, an additional development of the composition, otherwise very simple but despite that I would say musically self-contained form in the likes of the two-minute, perhaps three-or at the most-three-minute Etude. The Etudes form a logical whole. The Concrète Etudes are actually, I would say, a crossing-over from the certain technical sound which is represented by the beat of the metronome; [crossing] over from actually some natural element of water, [crossing] over from rather an *Etude* that rather has a character of a sound collage. This is the Human Etude which actually processes various emittances of a person-so cough, laughter, weep, yell, and the like-until actually it turns into a certain kind of a situation which is more similar to the music [musique concrète]; at least from the formal point of view in that we process sound of classic musical instruments through a non-traditional way. So first with cymbals, which is a fairly loyal sound for processing, and up to actually the Clarinet Etude which represents, I would say, also a certain approach of things in the sense of the serial technique, when one literally

exhausts certain rows of tones [pitches]. I have to add to this [Clarinet] Etude an incident that actually made a mark of how the Etude appears today. We actually had recorded tone material exclusively by a clarinet [of] individual tones, and out of them we created, including using a certain "aleatoric" technique, rows. We have to say that there exists here [in this case] another "co-composer" of this Etude, and that was a [lady] janitor who was cleaning up in the studio. And we had there beautifully organized the individual tones on little pieces of tape, probably on about half-milimeter pieces of tape, all arranged on the tape player. And of course we did not have them labeled, but we knew exactly which one is which. And Mrs. "Janitor", as in a good effort to clean up, so she swept these pieces into one pile and in essence wanted to throw them away into the trash-can, because she thought that they were some kind of remains. Well, she did not throw them away into a trash-can, but nonetheless the original rows already looked differently than the new ones. After that we were not able to put it together as it was before. But I think that it did not somehow effect [he is laughing a little] the quality of the composition, which was exclusively conceptualized in this spirit [serialism]. With a certain amount of distance of time-because here there were used *concrète* sounds, which means that actually the main instrument was the microphone—we waited with [realizing] the cycle of the *Electronic Etudes* [the five *Electronic Etudes* are: Etude of a White Noise Generator, Etude of a Square-Wave Generator, Etude of a Pulse Generator, Etude of a Sine-Wave Generator, and Etude of a Synthesizer (1975)] which again followed a certain span of cycles beginning with the actually complex signal, white noise, out of which from long filtering were actually selected or were created certain melodic, melodic forms. I have to say that the number of chances [coincidences], as in the intervention of the janitor here in the etude using the clarinet, so there were a number of similar coincidences. Not in the sense I would say of other people, but in the sense of, for example, the function of technology, when all of a sudden something [instruments] stopped working for us; the tape player/recorder stopped working, or they [maintenance people or somebody] stopped the supply of electricity, or the like. And surprisingly I have to say that in a number—of course not in all—but in some instances actually it [misfortunes] helped us; this certain kind of a problem [of the misfortunes] that helped us to return working ahead. Even in technology this surprisingly plays its role. There is an example of this in the White Noise Etude in which actually it came to a mistake of erasing a track. And then when we actually wanted to listen to what was still left from it [the erased track], so it actually inspired us to implant a motif-motifs a la a fanfare—into a beautiful fanfare section that on the contrary ends with a calming pseudo-like bird song. So these are things that of course occur during the realization, and there is not a reason, I would say, to somehow defend oneself against them. I think that the element of chance in this [electro-acoustic] music has to play its role, and that on the contrary it has to fairly often as long as there is not I would say too much, and if it is in a correct place; then it functions as a really stimulating factor, which is in the end important for genuine music. There is nothing worse than music created with a mechanical style.

The last [etude], that is to say from the Noise Etude up to the etude using the square-wave generator, up to as I would say completely uncorresponding way of processing the pulse signal of the third etude when actually everybody said that 'from the pulse signal it is possible to obtain so many various colors from filtering.' We [Kurz and Syrový] told ourselves that 'we will mix the pulse together completely absurdly. We will absolutely do not do anything in terms of color with it.' The section is very interesting of the sixteen sounds which create, in essence, a kind of an ocean of certain intervallic relationships, expansion and then again contraction of the overall sound [in the Etude].

The Etude of a Sine-Wave Generator—this is the fourth [Etude]—this is a classically made etude with scissors. So one can imagine that the minimal pieces were probably long, oh I do not know, three milimeters of tape. But in order that it sound as

long as it does, there had to be a whole number of them. We also sometimes call it the "glass etude", because it has an effect of a glass feeling. And it is an etude in which in essence only the scissors play a role, and nothing else in essence can be done with the sine-wave generator.

On the other hand, the last Etude [Etude of a Synthesizer ] is interesting for a number of reasons. First of all, it is an eude actually of the synthesizer. It was the first synthesizer that was purchased by the school, a synthesizer that was originally located at the Experimental Studio in Plzeň. The creator of the synthesizer was engineer Miloš Bláha. The synthesizer was built at VURT, in other words Výzkumný ústav rozhlasu a televize [Research Institute of the Radio and Television] in Prague. And it was comprised of twelve commercial tone generators and of a control panel. It was as big as a pianino. It weight about 300 kg [660 lbs]. It warmed up the room fairly nicely, because it was thermionic [valve tubed]. But it inspired a work that is, I would say, up to today can be joined with contemporary opinions of aesthetics, I would say, of acoustical expression. It, the model of this synthesizer that we received at the time when it was made obsolete at the [Experimental] studio in Plzeň, was indeed able to only produce twelve sine-wave tones and nothing else. When we received it, we upgraded it with the addition of a keyboard. So we basically expanded the possibilities of this synthesizer. And [it] is currently located at the Museum of Czech Music, in [the city of] Litomyšl; at least I think so. And we made use of one thing. For one thing, with the sine-wave tone one can only do either in the sense of some kind of a sound synthesis; which again, this synthesizer with only twelve generators could not offer some great number of possibilities. But it was possible to go via some destructive way, and this is in essence in the form of distortion of the sine-wave signal. There [the synthesizer] it was very well possible to set up specific parameters—and I do not know whether this was an advantage or a disadvantage, this is today very difficult to judge—but it was fairly easy to distort the signal. And the complete Etude is actually built upon two elementary moments of work with sine-wave signals, and that is its distortion indeed as in the sense of extreme distortion [he says 'extreme distortion' in English], and on the other hand, in the creation of combinational tones. That is, the creation of sound clusters with the method that did give me the opportunity [he does not complete the phrase], becasue they were classical measuring oscillators which had a range of approximately 2 MegaHz of frequency. So we moved the tuning of these generators to a range somewhere from 100 to 200 kHz. And in this region did we actually tune them into reverberation. So the method that is actually found throughout the history of electronic music from the early beginnings. And of course in the instance when one has two generators, then is created only one distinctive element. In the instance when the number of the generators is increasing, then automatically the number of distinctive elements increases, too. And when actually one has twelve [generators] in use, then one with the other gives a result somewhere in the limits of audible sound. So all of the sound clusters in this Etude, specifically in the middle section which is, I would say, distinctly, acoustically expanded exponentially with some kind of a peak, in which we even hear the certain whistles. However, of course the generators had a number of certain technical problems and so on. But in the end it was not the point to create some kind of a static block [section in the Etude]. On the contrary, the block is very much, I would say, alive internally, and we can see that the oscillators are between each other not in balance—they are out of tune-and the out-of-tuneness can be very unobservable in order to express a fairly large, quick movement of frequency in the limits of audible sound. So the cluster, the sound region gradually is growing there; then when it achieves the peak, the cluster gradually dies off. And one can beautifully hear the moment when only one reverberating tone remains, and when out of, one can say, from the complex sound which—it is difficult

to say how many tones there were indeed developed—and suddenly, there is only one single tone, on which is fastened—

[Phone rang. Turned off tape recorder.]

LZ: 'Zkresleni' [in Czech] means distortion [I say 'distortion' in English]?

VS: Distortion [he says 'distortion' in English], yes.

LZ: Distortion, great. Mr. Docent, now that you have finished with this [description of compositions and the early history of AMU's Audio Studio], can you tell me quickly what your opinion is why electro-acoustic music here in Prague was not [established and dominant]? That is to say, why was the studio in Plzeň [a center], and why was the center not here in Prague, or something like that, as we discussed whether or not it was politically motivated?

VS: Well I can say it this way; I can tell you my personal opinion, because perhaps this opinion will be different with a number of people who were at that time indeed active in this field. But to this I am sure that engineer Blaha will be able to address. You know I would say, the establishment of electro-acoustic music we can say that in the 1960s compared to the "mainstream" [he says 'mainstream' in English]—that is, the main stream—of music was still in a light experimental phase. Even if I would say that we had behind us all of those "classics" the likes of Pierre Schaeffer, Pierre Henry, Stockhausen and others. Because electro-acoustic music had a unique dependency upon technology—that is why here [Czechoslovakia] were also tendencies to call it [electro-acoustic music], "technical music"—so due to this fact, not everybody I would say was capable to work with it or comprehended how this music was even created. This is one thing. The second thing is the fact that there was a necessity of availability of technology; so the technology had to be on a certain standard. And we have to admit that the development of a technology, or electronics, was here [Czechoslovakia] already in the time, let us say, of the 1970s at the least ten years behind the world's [development/standard]. So one has to look at it that in 1971 the first digital organs were built by the company Ellan; in 1968 was already released the record Switched on Bach using the Moog [synthesizer]. And here [Czechoslovakia] we did not know about it. Here [Czechoslovakia] indeed, when I got my hands on the record for the very first time, so I indeed was, as I would say, "pulled" into another world. I know that one of the first synthesizers, a kind of a monophonic [synthesizer]—I do not know whether or not it was a Mini-Moog or not; actually the Mini-Moog was actually built in 1971. It was even on television. But all these things were small [insignificant] instruments. But it was known [here in Czechoslovakia] that a studio in Cologne by the Rhine [River] existed, that a studio in Munich existed, [and] in Warsaw. I back then saw the Warsaw studio [Polskie Radio Experimental Studio, ExpSt Warsaw] in the radio broadcast station, which was of course conceptualized classically totally different. But [working in an electro-acoustic studio in the Eastern Block] was a privilege for only a selected few who could get access to the technology [studio]. It was certainly not, in quotation marks, as today when the access availability to technology is great for the masses. That is why [he does not complete the phrase], and now it is necessary to state the new reason [for Prague's lack of electro-acoustic music activity]. Indeed the majority of the people who were involved in electro-acoustic music— with the exception of only a small number of people who were unrestricted—were on a black list due to the events of 1968. So these people [the majority] all of a sudden, I would say, as long as they were further involved in music, for certain did they not want to be or could not be involved in an area of music that would continue to be undesirable. And indeed this [the undesirability] was the characteristic of the field of electro-acoustic music, because it was something different. It was something unique. It is indeed even today for a number of musicians something different, but for sure it [electro-acoustic music] is no longer an experiment. It is something that has become stabilized. And it already is not what at the time was believed that this is

the next epoch of music development. We see [today] that this [electro-acoustic music] is a parallel stream which [flows] in its own direction, its own way, which has a number of contacts to the mainstream of music. But it does not substitute [the mainstream of music]. It does not push it away. It is not in competition with it. Also, I say that it was not so long ago unfortunately when I had to polemize about ridiculous stereotypes that in the year 2000 the entire Czech Philharmonic will have to start to purchase synthesizers, because the learning on a violin takes too much time [he is sarcastic], and it damages, in the real sense of the word, the hearing. Because until I will learn how to play it [violin] purely in tune, so it will take some time. Well, these sort of ridiculous opinions existed here [Czechoslovakia], and perhaps will continue to exist. Indeed it is exactly the same type of nonsense to insist that this [electro-acoustic music] is not music. This is a second [another] extreme. I, personally, see today when I am looking [analyzing the situation]---I rather look at it from the point of view from the work with sound rather than from the point of view of composition, I am not a composer-with what all of a sudden came up in the past, oh I do not know, Luigi Russolo with the art of noise, that all of a sudden there was an *enormous* justification that I can [am allowed to] work with something exclusively in a creative way; that I can begin to make an art.

[End of tape. Turned side of cassette.]

LZ: We are continuing our conversation with Mr. Docent Syrový.

VS: After the two cycle of *Etudes*, we created together with Ivan Kurz of course a number of other compositions. But I still consider this work [two sets of *Etudes*] as a dominant work. Frankly said, I frequently return to it, and I always find something in it. And I especially admire sometimes my own patience when I remember under what conditions the compositions were created and what a person had put into them. Unfortunately, that which also helped the person twenty years ago was that he had a lot more time than he has today. And of course, the technology plays a very important part. The technology today allows for a much faster compositional process.

In addition in regards to a certain atmosphere at the school [AMU] in regards to electronic music during the 1970s, after Ivan Kurz graduated there followed a whole number of students in the compositional department who either occupied themselves with this music on a, I would say, "one shot level," or even repeatedly. During a two- or threeyear span there occurred on almost a traditional basis that at each [student composers'] chamber concert of the compositional department there was performed a [electro-acoustic] composition. It was very interesting even to the audience which was, I would say, not only comprised of only experts, but these concerts were also attended by season subscribers. So they [audience members] received these compositions very well, because they [electroacoustic compositions] also enlivened the program of the evening.

However, it is necessary to say that the [Audio] studio, a typical phenomenon, when the studio was better, I would say, in terms of technology begun to be equipped indeed for the purposes of teachings of the realization of electro-acoustic music—thus the interest [in electro-acoustic music] accordingly fell off, or respectively it was not developing equally with the technical possibilities. To this was added another phenomenon. From the year—I do not know exactly when, I think since 1980—I was directly in charge to teach in the composition department, classes that were named, "Technical Foundations of Electro-Acoustic Music," [and] when I began to write the first texts [for the classes]. And immediately when it became a regular part of the lecture plan, then it was no longer dependent upon the individual interest of the students, [and] so the activities [of the Audio Studio] got some certain inhibitions. And the inhibition was of course not only due to this [disinterest of the students]. It was also due to the all-of-a-sudden penetration of the commercial musical electronics into this [electro-acoustic] music—suddenly with the joint bond or even, I would say, the unwanted bond [between the electro-acoustic and pop

music], and due to the emergence of popularity of pop music. And I would say [the Audio Studio's activities became inhibited] due to the overall climate of our society at the time. when actually as if something new was being waited for, and in the meanwhile the "train" of technology went away very fast. I think that today our thinking, our approach is approximately at least fifteen years behind of what our instrument manufacturers are able to present. The last time that I had to accept this fact was when I was at a presentation of BA-1 of Yamaha. That is a synthesizer that is based on the modelling of a tone of an acoustical instrument. Then it is necessary to ask the question of 'Why? For what purpose is it even?' Or 'why are we again trying to imitate through a completely different method a somehow healing of an inferiority complex of the technology?' Despite this, it [technology] I would say does not look for the fact whether or not it is used. All of this plays a role; or did play a role in the fact that the interest [in electro-acoustic music at AMU] was absolutely declining and continues up to today. When somebody [a student] comes into our studio, then he does not necessarily come to realize indeed an autonomous project in this field [electro-acoustic music], but most of the time he is realizing some scenic [accompanying] music, film music, music for ballet, and so on. So this is about all.

LZ: Great.

[End of conversation.]

The interview of Doc. Ivan Kurz was taped in his office at AMU in Prague on

Saturday, June 25, 1994, at 8 A.M.

LZ: Saturday. We are here with Mr. Ivan Kurz, and he will tell us about his electroacoustic compositions.

IK: So I began to preoccupy myself with this field already during my [graduate] studies. The first attempt [*Preludium, chorál a toccata pro generátor a klavír (Preludium, Chorale and Toccata for Generator and Piano)*, 1970]—of course an attempt that was very undeveloped, and rather it was a matter of "touching" [getting a feel] instead of that one could be talking about some composer's work—so it was about, I am guessing, in 1968, [19]69. I do not know whether—

LZ: 1970, I think.

IK: 1970, yes. But I do not exactly remember the dates. But Mr. Engineer Syrový would tell you this with great precision, because I think that he has it archived. Well, it was a prepared piano, synthesizer-hmmm sorry, not synthesizer, sorry-sine-wave generator, and in addition we used various techniques such as slowing down of sound, or on the contrary the acceleration of sound. Well, and with this was created a sort of a composition. But like I already said, it was rather an experiment of "touching" the terrain, actually of acquainting oneself with a completely different type of thinking, because this [completely different type of thinking] for me is essential and this is also a thing that attracts me to electro-acoustic compositions; that it [composing electro-acoustic music] is in essence, if I may say so, a higher abstraction of compositional thinking. On the other hand, as long as a musician is manipulating usual tone highs [pitches]—in other words simply with tones cultivated on [acoustic] instruments—so he is in his thinking far more concrete. In other words, they are concrete tones, conrete highs, concrete rhythmic values, and so on, instead of in the field of electro-acoustic [music] which works with [sounds] among others certain noises, certain simple and good sound hazes, and so on, which basically forces the composer that he think about it in a far more abstract level. So it forces you, actually, to understand---this field [forces you]--I would say the tectonic of the work [composition] and the musical thinking in the most general [universal] levels. If however a person is unable [to work in the way as just described], so he does not usually preoccupy himself

with the rules even in some way. Due to this reason, I also think that it is very important even from the point of view of pedagogy of the teaching of composition to preoccupy oneself with it. It forces the students to go from the concrete details to the most general foundation; that is, in the thinking of time, in the thinking of sound as a whole, which I consider as immensely important. And to me personally this moment "pulls" me the greatest [to electro-acoustic music]. That is one thing. A second thing is this. If however a person has before him a certain aim [project] with a content [and goal], so most of the time if he tries to concretely grasp it, [so] paradoxically the more it retreats itself from him, or it will not make a good impression. So in essence you have a-oh, I do not know-vision of a certain form, and now you try to press it into the material which you have at your disposal, and the more the material is concrete, the more the form has its "wings clipped." So in the end, that which is created is only, I would say, similar with some kind of reflection [as in reflection of light. In other words, is similar only a little bit] to that which was imagined originally. Well, and on the other hand, the more the material is—at least for me, and perhaps it is only a subjective opinion—general [generic], the more actually the similarity is although more abstract, but less impoverished. So these are the kinds of feelings that I have about it [electro-acoustic music].

But now I will return to the compositions.

#### LZ: OK, great.

IK: As another [composition] we also made here [AMU] with Mr. Engineer Syrový; and now when was it? It could have been so around 1972, approximately I think. Well, we called it—they were etudes kind of—Five Concrète Etudes [1974] and Five Electronic *Etudes* [1975]. It was all done with kind of, I would even say, mechanical ways, because at that time it [electro-acoustic music] in our longitude and latitude [country] was, I would say, in "diapers," and we used a lot of scissors and [we] cut out pieces of the sound signal, instead of perhaps that we could have used some kind of a bandwidth filter and make it, basically, using other means. So we actually did everything using mechanical means. Well, but on the other hand sometimes the shortage of technology forces a person to even-it-out somehow, which—not that it has to be always—but during favorable situations it can even bring something, I would say, new in the solution [process]. This again is a disadvantage of superfluous technological availability, that there exists the danger that certain, I would say, creative processes are repeated; that the composer allows himself to be seduced by already-created-sounds-with 'created' I mean already factory-stored memory-and that he will use them. Well, and then understandably, in the compositions—if more was done [if more compositions were composed]-certain techniques could be simply repeated, which I think that in [using] the manual means, threatens less. But in any case, we were poorly off in terms of the equipment. So out of the Concrète [Etudes] there was-for example I remember—a so-called Human Etude in which we actually manipulated with the fact that the human ear does not perceive under a tenth of a-if I am correctly saying it-second basically some sort of a sound action as some sort of a closed-up [complete] entity. In other words, the idea was that something will actually "flow" together something like—I do not know-during the watching of pictures. When there are fewer than sixteen-correct?then they are begun to be perceived as individual [pictures]. And if there are more than sixteen per second, then we begin to perceive it as a uniting action, vis. [visual] film-a big fraud to our eyes. And we tried to make the same kind of fraud to ears, if I may put it this way. So we recorded the most different emittances which a human person is capable of doing. Then they laughed at us when we demonstrated it—the human emittances. Then understandably, of course, everybody right away made jokes of what sounds a body could eminate . . . [he laughs].

LZ: [I laugh.]

IK: And well, nothing. And then understandably we cut—through mechanical means, which is with scissors—in speed 38 [cm/s], we cut basically—roughly I think that it came out to 1/12 of a second that we calculated, cut to be exact—and cut, oh I do not know, always less than half a centimeter it came out to be or something like that; something less than half a centimeter. Well, and out of this we glued, with tape, this thing; so the original was insane. It did not even want to pass through the tape heads, because it was so thick, and the glued splices went over each other. Well, then we succeeded in pushing it through [the tape heads] and to transcribe it [to dub the original made of glued splices]. Well of course, the result is as it is, basically peculiar. We did not succeed in everything, but it was fairly . . . I fairly like to reminisce about this—this martyr. We made it [for an] incredibly long [time], because it went very slowly.

LZ: Mr. Docent Syrový told me that one minute took twelve hours [to make]. IK: Yes, yes. And then there was something nice; this particular moment took place [during the realizing of this Etude] which was caused by chance. We left the tapes there overnight [over one particular night]—I do not know whether or not Docent Syrový told you this and a [lady] janitor and basically she cleaned it up there. Well, then we called it [this incident] a kind of an 'aleatoric moment,' that basically there was an aleatoric selection of elements. So that whatever the janitor swept away simply was not included there [in the composition]. So that was that.

Understandably, in these *Etudes* there were a whole number of additional [problems]. Perhaps in the *Electronic Etudes*, I can think of the Resonating Etude [Etude of a Synthesizer], which originated [made use of] this moment of resonance. However, we got ourselves into a paradoxical situation, in that it had an effect on poorly developed reproduction equipment as [sounding] technically unclean. So this was a problem. In the moment [the second that] when we performed it, and it really was not, I would say, superb equipment with, or relatively superb equipment in the sense of the richness of low frequencies—especially in low frequencies—then it appeared as a faulty signal. I do not know whether or not you heard this, on what equipment [you listened to it]. But now [these days] it [Etude of a Synthesizer] could be respectable. But perhaps it still does not sound [respectable]. Or does it have the effect that it is a faulty signal or not? LZ: Hmmm, now I cannot remember? That one particular Etude?

IK: Yes, yes.

LZ: Now no. Now I cannot remember it, but ...

IK: Hmmm... Well never mind! Well, these were the *Etudes*. Then the next thing that we did—we called it just for us with a production name—"Kuchýnská Revue" ["Kitchen Revue"]. It was basically a *concrète* composition, which... What was its name? Do you know that I do not exactly know what we called it in the end?! Can we stop it [tape recorder]?

LZ: Yes, of course.

[Turned off tape recorder.]

IK: Ah, now I already know it, *Electro-Acoustic Suite* [actually *Elektronická svita* (*Electronic Suite*) 1977]. Well, and why then did we call it—the production name—why was it, "*Kuchinská Revue*"? Because, basically we used all kinds of kitchen utencils [pots and pans included] on which we created sounds even with food; for example, pulse [seed bearing vegetables]. So when peas are nicely a bit older, then they are harder, of course. And when it was poured unto a pan, then it yielded a beautiful, really a nice sound. Or basically the lids from pots [were used to make sound, etc.]. All of these were instruments, as it were, generators of sounds. Well, and thus the title, "*Kuchýnská Revue*". So this was exclusively a matter that worked [dealt] with *concrète* sounds. Understandably, every time that a person comes into a studio which is not God-knows-how equipped with electronic instruments, [then] most of the time he will rather fall back unto the *concrète* 

sources, because there is basically no limit: what one thinks up, what one brings [to the compositional process], what one records, you've got it! Well, as opposed to when at that time—I do not know whether or not you were by chance in the Museum of Instruments? LZ: Not yet [I never had a chance to go].

IK: There you will see what was there [Audio Studio]. It was sort of a system of twelve sine-wave generators. It had a handle. It was manually tuned [using a handle] like this [he demonstrated how]. Basically, a person had a feeling as if he is in a Stone Age society. But it was basically . . . We called it "accumulators" [heaters], because it radiated an enormous amount of heat, because in it thermionic valve/tube technology was used. When it was turned on then it really radiated [heat]. Well, and nothing else was there [Audio Studio]. So understandably, the sine-wave sound is somewhat fairly, fairly, I would say, poor. So understandably, all of these things [compositions]—there was a [one] bandwidth filter, which was however... whose purpose was for measuring needs, because back then it was an overall problem here [AMU] to set it [electro-acoustic music] through [to get it established] at all due to aesthetic reasons; because these things [the establishment of electro-acoustic music] were suspicious in the realm of Social Realism. And so, in essence, Engineer Syrový, in order that he basically obtain something like this [equipment] at all, he had to justify everything for measuring [technical] and research purposes. So it was ... Surely he also informed you of these circumstances? So later on, of course, also perhaps these various filters although they were being able to be used, but it was not the "real thing," because they were built for other purposes, and so on. So this was another composition.

Then we did a, I would say, larger and beautiful commission when we did, together with Engineer Syrový, scenic music for an all-evening performance according to Goethe's text—utext—of *Faust*. Back then it was called *Urfaust* [1976]. And because it is kind of a "fabric" that manipulates or works with, you know, the world of the "abovemeaning" understanding—for example, the character Mephisto—so we clearly decided that we would not make the music with traditional means, but we made it entirely, exclusively electro-acoustically. It should also be here [Audio Studio's archive]. I do not know whether or not you have heard it?

LZ: No, but it is there for sure. I think so.

IK: Back then it was probably forty minutes worth of music. It was a combination of *concrète* sounds together with electronic sounds, because gradually nonetheless the electroacoustic field was becoming established, [so that] it was not possible to basically "close the doors so tightly."

LZ: Of course.

IK: In Plzeň there was even established the first official studio [Experimental Studio] of electro-acoustic music. It was not somehow well equipped, but basically at least "something."

So this [Urfaust] then was a big, I would say, commission. On it, we really spent hundreds of hours. It was . . . In order that it [electro-acoustic music] be a bit more human for the viewer in the theater, if I can say it this way—because nonetheless this music can have a somewhat cold effect; too, I would say, abstract—so we made it [the music] more human with the fact that during some moments in this music I put it in somewhat of a counterpoint with a normally real-sung part. So on this side there basically were some sound tracks—there were quavers, trembles and the like—and together with that there was a real song, melody [so, singer with tape accompaniment]. According to me, this combination is very interesting. There were however great problems of how to teach the singers with this. For a *long* time they could not orientate themselves in this music. They [sarcastically] called it [tape part] "bubbles": 'play us your "bubbles!"" LZ: [I laugh.] IK: Back then it was performed by the City Theater of Prague, and directed by František Myška. He is in respect here [Czech Republic] one of the somewhat prominent directors. Currently, he is active in Germany, Baden-Baden [Germany's most famous spa-resort town]. So this was kind of a first bigger commission. Then we made the scenic [film] music for a Bratislava movie. It was a biographical movie about the painter-again I will find it hard to remember. It was called Túžby po vzpomienkách [Longing for Memories]-What was his name? I am ashamed [for not being able to remember the name]! Well, it has again been twenty years. It was done in about 1976, I would guess, these Túžby po vzpomienkách. So in this [film music] we elected a combination of normal music together with electro-acoustic [music]. If I am talking about a so-called "normal" music, I mean that we recorded—back then we had at our disposal the Filmový symfonický orchestr [FISYO (Film Symphony Orchestra)]—certain tracks, certain foundations which we then however further processed. So nothing was left alone in its original similarity [state], but it was variously processed; either through various speeds of movements [various tape speeds], or it was run through some filter and out of that [was] taken out some track. In other words, the signal was always stylized through some method. It was not left naturally. In other words, the recorded material was always processed and not left in its originality.] Jekabčič was the name of the painter. A superb avant-garde Slovakian painter. And it was an autobiographical film about him; a "medallion" to his pictures [his paintings were shown] which were I would say unique impressions. And this music, in my opinion, beautifully corresponded with it. Also, the movie later did receive some kind of a prize for an art film [he says 'art film' in English]. So it was, I would say, the success of the power [of the combination of electro-acoustic music and his paintings] was publicly manifested. So this was the second kind of a big work of this type.

I then worked [composed] outside of this studio [Audio Studio]. I do not know whether or not Mr. Engineer [Syrový] also played it for you. He also has it there [Audio Studio's archive]. Indeed in Plzeň [Experimental Studio] what we were talking about—it was in about 1985, [19]86, I would probably estimate it—it is named *Reverie* [he pronounces it *Reverie* (1982)]; or *Reverie*, as we should probably read it in French. And this is basically made out of . . . it is meant that . . . After all, you will still be here for some time, so I can perhaps even play it back for you or something like that. LZ: So from 1976 to 1985 you did not compose any electro-acoustic music? IK: [Yes] we did the scenic music of which I was talking about. LZ: Ah, OK.

IK: On the one hand *Urfaust*, and on the other hand *Túžby po vzpomienkách*; that was all during the meantime [from 1976 to 1985].

LZ: Ah yes, I understand.

IK: Yes, yes. Well and then came this *Reverie*. But that however was done, I did that in Plzeň without Engineer Syrový. Back then the realizers were colleagues,—

LZ: Kadlec and Ježek?!

IK: ... Kadlec and Ježek, yes. So these were the two.

Well, also later, already with the before-mentioned director Myska, we did together in the recent time—precisely for the theater in Baden Baden—we did [music to] Sen noci svatojánské [Midsummer Night's Dream] of Shakespeare, where understandably we could not do everything electro-acoustically. But for relatively extensive scenes—there in the night forest indeed during the holy night of Pentecost, and there comes about a kind of a, I would say, "darkening" of thought of the Queen Wil, as done to her by Oberon. So in these phases [instances] we did basically make use of electro-acoustic music. It also is here [Audio Studio's archive]. I do not know whether or not Mr. Engineer [Syrový] played it back for you. They [these instances when electro-acoustic music is used] are, of course, made a bit commercially, because understandably the needs of the theater are the needs of the theater; and these are understandably primary. This is a thing that a person has to somehow distinguish. They had it [the play] for a commercial purpose. So a person has to respect the wishes of the director and the production needs. And basically one's own, I would say, creative or research-creative intentions he has to leave for some other time. So I only want to let you know about this.

This is about the overview of what we [Audio Studio] did here in this field. It is necessary to realize that the [Audio] studio always was owned by the school, and that understandably this work facility is used primarily by the composition department [composition students/majors]; even how you had the opportunity to see the students here leading to the fact that they do the work [composing] there [I had the opportunity of meeting two students while they were composing in the Audio Studio]. So the reality is that actually a person cannot here [AMU], I would say, take up the studio at the expense of the students. This is primary; the students. We [faculty] are always . . On the one side, we did it [formed the Audio Studio] in the beginning so that it [Audio Studio and electro-acoustic music] would even get "rolling," because later it [electro-acoustic music] was performed at the composition department in order that we basically lure these people [students]; when frankly this field in which nobody worked in, so somebody frankly has to start [to do electro-acoustic] and "come" here with it and, I would say, "put it on the table" so that people could basically, well, "smell" it a little bit and say, They, I would perhaps like to try this also!' And so this was the intent in the beginning.

LZ: Yes, of course. Can you tell me a little bit about your aesthetic?

IK: Well, my aesthetic-if I can say it like that-I personally do not think that it is necessary through some way to limit oneself to basically whatever. Basically, there are as we know it in the twentieth century-especially in the recent time-various, relatively a lot distinguished paths; be it minimal music, or perhaps the field of electro-acoustic music, or the field—I do not know-perhaps serial work, or timbral composition. We could name additional ones. Well, and we know that, or there is here [Europe] somewhat of a tie to Stockhausen's branch in the [19]60s which back then was established around the studio in Cologne by the Rhine River. So all of this is possible to kind of isolable remove. And there are a number of composers who indeed concentrate on [only] one way [style], and in essence do not welcome anything else. I think that this is not necessary—personally for me. I do not want to advise anybody how he should or should not do it. We are actually here alone for oneself. So for me personally it is not necessary. I, on the contrary, as the first thing build to the forefront the content, and all of these methods I consider enormously valuable in the sense that they are for me carriers of certain contentful events/realities. So I myself would rather label [myself] as a type [of composer] who looks at it [the process of composing] synthetically, and all of this takes—in the real sense of the word—as a "verbal supply." And basically if I want to express something that is personal in my mind, so I make use of, for example, the minimal field, or serial or aleatory and so on. And together from that originates a whole which is, at least according to my feeling, superior from a content point of view. So I really do not have an inner need to somehow restrict myself; instead I look at it this way. It is also according to my-I do not say whether good or bad—estimation one of a few paths which I can [envision] for the musical culture providing that our civilization will last-envision as going on [continuing]. Because those kinds of realities which already perhaps-I do not know, for example, if I should name Arthur Honegger during the [19]50s, as well as Igor Stravinsky during his time. They basically proclaimed that 'we [all of us musicians, composers] are "foreheads against the wall;" there is nowhere to go.' Everything was exhausted. What [to do] with it!? Then came experiments with quarter tones. This did not take roots. I do not mean to say that it completely did not take roots, but in the broader sense of the word, "no." So you yourself know that the musical culture "flows" towards various "neo-s," thus I would say

195

"prolonging its breath." In the current time, a neo-Romanticism is "flowing" through the world; or sometimes it is called postmodernism. So these things are a, I would say—I do not want to say "exit from poverty," for goodness sake, that would not be precise—but they are in the real sense of the word a symbol of that—that the road going forwards in the sense of the unfolding, in the sense of the progressive avant-garde—that it [the path, the music] is not easy. It [the path, the music] is, already today it appears to us as almost undiscoverable, because understandably a lot has already been tried [experimented], and . . . So I personally in this, I would say, synthesis for, or on, or in the direction of a certain new content, do I see a [one] of possible ways to go on. Understandably, in principle we could categorize this opinion into basically aesthetic ideals of postmodernism. This one has to realize, because one of the traits of postmodernism is not only in essence to combine and build into contraposition of techniques of the twentieth century, but also actually styles in the realm of the entire musical development. So in other words, that what I have said could be understood as a certain postmodern opinion. LZ: Great.

[End of conversation.]

### Written Communication

The correspondence with Doc. Ing. Syrový, CSc. was in Czech, and is here

translated. The format of the letter has not been changed.

Libor Zajicek 4452 Mattos Dr. Fremont, CA 94536 U.S.A.

Tel.: (510) 791 - 1756

Doc. Ing. Václav Syrovy, CSc. U smaltovny 20 F 170 00 Praha 7 Czech Republic

4 September, 1993

Dear Docent Syrovy!

With this short letter I would like to once again thank you very much for all that you did for me this summer! Your organization was superb which I will never forget. I have already begun to read the materials and documents. I have so much that only the reading and analysis takes up most of my time. Now I am eagerly awaiting your documentation about AMU. I hope that the moving of your department is without any problems and goes according to

plans! Please send me the new address of AMU. Once again, I thank you very much!

> With sincere greetings, Libor Zajicek.

Doc. Ing. Václav Syrovy, CSc. U smaltovny 20 F 170 00 Praha 7 Czech Republic

Libor Zajicek 4452 Mattos Dr. Fremont, CA 94536 U.S.A.

20 November, 1993

Dear Libor!

Thank you very much for your letter. Finally, we have moved, but there are still a number of problems. The new address of the school is:

Hudební fakulta AMU Malostranské nám. 13 118 00 Praha 1

And now the promised information about our studio:

The Audio Studio of the music department of AMU began its activities in 1971 immediately in three categories:

1. professional recordings of music

2. realization of electro-acoustic music

3. research in the field of musical acoustics, with the concentration primarily on the problematics of wind instruments

A required teaching of electro-acoustic music began at the music department in 1980, and currently is divided among three semesters:

1. Technical fundamentals of electro-acoustic music: lectures

2. Listening seminar of electro-acoustic music

3. Practice of audio synthesis (practice with synthesizers)

The number of hours is only one hour per week. The students of this curriculum end it by realizing a short etude in a duration of about five minutes. Further involvement in electroacoustic music is only based upon the students' own interests. The teaching of electroacoustic music is part of of the Composition department (in essence traditional composition); it is not its own curriculum.

Now about the current equipment of the Audio Studio: Digital Recording Studio

1 mixing console (20/8/2) Genelec 1031 A monitors Hard-drive: Digidesign Promaster 20 1 Apple Quadra 950 HD 440 Mb, 2x1 .6 Gb 1 J.L. Cooper CS-1 controller DINR (Noise reduction)

DATs:

1 Tascam DA60

1 Tascam DA-88 (8-track) 1 Studer D 780 CD: 1 Studer D 740 1 Studer A 80 analog tape recorder (19, 38 cm/s) (7.5, and 15 in./s) Dolby A/SR 1 AKG ADR 64K reverberator 1 Eventide H 3000 SE harmonizer 1 Cedar DC-1 de-clicker 2 Klark & Teknik DN 27A graphic equalizers 1 Klark & Teknik DN 60/RT 60 analyzer 1 Aiwa HHB Pro portable DAT 2 AKG K 1000 headphones 1 commercial record player, CD player, and tape recorder Electronic Music Studio 1 Soundcraft Spirit AUTO mixing console (16/8/2) 1 Apple LC II : Pocode Studio MIDI interface CD-ROM software: J. L. Cooper - Spirit Max, Book of MIDI Yamaha NS-40M monitors and PC 1602 amplifier 1 Sony DTC 77ES DAT 1 Fostex E-16 plus Yamaha YMC 10 synchronizer 1 Atari 1024 STF, software: Twenty Four Notator Analog synthesizers: 1 Korg MS-20 1 Transcendent 2000 **Digital Synthesizers:** 1 Yamaha DX-5 1 Korg DSS-1 Samplers: 1 Yamaha TG-77 1 Yamaha TG-500 Effects: 1 Yamaha SPX 990 1 Korg DRW 2000 1 Korg DDD 1200 (dual delay) 1 Electro Harmonix vocoder 1 dbx 1531 X graphic equalizer 2 dbx 363 X noise gates 2 dbx 563 X silencers AKG K 400 headphones 1 commercial tape recorder Recording studio space of 550  $m^3$ ; reverberation time of 0.8 sec. AKG, Neumann, Brüel & Kjaer microphones Classroom of audio creations 1 Tesla mixing console (16/8/2) Yamaha NS-40M monitors

Sony DTC 77ES DAT 2 Studer B 60 tape recorders (38/19 cm/s) (15/7.5 in./s) 2 Dolby A/SR 4-track STM 224 tape recorder (38/19 cm/s) (15/7.5 in./s) Tesla tape recorder (mono; 38/19 cm/s) (15/7.5 in./s) Yamaha SPX 990 multi-effect module MON graphic equalizer commercial CD, record player, tape recorder Recording Studio (Summer Scene) Soundcraft Spirit Studio mixing console (16/8/2) Tesla R 16 monitors 2 Sony DTC 77ES DATs 2 STM 210b tape recorders (38/19 cm/s) (15/7.5 in./s) 2 Tesla B 116 tape recorders (199 cm/s) (7.5/3.5 in./s) Yamaha SPX 990 multi-effect module commercial CD, record player, tape recorder Laboratories Dead room

3 laboratories/repair rooms I hope that I have not forgotten anything important. If you will need anything, then write or call. Many greetings to your parents, and lots of success.

With sincere greetings, Václav Syrovy.

The following letter was mailed to G.M. Koenig, Frits Weiland, and Stan

Tempelaars. The letter was identical with the only exception of the addressee. The letter to

Frits Weiland is provided here as an example.

Libor Zajicek 4452 Mattos Dr. Fremont, CA 94536 USA

Tel.: (510)791-1756

Frits Weiland Institut voor Sonologie, Koninklijk Conservatorium Den Haag, <u>Sonology Den Haag</u> Juliana van Stolberglaan 1 2595 CA Den Haag Netherlands

October 28, 1994

Dear Mr. Frits Weiland!

It is my sincere pleasure in establishing a contact with you. I hope that my request will not be imposing, troublesome, nor time-consuming!

In order that I justify my reason for writing to you, I must first explain my situation. I am a graduate student at San Jose State University in California, where, under the supervision of Professor Allen Strange, I am writing my Master's Degree thesis, *The History of Electro-Acoustic Music of the Czech Republic and Slovakia*. In my current state of research, I am trying to establish the contacts that Czechoslovakian composers of electro-acoustic music had with their Western counterparts.

In my interviews with Czechoslovakian composers -- especially the one with the musicologist Dr. Eduard Herzog -- I was told numerous times that Gottfried M. Koenig, Stan Tempelaars, and you gave presentations/seminars in Prague and perhaps also in Plzen in the 1960s. My request to you is, could you be so kind and inform me of what the subject matter of these presentations was? What kinds of techniques were presented? What is the time span of your contacts with these composers? Do you have any written documentation? And if so, could it be possible if you could perhaps send me some photocopies, please? I suppose that I could summarize my sincere request of you by basically asking you, if you could be so kind and inform me of any and all contacts that you had with Czechoslovakian composers of electro-acoustic music?!

I sincerely hope that my request will not burden you and your time! I would like to kindly thank you in advance for your grateful help and cooperation!

Sincerely, Libor Zajicek.

G. M. Koenig Rodeheldenstraat 32, NL-4116 BB Buren TEL +31 3447 2788 -- FAX +31 3447 2787

Libor Zajicek 4452 Mattos Dr. Fremont, CA 94536 USA

November 19, 1994

Dear Mr. Zajicek,

Thank you very much for your letter of October 28.

Tempelaars, Weiland and I were invited by the late composer Kabelác to give lectures on electronic music in Prague in 1969. Afterwards we continued our journey in order to see the electronic music studios in Plzen and Bratislava.

The lecture subjects were taken from our Sonology program and included (as far as I can remember) electro-acoustics (Tempelaars), history and techniques of electronic music (Weiland) and analysis of existing pieces. We also discussed some computer applications in composition (Tempelaars/Koenig) and presented my composition Project-1 and Project-2.

Besides formal lectures we discussed with the students music and musical situation in our countries and listened to music (by Czechoslovakian composers as well as Sonology productions).

I do not possess any written documentation, and I doubt that there was any. There are only study books that Tempelaars, Weiland and I had written for our Sonology students. You might write the Institute in The Hague and order them.

I suppose you have written to Tempelaars and Weiland as well. They may have a better memory than I have and may even have kept some items (written information, photographs).

Besides the meetings in Prague, Plzen and Bratislava I did not have many contacts with Czechoslovakian composers. I do however remember some correspondence with Herzog, Kabelác, Kohoutek, Kolman, Kotík, Kucera and Ruzicka between 1969 and 1979. If you want, I could look into the letters and give you an account of the subjects, although I am very pressed for time at the moment.

I hope this information will help you in writing your thesis.

Yours sincerely, G. M. Koenig.

Royal Conservatory Juliana van Stolberglaan 1 - 2595 CA The Hague - telephone (3170) 381 42 51 - fax (3170) 385 39 41

Libor Zajicek 4452 Mattos Dr. Fremont, CA 94536 USA

25 January 1995

Dear Mr. Libor Zajicek,

Finally, the only thing I can offer you are three photographs (copies of colorslides) taken during our course in Prague and what I can remember about our seminar. We started in September 1969 in Prague. My task was to speak about our then newly developed voltage control system, so I explained the principles (generating and transforming control voltages) and applications (amplitude and frequency control, setting filters) of this technique, and I played sound examples. After a week we travelled back to Plzen where the same program was repeated in the studio of the broadcast station. Finally we travelled to Bratislava to visit the studio of Peter Kolman there and then we travelled back home. I hope my former colleagues were able to give you more specific information. If you have further questions, please contact me via my private address (Klaverkamp 11, NL-3433 AH Nieuwegein, The Netherlands, tel +31 3402 62681, fax +31 3402 81346) or via the Conservatory.

Sincerely, Stan Tempelaars.

19th of November 1994

F.C Weiland Bruntenhof 14 3512 KZ Utrecht The Netherlands

Dear Mr. Zajicek.

Thank you for your letter of October 28th 1994. Yes, Stan Tempelaars, Gottfried Michael Koenig and I did seminars in Prague and Plzen and a presentation in Bratislava in September/October 1969 on base of invitations by the Czecho-Slovakian Composers Union. The contacts started several year earlier between the Institute of Sonology of the University of Utrecht and Eduard Herzog and Miroslav Kabelác, and Vladimír Lébl (in that time a member of the staff of the Institute für Musikwissenschaft in Prague and author of the book *Elektronická hudba*).

We hesitated to accept the invitation, because we were in the process of re-organizing our lecture- and research program at Utrecht University. But then we received the alarming message in late spring 1969 from Prague to present our program that very year, because later it would be impossible to realize the plans in connection with the accompanying change in the political climate in the CSSR.

As I remember well we started our lecture tour in the Electronic Studio of Radio Bratislava. Our host was Peter Kolman, in that time artistic director of the electronic studio in Bratislava. In Prague and Plzen we did more formal teaching, I think we were scheduled for three days lecturing in each city.

All the details -- if there are -- must be burried in the Sonology archives, which are supervised nowadays by Dr. Konrad Boehmer at the Koninklijk Conservatorium in The Hague. In my private files I have no copies of the letters I wrote (and I did a lot...) to get this undertaking going.

I remember Drs. Stan Tempelaars taught about the electro-acoustic problems in producing electronic music.

Gottfried Michael Koenig explained his electronic compositions and his strategies. I think I have talked about the "history of electronic music" with many sound examples from the European and American "schools", and about the problems of presenting tape concerts in an acceptable way for larger audiences. We were in Utrecht absolutely undogmatic in the battlefield of electronic music (without mice-sounds) and "musique concrète." I think that was an important reason our seminars were so successful.

Hopefully my letter gives you some help writing your thesis. Good luck.

Sincerely, Frits Weiland.

List of Instruments

The Electronic Studio at VÚRT had the following instruments in 1965.7

<sup>&</sup>lt;sup>7</sup> This list of instruments was compiled from the following three sources. Bláha, Miloš, "Studio elektronické hudby Výzkumného ústavu rozhlasu a televize" (Studio of Electronic Music in the Research Institute of the Radio and Television), *Rozhlasová a televizní technika*. 6, no. 4 (1965): 98-103. Vítek, Jaromír, "První úspěchy studia elektronické hudby VÚRT" (First Successes of the Studio of Electronic Music at VÚRT), *Rozhlasová a televizní technika*. 6, no. 3 (1965): III. Vítek, Jaromír, "Zařízení k

1 VÚRT MS 1 manual synthesizer 12 Tesla BM 365 sine-wave generators 1 VURT white noise generator with a 1/3-octave filter 1 VURT SRK-SG 1 effect generator of white noise 1 VURT ORF 1 fine-tune filter 1 VÚRT SRK UH 1 filter of lows 1 VURT SRK UV 1 filter of highs 1 VURT SRK CH 3 universal filter 1 VÚRT ER 2 effect reverberator 1 VÚRT EM 2 effect modulator 1 VÚRT relay pulse generator 1 VURT CR 1 timing pulse 1 VÚZORT mono tape recorder 1 Sander-Jansen SJ 103 mono tape recorder 1 mixing console 2 R 3 audio systems 4 VURT ZV 100 amplifiers 10 W 1 VURT ZI 010 indicating amplifier

1 Tesla BM 354 universal counter

1 VURT custom-built measuring reverb chamber

The instrumentation of the Audiostudio in the Czechoslovakian Radio Broadcast

Station in Prague consists of these instruments.<sup>8</sup>

1 mixing console

- 1 Studer S 903 with Audio Kinetcics MX 644 Mastermix
- 1 Studer A 820 multichannel tape recorder with Dolby A System
- 1 Studer A 80 tape recorder with Dolby A System
- 1 Studer A 807 tape recorder with Dolby A System
- 1 Studer A 807 tape recorder
- 1 Sony Betamax SL HF 950 with Sony PCM 701 processor

1 Sony R DAT

- 1 Yamaha Rev 5 digital reverberator
- 1 Yamaha Rev 7 digital reverberator
- 1 Lexicon PCM 70 digital processor
- 1 Yamaha SPX 90 II multi effect processor
- 1 Peavey Addverb digital processor
- 1 Roland VP 70 voice processor
- 1 Yamaha R100 reverb processor
- Genelec 1022B Triamp
- Nivox Model 4

prolužování a zkracování zvukových snímků" (Extending and Contracting the Sound Recording), Rozhlasová a televizní technika. 6, no. 2 (1965): 33-42.

<sup>8</sup> A list of instruments of the Audiostudio, summer 1993. It was most likely compiled by Jan Jirásek.

203
1 Atari Mega ST 4; software: Steinberg Pro 24, Steinberg Synth Works DX TX, Steinberg Synth Works D 50, C Lab X Alyzer, C Lab Notator, and Roland MC 500 MkII Micro Composer
1 Roland KR 3000
1 Roland D 50
1 Yamaha DX-7 IID
1 Roland D 110
1 Yamaha TX-802
1 Yamaha TX-16 W Sampler
1 Kurzweil 1000 SX String Expander
1 Roland TR 626 Rhythm Composer
1 Steinberg SMP 24 SMPTE MIDI processor
1 NEC Pinwriter P 2200

# BIBLIOGRAPHY

- Backstuber, Ján. "Úprava snímkov" (Processing Recordings). In Rozhlas a slovenská elektroakustická hudba (The Radio and Slovakian Electro-Acoustic Music). Bratislava: Metodicko-výskumný kabinet československého rozhlasu, 1989.
- Blśha, Miloš. "Prehled výroby ve Studiu electronické hudby, VÚRT" (Overview of the Output of the Studio of Electronic Music at VÚRT).

. "Studio elektronické hudby Výzkumného ústavu rozhlasu a televize" (Studio of Electronic Music in the Research Institute of the Radio and Television). Rozhlasová a televizní technika 6, no. 4 (1965): 98-103.

- Bláha, Miloš, and Miroslav Mandík. "I. seminář elektronické hudby v ČSSR" (First Seminar of Electronic Music in ČSSR). Rozhlasová a televizní technika 5, no. 4 (1964): 89-100.
- Čierna, Alena. "Elektroakustická kompozícia na Slovensku" (Electro-Acoustic Composition in Slovakia). In *Rozhlas a slovenská elektroakustická hudba* (The Radio and Slovakian Electro-Acoustic Music). Bratislava: Metodicko-výskumný kabinet československého rozhlasu, 1989.
- Davies, Hugh, comp. Repertoire International des Musiques Electroacoustiques (International Electronic Music Catalog). M.I.T. Press, 1968.
- Experimental Studio: Radio Bratislava. Bratislava: Edition slovenský rozhlas, 1991.
- Hanousek, Jiří. "Technická výstroj brněnského elektronického studia čs. rozhlasu" (Technical Equipment of Brno's Electronic Studio at the Czechoslovakian Radio Broadcast Station).

- Kaduch, Miroslav, comp. Česká a slovenská elektroakustická hudba 1964-1994 (Czech and Slovakian Electro-Acoustic Music 1964-1994). Ostrava: Jupos, 1994.
- Lébl, Vladimír. "Životopis Miloslava Kabeláče" (Biography of Miloslav Kabeláč). Hudební věda 25, no. 1 (1988): 8-63.
- Lébl, Vladimír, and Ladislav Mokrý. "O současném stavu nových skladebných směru u nás" (About the Current State of New Compositional Directions Here by Us). In Nové cesty hudby (New Paths in Music). Prague: Státní hudební vydavatelství, 1964.
- List of instruments of the Audiostudio at the Czechoslovakian Radio Broadcast Station in Prague, summer 1993.

Literární noviny, 18 November, 1961.

- Meninger, Milan. "Komise pro elektronickou hudbu" (Commission for Electronic Music). Rozhlasová a televizní technika 6, no. 4 (1965): 128.
- "Skladby realizované ve studiu pro experimentální hudbu v Plzni" (Compositions Realized in the Studio for Experimental Music in Plzeň).
- Stadrucker, Ivan. "História jedného zvukového pracoviska" (History of an Audio Studio). Slovenská hudba 13, nos. 9-10 (1969): 342-49.
- Vítek, Jaromír, "První úspěchy studia elektronické hudby VÚRT" (First Successes of the Studio of Electronic Music at VÚRT). *Rozhlasová a televizní technika* 6, no. 3 (1965): III.

\_\_\_\_\_. "Zařízení k prolužování a zkracování zvukových snímků" (Extending and Contracting the Sound Recording). *Rozhlasová a televizní technika* 6, no. 2 (1965): 33-42.