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# MUSICWORKS 43

the political economy of concert music

popular black music in south africa

equal opportunity for equal temperaments

murray adaskin

midi chamber music





2 is this good for canada?

reflections by murray adaskin

lucie edwards

popular black music in south africa

freedom is rising

Paul Rapoport

Paul R

hugh le caine 13 when the sound has a form of its own

11 midi chamber music

16 affinity groups jim montgomery

18 Stu shepherd reflections on the political economy of concert music in north america

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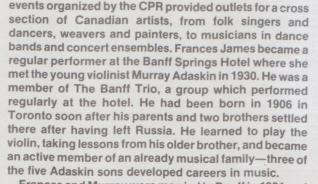
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At the University of Victoria in British Columbia this spring The Adaskin Years, A Conference on Canada's Arts, 1930 to 1970 was held in honour of the contributions made by Frances James Adaskin and Murray Adaskin to the arts in Canada, and to acknowledge an era of intense, often pioneering, activity in the arts that coincided with the development of their careers.

Soon after the festival, a book by Gordana Lazarevich was published by the University of Toronto Press, The Musical World of Frances James and Murray Adaskin. It portrays these two lives in music. Frances James was born in New Brunswick in 1903. Her talents as a lyric soprano were recognized early and she became well known for both her live performances, and later, for her many radio broadcasts.

During the late 1920s and 1930s the Canadian Pacific Railroad provided a great deal of support to Canadian musicians by sponsoring regular concerts and festivals at large tourist hotels such as the Banff Springs Hotel, Chateau Lake Louise, and The Royal York Hotel. The



Frances and Murray were married in Banff in 1931 and played together regularly for many years, both active in their own work, and at the same time, supportive of

During The Adaskin Festival, Murray Adaskin spoke with Gayle Young about some of his experiences.

My father earned so little money. He was a beautiful craftsman, but when he came to Canada he couldn't tell people what he did. He came as an immigrant on a boat and somebody taught him to say: Me vant a job. So the person would ask: Well, what do you do? and he would reply by saying: Me vant a job. That's all he could say, you see. And so his first job was hodding bricks up a ladder to a building. You remember those hods they used, platforms on poles to carry bricks? In my youth that's the way they built buildings. It's pretty amazing when you think of it, but labour was very cheap then.

My father was a wood turner, and did beautiful, beautiful things. I have a lot of his things. As a matter of fact, the first really professional stand that the Toronto Symphony Orchestra conductor was finally able to acquire was a stand my father built for them. They needed a podium with a shelf to put some of his scores. My brothers and I were all in the symphony, and when we realized what the conductor needed, we went to our pop and said: This is what they need, and he gladly did it. There was a period when he had his workshop at the back of our house. It was really a stable, I suppose, at one time. Later it would be a garage. My father made a little factory

out of it, with his belts and straps and wheels, and everything that a wood turner needs.

He loved the idea of his sons playing an instrument, especially the violin—that was it, the key to heaven. And his colleagues would say to him: You know, Mr. Adaskin, your sons won't ever earn a living doing that. They will play in a band, but won't ever make any money. Why don't you let them be lawyers or doctors? And my father would say: Well, I'm not that interested in what they make, but I am interested in their spiritual development. You know, for an immigrant man to come to Canada and be able to say things like that—I'm amazed at that kind of thing. I don't think very many fathers talk that way to their children today. I'm sure there are wonderful fathers around, I don't mean that there aren't by any means, but I don't think it's the usual thing that children growing up today hear around their dinner table. The kind of talk that is the best university education you can get. If you've been wise enough to choose your parents wisely.

We're living in times when everybody is earning a lot of money, but it's not enough, so that a wife and a husband both have to work. In my youth this was unknown. Once you became a wife your job was to look after the house and the children and the food. It was unthinkable to hear of a wife going out to work and the husband working. Everybody is making a lot of money, but it still isn't enough because the money isn't worth as much as it

When I started at the Royal York Hotel they used to have a sign on the door, giving you information. It was a silver-coloured metal square, and the room was \$6.50 a night. For years it had been \$6.50, and the sign had been there since the hotel was built. And then all of a sudden inflation reared its ugly head, and prices began to rise. At the Royal York Hotel there were an awful lot of little plaques to replace. They replaced them with metal, but soon they replaced them again, with plastic because they were replacing them almost every six months. Gradually going up, up, up. Can you imagine going to a top-flight hotel for \$6.50? The dinner in the main dining room was \$2.50. You left a quarter for the waiter and he was delighted. There was wonderful service by European trained waiters. They loved their jobs and did them with a feeling of artistry.

I'll tell you where I got my musical education if you want to know. Right behind the organ pipes in Massey Hall. There is a little space there. We got to know the stage door man, who collected small playing cards from cigarette packages, in those days. And when you had a pack, 52 cards, you would get an electric kettle, or something of that nature, very good prizes. I can remember following men up and down Yonge Street, and when I saw them taking out a package of cigarettes—in those days everybody smoked—I'd immediately ask: Are you saving the cards, otherwise could I have them? They usually said: Oh, sure. So, for every concert, we had a little pack of cards that we'd collected on the street and from all our relatives and friends. We'd give this to the man at the door and we'd be allowed into the space behind the organ pipes. There were maybe about ten of us up there. We heard every concert that took place in Massey Hall. Every symphony concert, everything. It was dark there, no furniture, we just sat on the floor. But we could see clearly, we were right over the stage, and we were looking sort of sideways, right at the conductor. We heard the Boston Symphony, the Cleveland Orchestra, the Cincinnati Orchestra, and all the artists that

came. Fritz Kreisler, Rachmaninov, and all the rest. And then of course, being young and brash, we'd go out and criticize some of them. I'm absolutely appalled when I' think about it now. But young people are brash and very knowledgeable, full of high standards. We took it very seriously. In those days gramophone records would come out. For instance, Fritz Kreisler had a kind of a system where the first thing that would happen was a recording would come out of one of his so-called transcriptions which later turned out to be his own compositions. Then the sheet music would arrive at the stores, and then he would arrive that season and play the latest piece. By this time we'd worn out the record. We'd wear out a record in ten days. We'd sit and listen to that record, we'd figure out every fingering and every bowing that he did. That was a good teaching experience, I can tell you. Most of us emulated the playing, and later with Heifetz the same way. Each one brought slight deviation to the style of string playing. We went through all this and we learned all their tricks by just listening and listening. We'd sit close to the gramophone and analyse where he did a shift, or a different bowing than was marked in the music. Fritz Kreisler never played it twice the same. He was a magic kind of personality, wonderful player, beautiful artist. Victor Feldbrill [the Canadian conductor, who spoke at the Adaskin Years Festival] was telling me that they have re-released on compact disc the early recordings of Kreisler playing the Brahms Violin Concerto. These wonderful early performances, sounding as they have never sounded before. He was telling me it's miraculous to hear how beautifully those men played. Violinists don't play that way any more. Now it's big, powerful sound, tempi much faster than anybody has ever played them. They have fabulous equipment, fabulous technique, and the magic is gone. It has, there's no question about it. Today they've learned how to play powerfully at the bridge, closer to the bridge, and, oh, they get a marvelous powerful sound. But today, they play the Stravinsky Violin Concerto, for instance, faster than I've ever heard it in my life. And it loses something. It loses something of what a wonderful piece it is. And it took many, many years before it even got into the

After the Banff Springs Hotel closed in 1941 the Adaskins lived all year in Toronto, where Murray played in "The Royal York Hotel Trio", an ensemble which performed almost every day at the Royal York Hotel. He had become interested in studying composition, and in 1946 began to study with John Weinzweig. Soon composition became his primary interest. He and John Weinzweig became close friends and were founding members of the Canadian League of Composers in 1951. His experience as a composer in the somewhat conservative atmosphere of Toronto was indicative of the low value attached to "modern" music.

John Weinzweig was the ultra, ultra modern composer in his day. I can remember the kind of slings that were shot at him. At the Toronto Telegram, which was a big daily newspaper at that time, there was a music critic who took a violent dislike to the music of John Weinzweig. Twelve-tone music, for the first time in Toronto. He didn't know what the hell it was all about, naturally. So he devoted a whole Saturday page to John Weinzweig, and I mean a whole page, not just a column, and just demolished him. And when his next week's page came, the following week, he felt he hadn't done enough, so he devoted another page. John made a slight reference to that [in his talk] yesterday. I knew what he was referring to. We were so outraged by this, and helpless. And yet somebody once asked us: Did we get downhearted about it? Did we sort of lose courage? and not at all. The more these things happened, somehow or other the more optimistic we became, and that's the reason, I'm sure, that composers at that time decided to take things into their own hands. It gave them enough impetus, and will, to do that. I think we wasted a lot of time doing it—we could have written a couple of extra pieces—but we had meetings. When we started the Canadian League of Composers the whole idea was, and still is, to make life easier for the new composers that were coming up. We could speak as a voice, we could speak as a body [through the League]. I think it has done quite a lot of good things. And I suppose that the new young people have to start their own things. For example, the Music Gallery—that size space is where all the exciting things of all periods have happened, never in big halls. When you think about it, it was usually in a place where 250 people were a big audience—a big audience for really contemporary music. I'm not talking about my kind of music, but the kind of music it was when we first started-to get that big an audience was really a triumph. All over the world, I think it's the same thing. All the new movements start, and there always, thank God, are new movements starting because that's the way it should be. Young people have to do new things with the resources that are available to them.

No recording machines (especially small ones like this one) were available in our early days. When we had a broadcast of a piece on the CBC, we got to know one of the engineers who worked for the CBC who, in his private home, down in the basement, had enough equipment to take something off the air and make a record. So you had a disc, and those kind of discs we wore out in no time. One of the great sorrows that we experience is that all the things that my wife (Frances James Adaskin) did, for instance, have been lost. She did an enormous amount of broadcasting in her day, interesting broadcasts. She would do a long series of one composer for a whole broadcast, and each week another composer, just Canadian composers. Those were the wonderful days of the CBC Radio. A young good performer could make his career because of the CBC Radio. Now can you imagine a young performer making a career on CBC radio today? There aren't enough live broadcasts. In those days everything was live, live meaning: the light went on, and that was it, whatever happened went on the air. The young composers always had some people, like my wife -but not many-who would perform new works. And they were difficult works. Barbara Pentland wrote very difficult songs. To this day they are difficult to sing, but in those days they were almost impossible to sing. The harmonizations were so new. Difficult enough for a player—for a singer almost impossible, because as a singer you have to hear it before you can sing it. My wife never refused any young composer's music at the time. She did 28 first performances of Canadian pieces. And she always repeated them once they were in her repertoire. Young composers were great fans of hers. I urge young instrumentalists today to do the same thing, to play works of composers from among your friends. If you're going to buy a painting, pick among your own colleagues, young struggling painters. That's how you start a collection. Anyone can win a lottery and buy an impressionist painting. That's no trick. The trick is to buy paintings when the artist really needs the money. I bought paintings from artists but I also bought things from dealers. I think it's very important to buy things from a dealer, because how else will a dealer take a shine to an artist if they don't sell anything? [A major part of the Adaskin Years Festival was the exhibition of part of the art

the depression.-Ed.] I can remember the incident that John Weinzweig described when the Canadian League of Composers bought the Toronto Symphony Orchestra to do a concert of Canadian music [in 1952]. That was the only way we could get it. John Weinzweig and I were the ones that were delegated to go and interview the women's committee, and we were given short shrift. We found ourselves on Victoria Street, outside Massey Hall, just bewildered. We said: We've been given the bum's rush! Instead of getting downhearted about it, it gave us enough courage to say: We'll do it another way. We raised the money for it. I used to play at the Royal York Hotel, so I knew all the mining tycoons and various people like that, and I went after a couple of these people, and they only asked me one question: Is this good

collection built by the Adaskins, which includes paintings

they bought from young artists such as David Milne during

Here are people that we look upon as, more or less, not exactly crooks, but the dollar sign was really their chief interest. And that's the question they had. What would they know about composers in those days? They had no idea what it was all about. But one man picked up his phone, talked to his secretary and said: OK, you've got this amount of money. Somebody else said exactly the same thing in other words, and we were able to raise the money. [It took five thousand dollars.] The hall was filled. It was a good concert and I remember we all felt

that in Massey Hall it was like a breath of fresh air. It was the first time this had ever happened—all new music by the Toronto Symphony Orchestra! My God, that was just unknown. It was very exciting.

And at the end the manager of the symphony came up to us and said: Let's make it an annual affair. He thought this was great, the musicians were paid, so they had extra services. And we said: Sure, but you raise the money. But they never repeated it themselves.

I might have a distorted picture, being so far away from Toronto now, but from all I read, I'm amazed at the number of things that are happening there. But now the Toronto Symphony has become a different thing. What a pity that it isn't what it's supposed to be-that is, the community's orchestra. Just as in Europe, the community has its own opera company, its own symphony, but of course, it's paid for by the people, by the government. We somehow or other have never quite captured that concept. You would think there are enough Europeans in Canada who have experienced this. I've talked to so many of them, and they say: Oh, in Europe, we used to do so and so. And I feel like asking them: What are you doing about it, and why can't we change it?

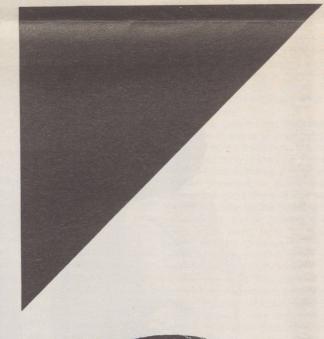
In a smaller place like Victoria, it's closer to being a community orchestra. They do a lot of new music, and they are very good about it. They play young people's music as well as old-timers like myself. They played very well, performing a new piece by Rodney Sharman as

In 1952 the Adaskins moved to Saskatoon where Murray built up the Department of Music at the University of Saskatchewan. He was one of the first to leave the Toronto and Montréal areas and contribute to the decentralization of musical activity in Canada. While in Saskatoon he continued to compose, developing a personal neoclassical folk-influenced idiom, in addition to teaching, conducting, organizing several festivals of music, and advocating Canadian music in general, in any way open to him.

When Murray retired in 1973, he and Frances moved to Victoria, where they remained active as teachers and where Murray has continued to compose.

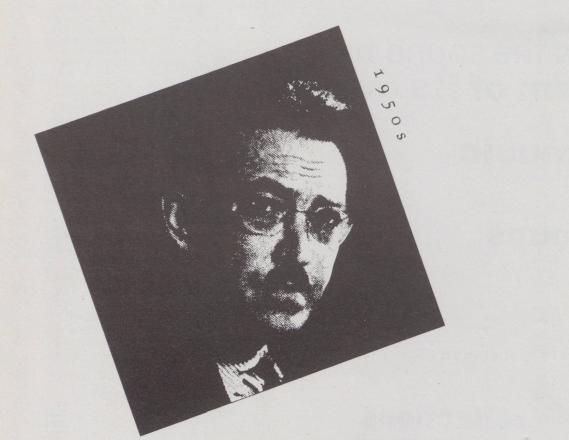
Sadly, Frances James Adaskin passed away during the summer of 1988. We wish to convey our deepest sympathies with Murray Adaskin.

The Musical World of Frances James and Murray Adaskin by Gordana Lazarevich is available through the University of Toronto Press for \$37.50 hard cover.

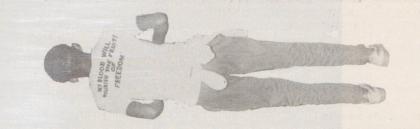




reflections by murray adaskin



is this good for canada?



# popular black music in south africa article by lucie edwards photographs by frances kelly

# is rising

Music is everywhere in black South Africa. It swells from the tiny township churches, spills out of parties in the matchbox houses, pulses from the pirate taxis taking workers to and from their city jobs, and punctuates every protest meeting. Most of this is still home-made music: although a recording contract and music stardom seem to be the dream of most township youths, music still belongs to the people. It is not yet a vinyl or plastic form

of passive entertainment.

The legendary South African jazz pianist, Abdullah Ibrahim (Dollar Brand), has said that *The function of* music in African society is social, devotional and healing, as well as to record history. For him, and other prominent black musicians, music is also my personal contribution to the struggle against apartheid and towards the institution of a just society. This struggle has forced him, and many other celebrated South African

It is easy to acquire a taste for the township sound by listening to recordings by such exceptional musicians as Abdullah Ibrahim, Miriam Makeba, and Letta Mbulu; but it takes a ticket (and a visa!) to hear the music as it should be heard, in the dusty streets of Soweto and the windswept coloured ghettos of the Cape Flats. Two things immediately strike foreign fans visiting South Africa: the variety and quality of the township sound, and the utter ignorance of white South Africans about these musical riches. Afrikaner country and western music and foreign pop dominate the airwaves of the white radio channels of Radio South Africa.

The outside world now has a much better knowledge of South African music as a result of Paul Simon's bestselling Graceland album. Several of the leading black music groups—Johnny Clegg and Savuka, Ray Phiri and Stimela, and Ladysmith Black Mambazo—have gained international recognition, admittedly at the price

of political brickbats overseas and in South Africa.

But this article is not about the knotty politics of cultural boycotts: it's about the vernacular black music of South Africa—the street sounds of the townships. It is dangerous, but convenient, oversimplification to say that black South African music has three sounds

drawn in turn from the churches, the shebeens (illegal saloons) and the protest gatherings of the townships. The sounds mix and mingle, crib the same themes, and borrow from the earliest rhythms and riffs of tribal music. I was recently privileged to attend one of the last great

tribal rituals: the annual celebration in Swaziland known as the Reed Dance. This national rite is both a fertility ritual marking the arrival of spring and a renewal of tribal loyalty to the royal family. For hours, the girls and young women of Swaziland, dressed in vivid traditional costumes and led by their clan leaders, sang and danced before the royal family. The music, as each clan competed in singing traditional praise songs to the accompaniment of hundreds of tin whistles; the colours; and the dust rising from the stamping feet of many thousands of participants, were intoxicating. At the climax of the ceremony the king selected his new brides from among the dancers and singers. For the Swazis, a Reed

Dance ensures rich crops and fat cattle in the year

ahead. Music and dance have always been indispensable to the health and happiness of the community.

The mother of gospel (devotional) singing in South Africa was tribal music, as performed at the Reed Dance, with its emphasis on complex rhythm, repetition and improvisation. Its father was the mission tradition, which has contributed the disciplines of European choral music and formal harmony, as well as a wealth of European hymns and liturgical sounds. The result is a complex tapestry of sound—almost exclusively choral, as church music is generally sung a cappella—combined with an extraordinary inventiveness in performance. Even the most professional of church choirs, epitomized perhaps by Ladysmith Black Mambazo, never sings a hymn the same way twice and the best-loved hymns take on different colours with the mood of the congregation The most famous of all hymns, "Nkosi Sikelele iAfrika"— "God Bless Africa"—can break your heart with its pathos or bring you to dance in rapture, depending on how it is

sung, depending on the mood of the congregation. While gospel music is above all an act of worship, it is also a source of community pride. Just as the Swazi clans compete at the Reed Dance to produce the loudest and most harmonious singing, community churches vie for the honour of the best choir. There are elaborate contests at the township, regional and even national level for the top gospel choirs. Prize winners, especially the choir conductors and top soloists, enjoy enormous community prestige. Most of the top choirs have junior choirs affiliated to them (like baseball's farm teams), from which newcomers can earn promotion to the ranks of the elite. Needless to say, choir members invest save to buy elaborate costumes suitable for competitions and community celebrations. These choir competitions are not without their critics: some ministers (often those whose parishioners are leaving for churches with better choirs) complain that this preoccupation with winning choral contests is unchristian, while political activists argue that it drains energy which should be properly devoted to political protest or selfimprovement. But at the black weddings, funerals and community celebrations, where one and often more choirs perform, the pride and excitement of both the choristers and their hosts were apparent. Gospel choirs remain one of the best-loved institutions in black South

It may be unfair to label popular music as shebeen music, but the shebeens were the cradles of the popular jazz and blues sounds of South Africa. Just as influential as traditional tribal music in developing amabaqanga and ngoema—Zulu and Cape Coloured popular music—was Afro-American music. The American influence began as early as 1887, when a black American ▶

# portrait of Pretoria

. . Imagine a giant bowl, with softly sloping sides: Pretoria fills the hollow. The most spectacular architecture in the city soars up from the edges. On one side, the Union Buildings, the seat of Executive Power They were built early in this century as a stone symbol of the union of the Afrikaner and English peoples. Two towers, and labyrinthine office wings, are connected by a spectacular amphitheatre. From the amphitheatre across the horizon looms an immense, brooding tower: the Voortrekker Monument. We have never been able to confirm whether the Monument was deliberately designed to look like the Tablets of the Ten Commandments, but that is certainly what it brings to mind. White South Africa's Westminster Abbey, its monumental size and stark exterior are both awe- and fear-inspiring The monument, 50 years old this year, was originally placed to stare the Union Buildings down: an old Boer Republics. Now that the Union Building is home to the Boer Republic's heirs, the monuments coexist in harmony, twin sentinels of white power in South Africa.

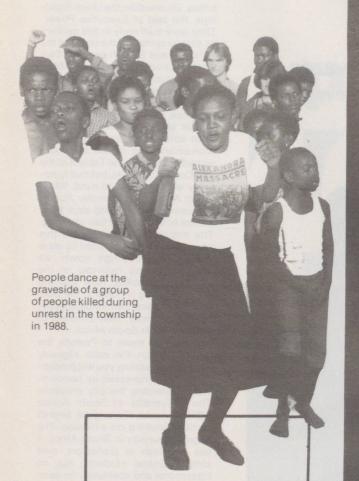
But if you travel to Pretoria the usual way, on the main highway from Johannesburg, you will probably be more impressed by two complexes guarding the city entrance. The University of South Africa (UNISA) looks like a giant aircraft carrier, teetering on a hillside. The largest university in South Africa, it has hundreds of professors, over sixty thousand students, but no classrooms and absolutely no campus activity. Hundreds of students take the same course togethernever meeting, never debating-in the privacy of their own segregated

A lot of UNISA students can be found up the road, in another giant complex. Pretoria Central Prison is one of the three major prisons for political prisoners: the other two, Pollsmoor and Robben Island, are near Cape Town. Pretoria Central is particularly hated, because all the hangings in South Africa take place within its precincts-164 killed last year on a gallows which has been specially equipped to hang 7 simultaneously. Imagine a maximum security prison just below the Houses of Parliament: that's what we have in Pretoria.

Pass the prison and you reach downtown Pretoria, a drab conglomerate of office buildings. The only striking building is the new Federal Reserve Bank building, a huge skyscraper sheathed in black glass. Behind the glass there is just reinforced concrete, for the building has no windows. Below ground, giant caves have been built to house South Africa's Croesus hoard of gold and platinum. This is the real seat of power in South Africa.

Have you read The Lord of the Rings? Pretoria reminds us of Minas Morgul, the capital of Saruman's Evil Empire. Black towers dominate the horizon and great and dangerous treasures fester in the darkness. (This is not as fanciful as it sounds: Tolkien was born in South Africa and the Hobbit territory, the Shire, was drawn from Tolkien's memories of the Hogsback district in the Eastern Cape.) Most of the time, it is more banal than evil, a civil service city whose citizens live out their lives shuffling paper. A wealthy city, with the highest income of any community in South Africa, and the garish shopping centers and terrible parking problems to show for it. An unhappy city, even for whites, with the highest rates of suicide, divorce and family violence in South Africa. Above all, a city where you can never get away from apartheid: despite tentative signs of reform, Pretoria, the capital, still maintains segregated parks, benches, buses, restaurants, liquor stores, toilets, swimming pools, hotels, schools, hospitals, churches, and libraries. Our feelings about this are straightforward: it is a violation of human dignity, a sin against the Holy Spirit

The preceding quotation and following descriptive passages are excerpted from letters sent by Lucie Edwards and her husband, Tom Roach during their posting in Pretoria, South Africa.



South African music is much more fun to listen to than to read about. Unfortunately, very little of it is distributed internationally. To get a taste of the South African sound, it is worth looking out for the following records.

Paul Simon, Graceland. (Warner Brothers) Ignore the pallid lyrics, and concentrate on the musical accompaniment by some of South Africa's most talented musicians, Joseph Shabalala and Ladysmith Black Mambazo.

Harry Belafonte, Paradise in Gazankulu. (EMI/Capitol) Another international star adopts the amabaqanga sound with a galaxy of talented South African backup artists. But the lyrics, in this case, are

Miriam Makeba, Sangoma. (Warner Brothers) "Mama Afrika" goes back to her tribal roots in this recently released album.

Hugh Masakela, Tomorrow. (WEA International) Aother legendary South African artist revisits the amabagango sound in this recent album.

Ladysmith Black Mambazo, The Journey of Dreams. (Warner Brothers) This deeply religious choral group, the best selling recording artists in South Africa, won a Grammy for its first internationally distributed album, Shaka Zulu (Shanachie).

Johnny Clegg and Savuka, Third World Child. (Capitol) This gifted rock group is enormously popular in Europe, where Clegg is known as "le Zoulou blanc", but is not yet well known in North America. They deserve to be the first South African group to become international superstars.

Let Their Voices be Heardtraditional Singing in South Africa Rounder Records 5024.

Soweto Never Sleeps—Classic Female Zulu Jive Shanachie 43041. Mbaqanga—The Indestructible Beat of Soweto Shanachie 43033. Music of Black South Africa Shanachie 43018.

If you're very lucky, or have access to specialty music shops, records by any of the following: Letta Mbulu, Abdullah Ebrahim (Dollar Brand), Ray Phiri and Stimela, the Genuines. the Boyoyo Boys, and Mahlatini and the Mahotella Queens. And for a taste of music north of the Limpopo, look out for the Zimbabwe group the Bhundu Boys.

minstrel group came to Cape Town. Their catchy vocal sound, backed by banjos, harmonicas and accordians immediately caught on in the Cape Coloured community. The annual so-called Coon Carnival has become an annual celebration of Kaapse Klopse—Cape Beatmusic featuring competing mineted arouse in the competi music, featuring competing minstrel groups in flashy satin, marching bands, and spectacular dancing. Later, American jazz, the blues, the Motown sound, reggae,

even disco music, captured large black audiences and spawned scores of South African imitators.

The characteristics that generally set South African music apart from Western pop are its rhythmic inventiveness, its sometimes jarring invenceities of tiveness, its sometimes jarring juxtaposition of musical instruments—where else is the accordion as important as the guitar?—the accomplished singing, and the content of its lyrics. Sung in a range of black languages, in English and in township-taal—a rich and vigorous slang which is the *lingua franca* of the townships—the songs are a faithful reflection and celebration of township life. They deal not only with the usual pop formula themes of love lost and found, and fortunes won and lost, but with hunger, separation, exile, unemployment, and humilia-tion, the common experience of black life in the land of apartheid. Politics and the impact of the current State of Emergency are common themes: as one of the best of the young black groups, the Genuines, explained on their debut album, their music is about *Oh ho ho de* Struggle . . . mellow yellow en Buffel en de teargas en de purple rain en de pain. (Translation: mellow yellow en Buffel are armoured troop carriers used by the Defence Forces in their military occupation of the townships: while purple rain is the purple dye police water cannons spray on township protestors.)

The line between popular mu

The line between popular music and protest music is increasingly hard to draw. These are the songs of the people, songs of protest, songs of hope, in praise of leaders and in condemnation of the present government. The music tends to be simple and rhythmic, often borrowed from traditional hymns and working chants created to ease the burden of ploughing the fields. The words change frequently, in reposition developments, now verse are frequently improvised on the opments; new verses are frequently improvised on the spot. These songs are rarely written down, but new pro-test songs seem to sweep the townships, and travel quickly from one community to another. Needless to say, these songs are not allowed on state-controlled radio, so their rapid transmission from one end of South Africa to another is a tribute to the strong oral tradition of

One of the first protest songs, called "iLand Act", was composed in 1913, in anger at the theft of black land by the white government. The song, one of the few from that time by an identifiable composer, combined traditional Zulu music and American ragtime. It is still popular today. (Unfortunately, the Land Act is still with us, so the song remains highly relevant.) One of the most famous protest songs, "Strijdom you have struck a rock" was composed as part of a campaign against the extension of pass laws to apply to women. In March 1956, 20,000 women sang it as they marched on the Union Buildings in Pretoria. The song is now the anthem of the Federation of South African Women. Another protest song with a long and heroic history is "Hlangani"—"Unite"—the theme song of the black trade unions, the fastest-growing union movement in the world today. A traditional hymn which has been updated to political use

has become "Somlandei uMandela." But most topica songs pop up suddenly and vanish just as quickly from South Africa's own unique version of "top forty" music I recently attended the 83rd birthday party of a ver

eran political activist, Helen Joseph, at which a new protest song was sung for the first time. The song, in praise of Mrs. Joseph's contribution to the struggle against apartheid, was composed by her old friend Winnie Mandela and sung by Winnie her developed. nie Mandela and sung by Winnie, her daughter Zinzie, and members of the "Mandela Football Club", who accompany Winnie everywhere. The group danced up the lane towards the house where the party was taking place, drawing in other visitors behind them who improvised new verses to the song as they streamed past. A very special South African gift for a very special lady Within days, Mrs. Joseph's birthday song was being sung throughout the townships. The song contributed to South Africa's oral history, by recording the accomp lishments of one of its national heroines.

In addition to protest songs, the crowds at political gatherings dance the toyi toyi—a fast shuffle known as the warrior's dance—while shouting political slogans. The repeated shouts of Amandla! Awethu! (power to the people) Viva Mandela Viva! Viva Socialismus Viv! to the sound of clapping and stamping feet have become a refrain at every popular gathering. At one recent church service, I watched the altar boys swinging the incense burners while doing the toyi toyi at the altar!

Protest gatherings and community celebrations, are, alas, few and far between under the present State of Emergency. While the world celebrated Nelson Mandela's 70th birthday, local gatherings in honour of Nelson Mandela, featuring leading black musicians, were all banned by the authorities. The Botha government even restricts the singing of protest songs at funerals. (Only "bona fide" hymns may be sung.) But union gatherings, church services, school celebrations and even commu ter train rides are popular occasions for the singing of

A train ride to the townships can be quite an experience. Hot, slow and desperately overcrowded, each train carriage has its regulars. One coach will feature rousing speeches and protest songs, while a fervent Apostolic church service resounds from an adjacent carriage. Passengers quite literally can make a political statement every time they get on the train! But then, everything is political in South Africa.

The music community is beginning to recognize the importance of the passenger to the freedom atrust.

importance of these protest songs to the freedom strug-gle, and by extension, the importance of popular music to black life in South Africa. Increasingly, composers are experimenting with musical theatre as a medium in which to portray the reality of township life. Many of these plays have attracted an appreciative international audience. Two of the most successful—Sophiatown and District Six—are musical memorials to communities which were destroyed by the South African government's policy of forced removal. A more contemporary portrait of township life is *Sarafinal*, now enjoying a successful run on Broadway. South African music, forged on the anvil of ruthless oppression, is a vibrant celebration of musical creativity, a treasure-house of Africa's long musical heritage, and a dauntless affirmation of hope in a better future for us all.



Youths dance during a church meeting in Pretoria to discuss the killings of a group of people by police in Winterveldt in the 'independent' black homeland of Bophuthatswana, June 1986.

# sikelel' iAfrika

Maluphakanysw' uphondo lwayo . Yizwa imithandazo yethu Nkosi sikelela Lord bless Thina, lusapho lwayo Us, her children Woza Moya Come, spirit Woza Moya oyingcwele Nkosi sikelela Lord bless Thina lusapho lwayo Us, her children Morena boloka sechaba se heso O fedise dintwa le matswenyeho O se boloke—o se boloke O se boloke morena Sechaba se heso Our nation Sechaba se heso

# Hlangani Unite

Hlanganani basebenzi nibemunye Ukuze singobe abaqashi ngeningi Siyanincusa basebenzi Hlanganani senizonqoba Hlanganani basebenzi

# Asibadali the Rent irente Boycott Song

Asibadali irente Asinamali Botha Senzeni Botha? Ngona asinamali Botha

# Strijdom you have the Women's struck a rock

Wena Strijdom wa'thinthabafazi wathinth'embokotho Wena Strijdom uzokufa! You, Strijdom, you will die!

# Unite workers nibemunye And be one.

Come together workers

So that we can defeat

We call on you workers

United you will conquer

the employers with numbers

We do not pay rent We have no money Botha What must we do, Botha? Because we have no money Botha.

**God Bless Africa** 

Lord bless Africa

Come Holy Spirit

Bless it, bless it

Bless it, Lord

Our nation

And be one

God bless our nation

Do away with wars and trouble

Let her horn be raised

Listen to our prayers

# Anthem

You Strijdom You have touched the women You have struck against rock,



Winnie Mandela with Helen Joseph.



Young people from Winterveldt, in the black 'independent' homeland of Bophuthatswana, dance in the street after a meeting at a church in Pretoria to discuss a spate of shootings in the township.

April 27, 1988

One of the highlights of the past few weeks was the 83rd birthday party of our dear friend and mentor, Helen Joseph. For over 40 years Helen has been a leading political figure, active in the trade unions, the women's movement and in a host of anti-apartheid groups. Neither treason charges, detention, house arrest, attempted murder, serious illness nor age have broken her spirit. Perhaps because of our training in history, we particularly enjoy her vivid accounts of the early days of the struggle, including the Congress of the People, the Women's March on Parliament, and the Defiance Campaign. She is still active, and her tiny house invariably overflows with visitors while the telephone rings off the hook. It was most impressive to see how many other people came to bear her tribute, a veritable who's who of the anti-apartheid movement in South Africa. One particularly memorable moment was the arrival of Winnie and Zinzie Mandela, with the "Mandela Football Team"-20 or so comrades, dressed in identical yellow and red tracksuits, who accompany Winnie wherever she goes. As a result, her excursions tend to be a cross between a royal progress and a circus. This was particularly the case at the Birthday Party, as Winnie had composed a new protest song in Helen's honour and trained her football team to sing it. In they bopped, in a toyi toyi procession, disrupting the whole proceedings and leaving Helen torn between tears and laughter.

. The other major event in recent days was our formal induction to the Security Services' roll of "enemies of the people". Admittedly, it doesn't take much to join this club; a black skin, after all, virtually guarantees entry. You know you've made it when you start getting harassed, by the authorities or their right-wing supporters. (Needless to say, neither we nor any of the other lucky recipients of their attentions have any evidence of who is behind this. But the pattern is quite clear.) While most of their actions are pretty crude—a favourite one is throwing a brick through your window, while tampering with cars and threatening telephone calls are equally popular-they can, on occasion, be quite imaginative There was, for example, the photographer we know who came home to find a bulldozer preparing to demolish his darkroom. And the woman who received delivery of an unwanted casket. In our case, someone ordered delivery of a truckload of manure, which was, presumably, to be off-loaded on our front garden. We had quite a time persuading the irate gang-boss that we hadn't ordered it, as he had come a long way with the stuff and didn't want to bring it back. We can only assume that the manure was a left-handed compliment to Lucie's reporting.

One of the most amazing sights in South Africa is to see the more than 1000 buses which transport 70,000 workers to and from Kwandebele every day: a two-anda-half-hour one-way journey. The average worker climbs on a bus at 4 A.M. and gets home around 8 in the evening. The community was located way out in the bushveld because the good burghers of Pretoria objected to a black community within 40 miles of the city. Canadian towns have green belts, South Africa cities, white belts. Tom and Lucie

Sept. 19, 1988

. We had a superb 4-day weekend in Swaziland . . . In a stroke of good luck, that weekend was the Reed Dance, Swaziland's most important tribal festival. The Reed Dance is both a fertility rite, celebrating the return of spring, and a renewal of loyalty to the Swazi royal family. The maidens of every village are summoned to the Queen Mother's Kraal, or family compound, to cut cane used to refurbish the traditional dwellings. After they cut the reeds, the maidens, led by their village elders, dance and chant praise songs for the royal family. The climax of the ceremony is the King's selection of one or two of the

maidens as his new brides. That description does not do much justice to the actual event. We were not prepared for the size of the crowd: between 5 and 10 thousand bare-breasted young girls, some little older than toddlers, regimented in cla groups and wearing distinctive, brilliantly coloured traditional costumes. Piercing penny whistles accompanied the singing, with every group performing their own clan song and trying to out-do their neighbours. Giggling girls, released from scrutiny by the village elders, stampeded to avoid the clutches of lascivious young men. And all the noise, colour and heat overlaid by a haze of rich, red African dust. The ceremony came to an extraordinary conclusion: at the very moment when the sangoma (shaman) signalled the king to go forward and pick his brides, the wind shifted 180 degrees and a cool, clean breeze streamed in from the mountains bringing clouds and the promise of rain. The best possible omen for fat cattle and rich crops in the year to come. It was easy to understand at that moment the contract, made up of equal parts of religion and tradition, between the Swazi king and his people.

Lucie Edwards is Counsellor at the Canadian Embassy to South Africa. She has lived in South Africa for almost three years. She was previously assigned to the Canadian Embassy to Israel and has worked for the Department of External Affairs for over 12 years. In addition to the music of South Africa, she and her husband particularly enjoy exploring the more remote regions of Southern Africa. They don't miss the Canadian winter at all.



# Paul Rapoport OME EQUAL TEMPERAMENTS ARE MORE EQUAL THAN OTHERS...AND DECIDEDLY temperament. The overbearing influence of the piano underestimate the power of truly disagreeable tunings.

# MORE TEMPERAMENTAL

Among the less welcome results of the Western standard known as 12-note equal temperament is that most musicians don't understand tuning. By this I mean quite simply that musicians do not understand how their tuning system works, and thus also do not understand how it does not work, i.e., what it cannot do. To put it more bluntly, so pervasive is 12-note equal temperament in our society that it has led many musicians to believe that no other tunings are useful, if indeed they are aware of any. We have this unhappy result even though many instruments are not easily built in or tuned to 12-note equal temperament, and choirs take to it about as naturally as birds do to a cage. In other words, 12-note equal temperament, despite its well-known advantages, has significant disadvantages, some of which will emerge shortly.

This article will discuss the theory and history of certain other equal temperaments. It will delve into them both mathematically and musically, and will reveal elementary aspects of their virtually unexplored sounds and structures. On the MUSICWORKS cassette are examples of polyphonic compositions in various equal temperaments rendered precisely in tune. In the course of the article, I will claim (and occasionally show) that:

- 1. B# and Cb may be the same note.
- 2. Major keys may have both sharps and flats in their key signatures.
- 3. E and F may be the same note
- 4. Eb may be lower than D.
- 5. Something else may be true which seems so odd, even in comparison with the above, that it will have to remain unstated for a while!

Why do all these things seem ridiculous? The short

answer is: the piano. The piano is indeed responsible (if we can lay such a charge on an instrument) for the very narrow situation we are in with regard to tunings. The piano is the all-purpose, all-pervasive instrument with a history both musical and social as weighty as its avoirdupois. Its tuning, of course, is fixed, in 12-note equal temperament. Hence the fix we are in, hence the tendency-no, it is even a rule in some quarters-to consider everything in terms of the piano and its tuning. Our ear-training classes sing to it. Our theory classes may even teach the modes in terms of the "white keys"; we certainly illustrate Bach chorales on the piano. We presume that Eb and D# are the same note. Lies, damned lies, and the piano! Tell students that the piano must be out of tune in order to be (considered) in tune, and they will think you are joking, even if they like paradoxes. To illustrate this fact of tuning is surprising simple, but it is also surprisingly difficult, because in the process we must undo several hundred years of piano-dominated

But there is a parallel history, one might say an alternative history, theory, and practice of tuning systems.

41-note equal temperament: 3 x 5 just tuning

53-note equal temperament: 3 x 5 just tuning

item 1: correspondences: equal and unequal temperaments

19-note equal temperament: 1/3-komma temperament

43-note equal temperament: 1/5-komma temperament

74-note equal temperament: 2/9-komma temperament

(some equal temperaments and the more precise just or

also 3 x 5 x 7 just tuning

tempered systems from which they are derivable)

31-note equal temperament: 1/4-komma temperament (meantone);

While acknowledging the magnificent achievements of the piano, it explores the really vast reaches which the piano and its tuning cannot approach.

The world of tunings is certainly worth investigating, and no farther away than the bottom of the rabbit hole or the other side of the looking glass. I suggest that, like Lewis Carroll's Alice, we need little more than imagination and curiosity to investigate this world. Like the other worlds Alice encounters, other tunings, while often unpredictable, can be quite logical and revealing in their unique ways, not to mention a lot of fun.

On a simple level, tuning systems may be divided into three categories: just tunings, unequal temperaments, and equal temperaments. By "just tuning" I mean any system whose consonances equal pitch ratios with small integers in the numerator and denominator, ratios such as 3/2, 5/4, 7/4, and 11/8. Although these ratios often include 3 and 5, they are not limited to them. We might evolve a just tuning based solely on harmonics 7 and 13 (ratios 7/4 and 13/8). A just tuning, having all its intervals based on the harmonic series, has no enharmonic relations: we never find exact equivalences like D#=Eb or B#=Cb. Because of this, the intervals of a just tuning go on multiplying themselves forever, producing a tuning of a theoretically infinite number of notes per octave. While this infinity poses obvious problems for acoustic instruments, it is unproblematic for electronic/computer generation of intervals. (In practice, one must also decide how close two notes may get before they are considered the same note.)

Unequal temperaments are practical solutions to one particular problem: namely, that four justly tuned perfect 5ths are noticeably larger than two octaves plus a justly tuned major 3rd. Because of this, it is impossible to have both just perfect 5ths (3/2 in the harmonic series) and just major 3rds (5/4 in the harmonic series) in a tuning system and keep down to a practicable minimum the number of notes per octave, which is obviously a basic requirement for most instruments. (Other serious harmonic and melodic difficulties also arise.) The result is that in unequal temperaments, certain instances of a given interval sound better than others and thus certain keys sound better than others. In the meantone temperament, to take the best-known unequal temperament, there are consonant major triads on eight roots, but those on B, F#, C#, and G# are so out of tune as to be unusable. One should therefore avoid (among others) the keys of E and B major, because the major triad on B

Other unequal temperaments make it possible to have more consonant triads than this, with some sounding very good and others acceptable though less good. Each key may sound different because the location of the more in-tune and less in-tune triads will differ in each key. These tunings are often known as irregular or mixed temperaments. Several well-known examples have been devised by Andreas Werckmeister (1645-1706), among

Equal temperaments, unlike the other types, are completely symmetrical, because any interval is the same size regardless of where in a scale it is found. Consequently, they are the only tunings to have genuine enharmonic changes: each note may be spelled and interpreted in more than one way, with some fascinating results for chromatic harmony.

Equal temperaments were discussed as early as the 16th century—and not merely the one with 12 notes per octave. In a treatise from 1555, Nicola Vicentino described something which is very close to, if not exactly, 31-note equal temperament. In the next three centuri other theorists dealt with equal temperaments of 19, 31, 50, and 53 notes, among several others. In almost all cases, the equal temperaments were discovered because they were extensions of something else, usu-

The result was equal temperaments of more than 12 notes whose basic intervals deviate somewhat from those of just or unequally tempered systems of 12 (or a few more) notes, in order to provide a finite number of pitches in a closed cyclic tuning—a tuning in which conjoined perfect 5ths form a closed cycle, a certain number of them (depending on the tuning) arriving back at the starting point. Item 1 shows some of these correspondences. The word "komma" refers here to the deviation mentioned above: it is the amount by which four perfect 5ths exceed two octaves plus a major 3rd. In size, the komma is between 1/4 and 1/5 of a 12-note equaltemperament semitone, large enough to be quite noticeable in most musical contexts.

The equal temperament of 19 notes is a closed cyclic tuning whose intervals are almost the same as those of 1/3-komma temperament. The latter is a tuning in which the main perfect 5ths are all 1/3 of a komma flat (and the other perfect 5ths, too far out of tune, are not usable). In this tuning the usable major 3rds are also 1/3-komma flat. In meantone temperament, the usable perfect 5ths are 1/4-komma flat and the major 3rds are precisely in tune, i.e., they are the same as those derived from the harmonic series. The history of temperaments is largely an attempt to come to terms with the tradeoff in purity of these two intervals, usually robbing the perfect 5ths to



1 Ell Ep Epp Ep Ep D# Ep D# D D D 2 FL E E E D# Eb Eb D# Eb D# D# 3 F# F Fb E E E D# Eb Eb D# Eb 4 G + F# F# F/ F E# E EL Eb/ Eb Eb 5 AL G Gb F# Gb F F E D# ELL ED 6 Bb G# G# G F# F# Gb Et E\ EL D#

7 BF A Ab Ab G Gb F# FL E E E

8 CH Bb A# A Ab G F# F E' Fb E

| B# | Bb | A | Ab | Ab | F# | F | E# | E /

C\* C A# A# G# GL Gb\ FF F\

C#\ C | B | Bb | Gt | F# | F# | F/

D Db Cb Bb/ G# F#/ Gb F#

C# C A# Ab G' GLL Gb

D C# B AL G GL F#

Db C A G G F#

D Db At Ab Gt F#

C# A# G# G# G\*

C# Bb G# G# G

D BL G# Ab G

B A ALL G

BI A AL G"

CL A A Ab

C Bb At G#

Ct Bb Att G#

C# Bb/ A# G#/

Dp 84 Bp 8"

Of B. Bil A.

D B B A

B' B R'

C, Cp Ha

C B# Bb

Dp. C Bp.

C# C# B"

C# C# B

D DH B

Dp B

DL B"

D C

C"

100 C#/

C#

C#/

D.

0

D

Ith Bb

C# C B Bb A G# Gb F F F

9D B B A G# G# G FF F E# E

9 12 13 15 17 19 22 31 41 43 53

0 0 0 0 0 0 0 0 0 0

item 3: equal-temperament notations

in each column is a different

equal temperament

pay the major 3rds.

In the early 20th century, most of the work on equal temperaments centred around further subdivision of what was by then the standard 12-note model. The most well-known composers were Julián Carrillo, Alois Hába, and Ivan Vyshnegradsky. Despite some fine music by these three, most of their equal temperaments were based on a false premise, namely that one must subdivide only 12, producing equal temperaments which are multiples of 12, such as 24-, 36-, 84-, and 96-note equal

again! Most of these are relatively uninteresting tunings, because they merely compound the out-of-tune nature of 12-note equal temperament, i.e., its deviation from intervals related to the harmonic series. If these multiples of 12 are to be used to produce equal temperaments having intervals which are more in tune than those of 12-note tuning, then that is fine, but there are other tunings which achieve that result better, as will soon be demonstrated.

In any case, for a long time in the 20th century the ubiquity of 12-note equal temperament coloured research into microtonality, which by rights should have freed composers from 12-note tuning instead of shackling them to it. Before 1950 only a few composers, such as Harry Partch, realized this.

For whatever reason, musicians today, upon hearing of microtonality, often come up with an unsettling response: "Oh, you mean quartertones." Now, microtonality has come to imply nearly any tuning other than 12-note equal temperament, a broad usage which is quite all right. But using "quartertones" to mean "microtonality" is unacceptable. If semitones are the smallest unit in 12-note equal temperament, then quartertones are obviously the smallest unit in 24-note equal temperament—and no more. To label all microtonal music "quartertone" is as sensible as labelling poor Alice in Alice in Wonderland a serpent. That is exactly what the pigeon insists on doing. The pigeon is convinced that anything which eats eggs must be a serpent. When Alice explains that she is a girl who eats eggs, the pigeon

merely concludes that girls must be a kind of serpent. Until only ten years ago, research into many equal temperaments faced the difficulty of producing actual music in them. J. Murray Barbour published an entire book on tunings in 1951 having heard neither most of the tunings he described nor, of course, all the interesting tunings he did not describe and presumably thought inferior. But in 1980, having begun investigating a group of equal temperaments a few years before, the American composer Easley Blackwood proved conclusively, much to his surprise, that many of those which have been dismissed are in fact strikingly useful. His task was to study the properties of all the equal temperaments of between 13 and 24 notes, produce a notation for each, and write and record music in them. The results to date include his 12 compositions in each of the 12 tunings, their publication, their recording as played on a synthesizer, as well as a book. All these items are mentioned in the bibliography to this article.

I believe that there are two related musical reasons for exploring equal temperaments. One is simply to discover new tuning structures and how they relate to each other. The other is to find harmonies which are more in tune with the harmonic series than what 12-note equal note equal temperament are closer to the major and temperament provides, or less in tune even: never minor 3rds of the harmonic series than those in 12-note

But the first example on the cassette is of a quite agreeable equal temperament, namely that of 19 notes. This temperament is full of curious structures which cry out for exploration, such as the following:

- 1. The chromatic semitone (e.g. D-D\*) is half the size of the diatonic semitone (e.g. D-Eb)
- The augmented 6th (e.g. D-B\*) and diminished 7th (e.g. D-Cb) are the same size.
- 3. The perfect 4th (e.g. D-G) is divisible exactly in half, into two augmented 2nds or diminished 3rds: e.g. D-E# and Fb-G (giving two augmented 2nds, since  $E^{\sharp} = F^{\flat}$ ); or D-F and  $E^{\sharp}$ -G (giving two diminished
- 4. An octave plus a perfect 5th (e.g. D-A) is divisible into 6 minor 3rds (D-F-Ab-Cb-Ebb-Gbb-A, since

Despite some apparently odd musical relationships, 19-note equal temperament is a completely tonal tuning, with quite acceptable major and minor triads. Consequently it has a diatonic behaviour which is virtually identical structurally and very close in sound to that of 12-note equal equal temperament.

Example 1 on the tape is an excerpt from Blackwood's 19-note etude, the coda in C major. Most of it sounds close to normal, but watch out for the chromatic lines on the top shortly after its beginning; they may make your stomach sink! But musically the phenomenon is less distressing. The measures in question appear reduced as Item 2. The chromatic and enharmonic motion in the top is what we attend to, but it has a largely diatonic underpinning on the bottom consisting of a sequence of six descending minor 3rds, as mentioned in point 4 above. Now, in 12-note equal temperament, six descending minor 3rds go from C down to F#, but in 19-note equal temperament, they go from C down to F4. From C they are A-F\*-D\*-Cb-Ab-F, the F of course being the subdominant in the final IV-V-I cadence of the etude. Note that in this tuning B# is the same as Cb. A complete notation for 19-note and other equal temperaments is provided in Item 3, which, along with Item 4, gives some details on enharmonic notation

Example 2 on the tape is Blackwood's entire etude in 19-note equal temperament. As in all his microtonal etudes, there are aspects of this one which cannot be transferred to 12-note equal temperament, because of crucial structural differences in the tunings. In this etude there is a diatonic first theme which sounds reasonably and disarmingly close to 12-note equal temperament, for the structural reasons mentioned earlier. The chromatic second theme displays some of the behaviour unique to the 19-note tuning. The whole etude reveals a miniature sonata design.

Note also that both the major and minor 3rds in 19-

item 4: equal temperaments: enharmonic equivalence

In each column are some of the enharmonic equivalence relations for each equal temperament.

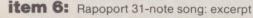
k = representation of the syntonic komma. In 53-note equal temperament this representation is very close to the just value, but in 15-note equal temperament it is very far from the just value.

9	12	13	15	17	19	22	31	41	43	53
b=LLL #=##			/ \ = k			/ \ = k	b=ll #=##	/ \ = k	b=111 #=##	/ \ = k
lo=bl #=#i							b=b  #=#i		b=bl #=#i	
Ab=G#	Ab=G#	Appp=C#	Ab=G=F#	Abb=F#	App=C#	Ab=G'	Alo=G#	Ab=G#\	Alo=G#	Ab=G#\
		App=Cx	A*=G′				Hpp=Ct	Ab~=G#	Alok=G#	Ab~=G#/
									Upp=Ct	
Fb=E	Fb=E	Fbb=E#	F=E	Fb=D#	Fb=E#	Fb=Eb/	Fb=Et	Fb=E	FLL=E#	Fb=E'
FLL=E	15057							Fb = D##	Fb=F\$	Fb = 0##

item 2: Blackwood 19-note etude: coda

item 5: equal temperaments: deviations from selected just intervals

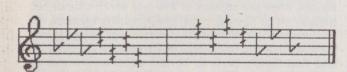
ratio	dec.	cents	de	viat'n		deviat'	n		deviat'n		deviat'n		deviat'n	deviat'n		deviat'n		deviat'n	deviat'n	deviat'n		deviat'r	2
				9 9	9	12	12	12	13 1	3 13	15 15	15	17 17 17	19 19	19	22	22 22	31 31 31	41 41 4	1 43 4	3 43	\$	53
/1	1	(	0	D	0		D	0	0	0	D	0	D 0	D	0		0 0		D (			·	D
6/15	1.067	111.731	1	ELL	1		Ep	1	E	bb 1	Ep/	1	D# 2	Eb	2		b/ 2		Ep.		**********	·	Eb.
-	1.071			ELL	1		Eb	1	Ε	bb 1	Ep	1	D# 2		2		b/ 2	·	Ep.			·	Ep,
	1.077			ELL	1		Eb	1	E	bb 1	E	2	D# 2	Ep	2		b/ 2		Ep.		1 5	·	D#
***********	1.083			ELL	1		Ep	1	E	2	E`	2	D# 2		2		# 3	-	0#/ 5		1 5	4	D#
12/11	1.091	150.637	7	Ell	1		Ε	2	E	2	E		D# 2	Ep	2	- preterriere en excessor que	# 3		D# s		1 5	·	E.
	1.100	165.004	1	Ell	1		Ε	2	E	2	E`	-	D# 2	Ε	3		# 3	· · · · · · · · · · · · · · · · · · ·	E (			·····	•
***********************	1.111			ELL			Ε	-	E	2	***	2	E 3		3		# 3	· ·	E (			····	E"
****	1.125	***************************************		FL	2		Ε		in an annual services	2	Ε	3	E 3		3		4	4	Ε			ф	E
***********	1.143			FL			Ε			3		3	E 3	*******************************	4		4	4-1	E' 8			·	E'
	1.154			FL			E			2 3	Ε	3	F 4		4	·	5		E' 8			<b>\$</b>	F"
	1.167			0.204 FL		33.129	-		10.052 F		E	3	F 4	,	4	-	5		F		10	\$	F
	1.182			FL			F			3	F/	4	F 4		5		5	· ·	F 1		10	·····	F
	1.200			8.975 FL		-15,641		********	-38.718 F		4.359 F'	4	-33.288 F 4	h	5	11.631 (		·		1 -8.665 F		1.340	•
	1.222		*********	F#		101011	F			4	F′	4	Gb 5	F#			b 6	***************************************	Gb 1		12		F"
	1.231		-	F#			F#			4	F′		Gb 5	F#			# 7	·	Gb 1		13	<b>\$</b>	Gb,
*****	1.250			3.686 F#		13.686			-17.083 F		13.686 F#\		-33.373 Gb 5	-7,366 F#		-4.496 F		0.783 F# 10	-5.826 F#\ 1			-1.408	
*****	1.273			F#	·	10.000	F#			5	F#\		F# 6		7		# 8	Gb 11	-3.020 F# 1		15		F#
	1.286			F#			F#			5	F#\	·	F# 6	Cp O			# 8	GÞ 11	F#/ 1		1 16	····	F#
*************	1.300			F#			G			5	G	6	F# 6	Gb		· \$	# 8	GL 12	G` 1		1 16	····	
	1.333			G <sup>‡</sup>			G			5	G	6	G 7	G		0		· · · · · · · · · · · · · · · · · · ·	G 1		***********	·····	G"
	1.364			G‡			G			6	Alb/		Ab 8	G#		4	b 10	4			18		G
	1.375			7.985 G <sup>‡</sup>		48.682			2.528 6		8.682 Ab		13.388 Ab 8	17.103 G#		-5.863 P		****	6/ 11 4.780 8b\ 11				G"
	1.400	******		G‡		10.002	G#			6	Ab/		Rb 8	G#			1 11		G# 21			-7.922	
	1.429	***************************************		AL			G#	*******		7	A'		G# 9	Ap	*********		#\ 11	Q	G# 2		21		G#
	1.444			AL			G#	-		7	A'	8	G# 9		10	\$	# 12	\$			22		G#
	1.455			AL		-	G#			7		8	G# 9		10		# 12		G# 2:		1 23		G#/
	1.500		· · · · · · · · · · · · · · · · · · ·	5.288 A		-1.955	*******	*****	36.507 A			9	3.927 A 10	-7.218 A		7.136 A	menerija erene	\$ i	*************************************		1 23		A.
	1.556		-	******************************	6	-1,900	Bb	******		8	10.043 h		3.921 H 10	-r.210 H		\$	13 b 14	\$1111111111111111111111111111111111111	0.484 A 2			-0.068	
	1.571		-	****************			Bb			8	Bp.		Bb 11	H# A#		\$\$	b 14	\$	Bb\ 21		\$ 27	******************************	Bb
					6		Bp				8p/		BF 11 R# 12	Bb		i			8b 2		28		Bb
***********	1.600	813.686			6					9			· ф	***************************************	*********	<b>\$</b>	15	\$ <del></del>	Bb/ 28			******************	Bb/
**********	1.625				6	-40.528			-9,758 B		39.472 B	********	6.531 A# 12	-19.475 Bb		-22.346 B			8.253 A#/ 2			-2.792	
**************	1.667	*************	***************************************	B‡			В	*******************************	******************************	10	B`		B 13	В		\$ <b>\$</b> -	# 16	\$	B` 31		32	****	B,
-	1.714			B‡			В			10		12	B 13	Ср	*******	\$	17		B′ 3		33		B'
/4	1.750			5.493 B <sup>‡</sup>		31.174	-	*****	-45.749 Bl			12	19.409 C 14	-21.457 Cb	***************************************	12.992 0			-2.972 C 3			4.759	**********
		996.090		B‡		**	С	-		11	С	· · · · · · · · · · · · · · · · · · ·	C 14	C		\$\$	18		C 34	*********************			C
	*******************************	1017.596	-	C‡‡	*********		С			11	C′		C 14	С	********************************	<b></b>	19	\$	C′ 3		36		C'
		1049.363	-	C‡‡			C			11	C′		Db 15	C#		·	19		Dp. 36		38		C"
-		1071.702		C‡‡			C#			12	C′		Db 15	C#			20		C#\ 3		38		Dp.
		1088.269	·	C‡‡	********		C#			12	C#		Db 15	C#		<b>************************</b>	20		C#\ 31		39		C#\
/1	2	1200	1	0.000 D	9	0.000	0	12	0.000 D	13	0.000 D	15	0.000 D 17	0.000 D	19	0.000 D	122	0.000 D 31	0.000 D 41	0.000 D	43	0.0001	n



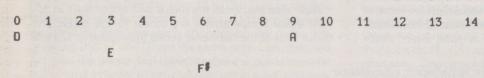




item 7: 31-note key signature for E semi-flat major



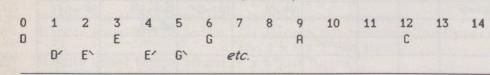
item 8: derivation of 15-note equal-temperament octave: beginning



item 9: derivation of 15-note equal-temperament octave: continued

0			9 10 11	12 13 14
0	E	F#	A	В
C#	F	G	Bþ	C
Ep	D#	Ap.	G#	Dp

item 10: derivation of 15-note equal-temperament octave: continued



item 11: derivation of 15-note equal-temperament octave: conclusion

0	1	2	3 E	4	5	6 G	7 8	9 A	10	11	12 C	13	14
							etc.						

item 12: derivation of 13-note equal-temperament octave: beginning

0	1	2	3	4	5	6	7	8	9	10	11	12
D	C#	F	E	Ap	G	F#	Вр	A	Op	C	11 B	Ep

item 13: derivation of 13-note equal-temperament octave: continued

Mark In	94, 197											
0	1	2	3	4	5	6	7	8	9	10	11	12
D	E	F#	G#	H#	F	G	A	В	Gp	Ab	11 Bb	C

item 14: derivation of 13-note equal-temperament octave: conclusion

0	1	2	3	4	5	6	7	8	9	10	11	12
П	Fbb	E	Fb	F#	Gb	G#	Ab	A#	Rb	R#	11 C	Cx

item 15: derivation of 13-note equal-temperament octave: beyond conclusion

0	1	2	3	4	5	6	7	8	9	10 Bb^>	11	12
D	E~~	E~	F#vc	F2	Cins	G^	A~	A~~c	Bc	Bp~	C~	C~~

distance up from the note indicated (e.g. G) to the repre-

- sentation of the 11th harmonic
- inverse of ^ distance down from the note indicated (e.g. B) to the re-
- presentation of the 13th harmonic
- inverse of c

item 16: distances in 13-note equal temperament

	Distance in 13-note ET generated from the 11th and 13th harmonics (ITEM 15)	Distance in 13-note ET generated from the 5th harmonic (ITEM 14)
Whole tone	* 246.154 cents	184.615 cents
Diatonic semitone	* -15.385	* 138.462
Chromatic semitone	* 261.538	* 46.154
Harmonic 11th sign	76.923	*
Harmonic 13th sign	138.462	*
Perfect 5th	* 723.077	* 692.308

\* not found in the system

equal temperament are. You can see this in Item 5. In the leftmost column are all the interval ratios using all the integers up to 16. In the cents column is the logarithmic size of those intervals, defining an octave to contain 1200 cents. Taking the major 3rd as an example, you will note that the just ratio 5/4 is represented in 12-note equal temperament by an interval which is 13.686 cents too wide. Presuming a base note in each case of D, in 12note equal temperament we find the major 3rd above D is F\*, which is the 4th note in the tuning above D. Again, this F# is sharp by nearly 14 cents, or 1/7 of a semitone, a rather large amount. Moving along to the right, in 19note equal temperament the major 3rd, represented again by F#, which is the 6th note above D, is flat by about 7 cents, a much smaller amount. Above that designation you can see that the minor 3rd (6/5 in the harmonic series) in 19-note equal temperament is a tiny 0.148 cents sharp, compared to the deviation in 12 for the minor 3rd, namely 15.641 cents flat.

For many of the equal temperaments, especially the completely tonal ones, the question of notation is readily solved. Another of these, 31-note equal temperament, has a long and distinguished history, particularly in Holland; its notation is standardized as you see it in Item 3. The unusual signs in 31 are explained in Item 4 as a semi-flat and semi-sharp; there are also a sesqui-sharp and sesqui-flat, which do not appear in Item 3. As the basic unit in 31-note temperament is nearly 39 cents, or about 3/8 of our semitone, it is most definitely noticeable, even in a melodic context

Example 3 on the tape is an excerpt from an electronic realization of a choral song of mine called "Artichoke", from a set of six Songs of Fruits and Vegetables. The excerpt is printed as Item 6. The line containing five successive descending units in 31-note equal temperament is marked in the alto part with a brace.

At the beginning of this passage, the two alto parts have a succession of augmented 2nds (which are slightly more discordant than minor 3rds), leading to the chords under the asterisks, which are neutral triads, i.e., between major and minor. Not only can the 31-note units in the alto be heard clearly, it is readily understandable that the passage is not reproducible in 12-note equal temperament. On the tape you may compare the 31-note version with the same music in a 12-note version which is as close as possible to the one in 31. (The 12-note version is Example 4.) I think the 12-note version is dull compared to the one in 31

Earlier I promised to reveal that B\$ and C\$ may be enharmonically equivalent. This I have already mentioned, if not shown directly, for 19-note equal temperament. The second promise was a demonstration that major keys may have both flats and sharps in their key signatures. Proving it would demand an extended digression; I will merely present the matter and claim that there is enough information here concerning 31note equal temperament to prove it.

In 31-note equal temperament sharps raise a note by two of the units of the tuning. Semi-sharps thus raise a note by one unit. Since flats and semi-flats lower a note by the same respective amounts, and in this tuning D# is (as in 19-note equal temperament) also lower than Eb by one unit, we evolve a whole tone divided into five parts: D -Di-Di-Ei-Ei-E. In a scale of Ei (E semi-flat) major, the leading tone must be a diatonic semitone lower: 3 units, or the note D<sup>†</sup>. The complete key signature for this key is Item 7. It requires both semi-flats and semi-sharps. Curiously, you may write it in either of the two orders indicated there, with the semi-flats first or the semisharps first. Only slight modification is needed of the usual rules for determining tonics from key signatures in order to figure this one out.

The third promise was to show how E and F may be the same note. At one time or another I have made and kept all these promises to my undergraduate students. When I show them that B# and Cb may be the same, they become uncomfortable. When I show them the key signature of E semi-flat major, they begin to look worried.

When I tell them that E and F may be the same note, some of them put their hands over their ears, and delivery of the fourth promise on page 8 has actually caused one person to run moaning from the classroom. More polite would be to behave like Alice and stay around to see what happens.

As mentioned earlier, notation for some equal temperaments is not a problem. You merely pick the unit which gives the ascending perfect 5th closest in cents to the 3/2 ratio in the harmonic series and call that A if your starting note is D. You then keep adding or subtracting fifths until you've gone all the way around the tuning, changing a few things, most of which are obvious. I will now explain this procedure for 15-note equal temperament, in which we encounter a problem, as illustrated in Items 8 through 11.

In 15-note equal temperament, the basic unit is 1200/15 cents, or 80 cents. A perfect 5th is therefore 9 units, or 720 cents, because this is the closest you can get to the value of 701.955 cents, which is equivalent to an interval with the ratio 3/2. In Item 8, a starting point of D on note 0 therefore requires A on note 9. The next higher perfect 5th, namely E, must be 9 units above that. Since 9+9 (mod 15)=3, we place E on note 3. We may now see that the major step D-E is 3 units and therefore place the next higher major second, namely F\*, on note 6.

In Item 9, the procedures of Item 8 are taken to their logical conclusion. Since a major 2nd is 3 units, it is inescapable that G# occurs on note 9, a major 2nd above F#. The complete Item 9 proves that in 15-note equal temperament, the diatonic semitone (e.g. D-Eb) equals 0 cents. In other words, it does not exist. This item also shows that the tuning is defective—in a technical sense, of course. All the common note names are used up while some of the note positions remain blank. A cycle of perfect 5ths returns to note 0 before two-thirds of the notes have been named!

In Item 10, the basic notes D E G A C are preserved, and the notes between them use the same letters with signs to designate "up" and "down" one unit. (In place of E, F could be used, since E and F are the same.) With this set of notes, there is no indication that there are any major 3rds in the tuning, a situation which is rectified by the alterations carried out in Item 11. The interval D-F#1 is in fact the same size as the major 3rd of 12-note equal temperament, 400 cents. The interval D-F' is 320 cents, a very good minor 3rd. Thus, 15-note equal temperament has acceptable major and minor triads, if one treats the rather sharp perfect 5th (720 cents) carefully, disguising its out-of-tune character with appropriate sound

Despite the apparent oddity of the notation and the strangeness of the quasi-tonal scales and of many chord progressions in 15-note equal temperament, it is a fascinating and perfectly viable tuning. Example 5 on the tape is the 15-note etude by Easley Blackwood. The first and third sections are in the key of D' major; the middle section starts in Bb and modulates. One passage near the end of this section, beginning and ending on an F' chord (enharmonically F#\*, the mediant of D' major), descends through five major triads, the root of each being one-fifth of an octave lower than the last. The result is extremely disconcerting but dramatically effective.

The defectiveness of the initial labelling of this tuning (Item 8), mentioned above, comes about because 15 and 9 (the 9 representing the perfect 5th) are not co-prime. The disappearance of the diatonic semitone comes about because the perfect 5th is exactly 3/5 of an octave, or 720 cents. If the perfect 5th is larger than this, even stranger things happen, as the following discussion will

In 13-note equal temperament, if we take the perfect 5th to be 8 units, it becomes about 738 cents, which is above the limit for quasi-tonal tunings—this limit being 3/5 of an octave. The result is the notation in Item 12. Because the positions from 0 to 12 must represent only one octave, the inevitable conclusion is that Ab is lower

than G and Eb is lower than D.

At this point, the first four statements made at the beginning of this article have been claimed or shown to be true: points 1 to 4 apply to (respectively) 19-, 31-, 15-, and 13-note equal temperament.

But the problems of Item 12 cause us to reconsider. Instead of a perfect 5th of 8 units, we may choose to make the perfect 5th 7 units out of 13, which is about 646 cents. This is considerably below the lower limit for quasi-tonal tunings of 4/7 of an octave, or about 686 cents. By choosing this perfect 5th we create the mess found in Item 13, which reveals the unstated fifth promise which I only alluded to before: here Ab is higher than A and, incidentally, B# and F are the same note. Can anything be worse than that?

What we have created in Items 12 and 13 are a kind of Red and White Queen in Looking-Glass tunings. Lewis Carroll would surely have loved them. We could try a solution similar to that for 15-note equal temperament by amalgamating the two notations we have for 13, but I fear we would only create something much like the scene at the end of Through the Looking Glass, when the Red and White Queens get together and bring on complete chaos.

In order to set things at least partly right, we must escape these anti-tuning notations, but not by trying to shake some sense into either of them. We must merely give up on the perfect 5th and establish the major 3rd F# above D. We place D at note 0, as usual, and F# at note 4, representing a major 3rd which is flat by about 17 cents. We end up with the notation of Item 14, which looks friendly compared to the other two, even though still a little odd. We would conclude from this notation, quite rightly, that 13-note equal temperament has no perfect 5th, no perfect 4th, and no diatonic or chromatic semitone, although it does have intervals which equal two diatonic or two chromatic semitones (e.g. D to Fb and D to Eth respectively). It has a major 3rd, of course (D to F\*), and a major 2nd (D to E); the diminished 3rd (D to F<sup>b</sup>) is reasonably close to the 7/6 3rd of the harmonic series. Many of the other diminished and augmented intervals of this arrangement behave quite strangely.

For good reason, then, Easley Blackwood called this equal temperament the most alien of all. His etude in it makes frequent use of flat minor and major 3rds because they are virtually the only close-to-concordant intervals available, at least in terms of traditional tuning practices. The timbres are also subdued in order to suppress the jangle of conflicting harmonics. Nonetheless, the 13-note etude is as tonal as he could make it. It is Example 6 on the tape.

Item 15 is labelled "beyond conclusion". To some people it will seem beyond reason. Because it would take a while to explain it fully, I will point out only the basic ideas behind it. In Item 5, in the column for 13-note equal temperament, you may notice that the 11th harmonic (ratio 11/8) and the 13th harmonic (ratio 13/8) are well represented in this tuning, with errors in each case of fewer than 10 cents—which compares very favourably with the errors in 12-note equal temperament of nearly 49 and 41 cents respectively. Thus, it is possible to base the 13-note tuning on its representations of these two intervals, just as most tunings are based on their representations of the 3rd harmonic (the perfect 5th), and possibly the 5th harmonic (the major 3rd) also. To arrive at the distances in Item 16, one needs only to solve a few simultaneous linear equations. I include the size of the perfect 5th in both derivations for 13-note equal temperament because it helps explain some things even though neither derivation has a perfect 5th in it. The perfect 5th in these cases thus becomes like the sun in The Walrus and the Carpenter. The shining of the sun, you may recall, was odd "because it was/The middle of the night." Here in specific locations, the values for the perfect 5th shine just as brightly in the dark spaces between steps in the tuning.

Item 15 may now be considered to have its own problems. It contains a mixture of notations, some new ideas

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Yasser, Joseph: A Theory of Evolving Tonality. New York: American Library of Musicology, 1932. [reprinted New York: Da Capo Press, 1975.]

Also important are other publications of Diapason Press and articles in the journal Xenharmonikon (currently issued in Claremont, California), as well as unpublished articles by Siemen Terpstra (4472 James Street, Vancouver, BC, V5V 3J1).

derived from the 11th and 13th harmonics mixing with traditional notation. But since we are considering basing 13-note equal temperament on those higher harmonics and not on the 3rd or 5th harmonics, why not seek a new notation which reflects this? Curiosity beckons, to be answered by a number of possibilities. A reasonable one reflects, whether we like it or not, the following conclusions for 13-note equal temperament based on the 13th

- 1. The diatonic scale consists of 10 notes, not 7.
- 2. The pattern of whole-tones and semi-tones in a major scale is: half-half-whole-half-half-halfwhole-half-half-whole.
- 3. The key of D major has three flats: F-flat, C-flat, and
- K-flat 4. The interval F up to C is a perfect 8th (not "octave", for that is a perfect 11th), G up to E is a minor 9th,

and C up to G# a major 5th.

Whether these conclusions lead to a really different music for this tuning remains to be investigated; the three short phrases I have composed using them are but a beginning of such an investigation

Items 17, 18, and 19 contain these three phrases, which are recorded as Examples 7, 8, and 9. Items 17 to 19a present a "traditional" notation, derived from Item 14. Item 19b presents a notation based on the four points above, with a key signature of three flats for D major followed by four flats for A major-which could be notated with nine sharps for its enharmonically equivalent K\* major. (Of course!) In this notation, "octaves" are eleven lines and spaces apart rather than the usual eight,

if we count both ends of the interval. To resolve that problem (and the overahundance of ledger lines) we would need to introduce two notes per space. This would keep the "octaves" roughly the same distance on the five-line staff as they are in 12-note equal temperament. Intrigued or exacerbated readers are invited to try that notation themselves

Example 7 and Item 17 offer a 2-part harmonization of an ascending chromatic scale (all 13 notes), emphasizing some acceptable approximations to the consonances 7/6, 11/8, and 13/8, which are heard at the points indicated. Example 8 and Item 18 offer a 4-part chorale phrase which harmonizes another scale, this time a 7tone one in the symmetrical pattern whole-wholewhole-half-whole-whole. The first beat of each measure and the last beat of the phrase contain harmonies based on the 11th and 13th harmonics above D. namely G<sup>#</sup> and B<sup>b</sup> in the traditional notation (J and A in the new notation used in Item 19b).

Example 9 and Item 19 offer a simple diatonic modulation, using only a few chords in the keys of D major and Bb major (D and A in the new notation). Given the remarks above, don't expect it to sound like anything else that has ever been labelled with the same keys in 12-note equal temperament. When I use a key, it means just what I choose it to mean—neither more nor less.

The remainder of Items 3 to 5, which I have skipped over, amplify points I have already made and introduce other equal temperaments. The literature on the notation of equal temperaments is very sparse; Rudolf Rasch and Easley Blackwood are the only ones to have published

notations for many equal temperaments using the 5-line staff and as much tradition as possible. But some of their notations are problematic, e.g., Rasch's notation of 15note equal temperament and Blackwood's of 18-note equal temperament. There are other practical problems of their notations which I won't go into here, and many nontraditional ways of notating equal temperaments, only a few of which I have demonstrated.

I have also included a notation for what could be called a macrotonal tuning, namely 9-note equal temperament. It has not been illustrated by anyone else. It is a tricky tuning to notate on the basis of musical intuition, as it leads easily to solutions which are inconsistent or ridiculous. It is not useful, for example, to derive a notation in which both the diatonic and chromatic semitones are the same as the whole tone, and all the notes occur in two or three different positions in the

As for actual music in the various equal temperaments, not to mention unequal temperaments and just tunings recent developments in microchip technology should make it possible for many people to explore it. There is certainly enough potential in these areas to last many people many lifetimes, in history, theory, composition, and psychoacoustics. We might at least agree with the Cheshire Cat when he is confronted by Alice lost in the woods. In looking for directions, Alice explains she doesn't much care where she goes as long as she gets somewhere. "Oh, you're sure to do that," says the Cat, "if you only walk long enough."

item 17: Rapoport 13-note phrase in D (chromatic scale on top)



item 19a: Rapoport 13-note phrase (modulation, traditional notation)



PAUL RAPOPORT teaches in the Music Department at McMaster University in Hamilton, Ontario. Among his books are Opus Est (1978), a translation of a book by Vagn Holmboe (forthcoming), and a collaborative book about Kaikhosru Sorabji (forthcoming). For 11 years he has been a critic for the magazine Fanfare. His compositions include Inte (orchestra) and several songs, some written in microtonal tunings. Songs of Fruits and Vegetables, mentioned in this article, was published in 1988 by Diapason Press (P.O. Box 2376, 3500 GJ Utrecht, Holland) in two tunings (31-note and 12-note equal temperament). The publication includes an essay about the tunings and the songs.

The present article is an expansion of a talk given by Dr. Rapoport at the annual meeting of the Canadian University Music Society held in Windsor in June 1988.

EASLEY BLACKWOOD, born in Indianapolis in 1933, is well known as a composer, pianist, and theorist. Since 1958 he has taught in the Music Department at the University of Chicago. Among his teachers were Olivier Messiaen, Paul Hindemith, and Nadia Boulanger. His first symphony, completed when he was 22, was recorded by Charles Munch and the Boston Symphony Orchestra. His longstanding interest in microtonal tunings has resulted in many lectures, a book, and a record, with more to come. The book, The Structure of Recognizable Diatonic Tunings, was published in 1985 by

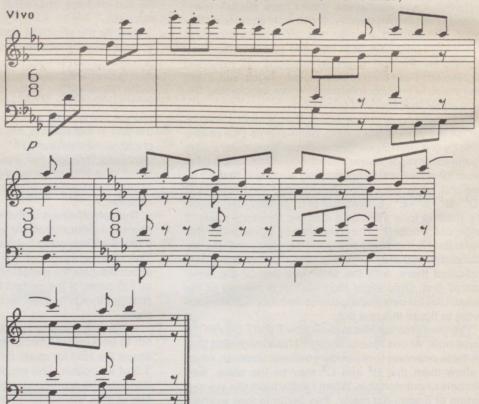
Princeton University Press. The record, containing microtonal etudes in all the tunings from 13-note to 24-note equal temperament, is available from Prof. Blackwood at 5300 South Shore Drive, Apt. 44, Chicago IL 60615 for \$9.95 (U.S.) postpaid. Three of the etudes from this record are reproduced on the MUSICWORKS cassette with kind permission of the composer. Production of the record (ten years ago) involved a complicated process of multitracking and mixing his performances on a Polyfusion synthesizer at Sound 80 The examples in 31-, 12-, and 13-note equal temperament

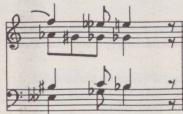
on the MUSICWORKS cassette are played by SUSAN LEE, a pianist and student in the McMaster University Music Department. The instrument she is playing is a Scalatron, a pitch-programmable electronic keyboard instrument made by Motorola of Chicago in the 1970s under the direction of Richard Harasek. This model, at McMaster University, has a generalized keyboard designed by George Secor, after a similar one by R.H.M. Bosanguet (whose design was published in 1876). It also has a transposing board designed by Erv Wilson which enables tuning to 360 keys in any pattern for music in just (pure) tunings. This Scalatron is the last and most complex model that Motorola built, having a keyboard of 56 notes per octave, with the Wilson board making available more than 20,000 notes per octave.

item 18: Rapoport 13-note phrase in D (mixed 7-note scale on bottom)



item 19b: Rapoport 13-note phrase (modulation, new notation)





On the MUSICWORKS cassette:

Example 1: Blackwood 19-note etude: coda Example 2: Blackwood 19-note etude entire

Example 3: Rapoport 31-note song: excerpt from "Artichoke", one of a series of six Songs of

Fruits and Vegetables

Example 4: Rapoport 12-note song: excerpt from "Artichoke"

Example 5: Blackwood 15-note etude entire Example 6: Blackwood 13-note etude entire

Example 7: Rapoport 13-note phrase in D (chromatic scale on top)

Example 8: Rapoport 13-note phrase in D (mixed 7note scale on bottom)

Example 9: Rapoport 13-note phrase (modulation)

Caine designed a monophonic voltage-controlled synthesizer with a touch-sensitive keyboard on which vertical pressure increased volume and lateral pressure altered pitch. In the early 1950s he built a polyphonic touch-sensitive electronic organ. Both instruments were intended to enhance the possibilities for live performance using electronic instruments. In 1955, at the National Research Council in Ottawa, Le Caine completed the prototype of

In the late 1940s Hugh Le

an instrument intended for composition rather than performance, the Special Purpose Tape

# when the sound has a form of its own

hugh le caine



portrait of hugh le caine

Reinhard Reitzenstein painted a series of watercolours entitled The Electronic Music Concert Series in response to the novel visual aspects of the performance of electroacoustic music. In the process of imaging the visuals for the series he explored and incorporated the schematics, graphics and diagrams of the circuitry of electronic music instruments. He discovered that the circuit diagrams tended to point to anthromorphic possibilities which he exploited to also comment on art

Drawn in Renaissance profile portrait style. Le Caine is presented as a mind filled with a fantasy of electronic circuits defining even the features of his head, which is surrounded by a field of floating sub-atomic particle collision diagrams. These are the realms Le Caine explored.

Recorder, informally known as the Multi-track. In November of that year he composed his landmark work Dripsody, using the sound of the fall of a single drop of water whose playback speed was altered by the new instrument. The prototype Multi-track was able to play six tapes simultaneously, changing the playback speeds using a voltage-generating keyboard, and combining the resulting sound into a single monophonic recording. By 1959, when the instrument became the central feature of the new electronic music studio at the University of Toronto, it had been expanded to play ten stereo tapes and, with a built-in mixer, to produce a stereo recording. It functioned more as a multiple tape player than as a recorder—its purpose was to provide a tool for composers interested in musique concrète.

The following is an excerpt from Le Caine's lecture notes, written in 1957 after two years of experience composing with the new instrument. In it he expresses serious reservations about the use of pre-recorded sound in composition. Despite his doubts, however, Le Caine continued to improve the instrument

he advent of modern tape-recording techniques has brought about a minor revolution in music and research comparable to the great change in method of circuit design and servicing brought about by the advent of the low-priced oscilloscope. The possibilities of the recording device as a musical instrument were first seriously developed by the French Musique Concrète Group. Their many fascinating compositions using natural sounds, processed by the recording device have aroused a great deal of interest. Earlier attempts with the disc phonograph, especially by Milhaud, had led Constance Lambert, in Music Ho! A Study of Music in Decline, to speak slightingly of the possibilities of this approach to music. In spite of the enormous improvement in recording techniques since 1934, several major objections are apparent to the use of recording techniques in what Eimert has called, "The composition of music", referring to the two distinct processes of the conception of the musical work, and the production of

When a recording process is used during the conception of the work, that is, when various complex sounds, chords, or even themes, or developments of themes, are already recorded on the material before the composition has even taken shape in the composer's mind, their very existence in concrete form tends to inhibit the thought processes of the composer. They are, in fact, too useful in suggesting developments and directions which the work might possibly take. Thus the development of the theme is handled too inflexibly or mechanically. It would seem that the ability of a composer to retain and manipulate in his mind all the musical materials with which he is working ranks second only to his inventive ability. Again, a device for variation, such as repeating the same passage at different playback speeds, is effective, but too limited to be used extensively. Musique Concrète might be called a mechanical art, like photography, suffering from the defect that too much is done for the artist. As is the case with photography, if every detail is to be arranged exactly according to the carefully thought out plan of the artist, the method loses its value—it would be easier to paint than to arrange the picture. However, when the artist has only a limited amount to say, exerting a supervisory control over a mechanical process may be the ideal outlet for him. There are probably people who can say all they have to say visually simply by hanging

The use of the recording device to put together pieces of an already written [composition] is open to somewhat the same objections, as [is] the use of the recorder in conceiving a musical composition. As is well known, a piece of music is never completely written down, and a performer at any level, if he is a human performer, is to some extent a creative artist. The use of recording devices in putting together fragments of a composition, while it banishes to a certain extent the limitations of the human performing mechanism, also prevents the performer from getting a complete grasp of the whole performance, and regulating the minute details of timing, accent, and so on. While in a sense this control may be maintained by the recording artist, he is somewhat

further away from the process than one performer or a group of performers who are actually playing the material directly. Because of the mechanical connection, the time taken to make alterations, and so on, the control over the material will never be so intimate and direct as is the case in the performance in the usual way.

Because of these fundamental objections it seems that Musique Concrète is a musical by-path, just as the literary experiments of Joyce were out of the main line of literary development. While Musique Concrète may not have a comparable effect on the development of music, no musical technician can afford to overlook any new development in recording technique. The possibility that recording techniques may be invaluable inside a more flexible system is especially important in the case of coded-music systems.

There is also a basic objection to the use of a complicated sound as musical raw material, instead of the formless and more plastic sounds, such as the sound of the violin string, which are normally used. When the sound has a form of its own, the composer is faced with the problem of fitting the form of the sound into the form of the composition. It is much easier to produce a satisfactory picture with paint, which is quite formless, than to make the picture with seashells or glass beads.

An LP recording of compositions and instrument demonstrations by **Hugh Le Caine** is available for \$10.00 plus \$2.50 postage from The Hugh Le Caine Project, 146 Ridge Road West, Grimsby, Ontario, L3M 4E7, Canada. Gayle Young has written a biography of Le Caine which will be published in the fall of 1989 by the National Museum of Science and Technology in Ottawa.

MUSICWORKS 43 13 EQUAL OPPORTUNITY

Begun in 1986 and currently near completion, Night Labyrinth is a work of MIDI chamber music for three performers and tape. The three performers play MIDI keyboard, MIDI wind controller, and MIDI percussion controller. All the sounds they trigger are produced with a Yamaha TX 816 synthesizer.

Night Labyrinth is a work of symphonic dimensions and, I hope, of substantial emotional range. It is an attempt to

> combine the intimacy of live chamber music with the variety and richness of electroacoustic sound resources.

> The work exploits MIDI technology and live performers in varying ways. The first and last movements require all

Music Instrument Digital Interface (MIDI), the protocol governing communication between one synthesizer and another, as well as between digital musical instruments and computers in general, was introduced in the early 1980s. Since then, it has greatly expanded the musical potential of electronics, since it allows musicians to combine previously incompatible technologies to create richer artistic results. Like any widely accepted standard it has had far-reaching effects, many of them unintended, surprising and profound. In particular, MIDI has led composers to new ways of thinking about how to use performers and electronics together. In this article I will discuss how MIDI technology has affected the composition of my work-in-progress Night Labyrinth.

An important reason for introducing the MIDI standard was that many early synthesizers, when taken individually, produced rather uninteresting sounds. MIDI made it possible for several synthesizers to double the same line simultaneously so as to produce a richer overall sonority. In this way the weak points of one sound

could be improved by elements in another sound. For example, an overly brilliant sound that lacked a clear fundamental might be solidified by adding a rather strong but dull sound at the appropriate pitch. Conversely, a rather colourless sound might benefit from the addition of a delicate high sheen of harmonics. The fact that the sounds could be created independently on different instruments employing different types of synthesis made it possible to use all the strengths of any given system without being limited by its weaknesses.

Although synthesis has improved enormously in the past five years, allowing more lively timbres to be created on one machine alone, doubling remains one of the most musically interesting things that MIDI can do. In Night Labyrinth, most of the musical lines are

main reasons for having live performers at all: the work changes at each performance, having slightly different inflections according to the performers' moods. Even within one performance no two notes are exactly alike; there are constant inconsistencies on a microscopic level. Such inconsistency, musically guided, gives the music its phrasing, and its live feeling.

The issue of control of sound is complicated in a MIDI setup by the fact that the performer no longer only produces one type of sound, on his own instrument. (Indeed, the controlling instrument may be entirely mute.) In conventional instrumental music, performers produce sound on their instruments in several ways: they strike, stroke, press, or blow. The nature of the sound is, to a large extent, a direct result of the way it is produced. For example, a sound that is produced by striking has a strong attack and fades away; the only thing the performer can do after the initial attack is to

damp the sound. Each performer trains for years in order subtly control the parameters that are relevant to his instrument

With MIDI the performer is no longer tied to only one type of sound. This has two immediate results: the sounds he makes are much more varied than in acoustic instrumental music, and he can share his sounds with another performer. While composing Night Labyrinth, I needed to decided which sounds to assign to which performers. Although I had built up a mass of sketches for sounds in the same way I would accumulate melodic and rhythmic fragments for an instrumental piece, I needed some musical criteria to decide who would play

In a chamber music setting involving several performers, the problem was more profound: how to give each performer a distinct identity.2 Chamber music is doubled, often with highly contrasting sounds. For conversational in nature. The participants can agree or

group it easily turns to chaos. Since there exist only a few distinct approaches to sound production, differentiation is a problem in larger chamber ensembles or in the orchestra, where several performers may play the same instrument or similar instruments, and where the large number of people on stage makes it difficult to assign each person a very distinct location in space.

This issue of musical identification—indeed, of musical personality—takes us to the heart of MIDI and its implications. I think that it is much more important than the rather superficial question of whether or not one makes use of conventional instrumental sounds. What is the use of a large ensemble if new players add no new sounds or styles of playing? What becomes of the distinction between orchestral and chamber music if the chief characteristic of chamber music-intimate con-

versation among recognizable individuals—is lost?

The composer's musical interest in writing for orchestra has always been the orchestra's density and variety of sound. For the listener, in addition to musical richness, the orchestra is also psychologically appealing: he sees a large crowd making music in a coordinated way. This reassures him that civilisation is possible, that many people can work together and cooperate to produce a beautiful result (though the orchestra is one of the least democratic of social organizations)

From a purely musical point of view MIDI now allows a few people to achieve a level of richness that in the past required an orchestra: one of the pleasures of composing Night Labyrinth has been that I have never felt limited in terms of the colors available to me. After seeing what can be done with three people, it is difficult to imagine what musical use there would be in assembling a large group all playing MIDI synthesizers on the same stage. They would probably simply cancel each other out in the general amplified din. Certainly, most could never emerge as individuals. If simple massiveness of sound is required, digital processing can provide it, relatively inexpensively.

This leads me to the conclusion that live MIDI performance is, in essence, an art of chamber music. The MIDI orchestra should be a small group, whose members interact in the way that chamber musicians do: they converse with each other, listen to each other, and each contributes substantially to the overall discourse, while always maintaining his individuality.

In Night Labyrinth, the only movements where a more anonymous, "orchestral" attitude emerges are those on tape. In these movements I recorded individual parts with a MIDI sequencer, which then played them back simultaneously. The main difference to the ear between the tape movements and the live trio movements is that in the former, harmonic and contrapuntal dispositions are not limited to three layers, and thus the textures are often more dense.

Of course, even here, the number of really different things that can occur simultaneously is still limited—in this case by human perception. Most people agree that anything beyond three or four layers of musical activity at the same time quickly becomes incomprehensible. However, within musical layers, the MIDI sequencer permits great richness, since it imposes no significant limitations on rhythmic complexity or on speed.

One technique which I used several times in the tape movements of Night Labyrinth to achieve richness of texture was heterophony. Following a common harmonic plan, I would separately record several polyrhythmic layers. By strategically placing rests in the individual parts (so that the points of coincidence of the polyrhythms were eliminated and so that there would be an element of unpredictability in each line) it was possible to create fluid and complex textures that could either serve as momentary impressionistic clouds, or as accompaniments to more defined lines in the foreground. A long example of this occurs in the last tape

In executing such rhythmically intricate heterophony the computer is more efficient than live performers. Playing similar lines containing minute, irregular, and

unpredictable differences, without strong accents as points of reference, is very confusing to performers. It can require a good deal of rehearsal if it is to be done well. With a pre-programmed sequencer, unpredictability and complexity pose no problems.

The issue of unpredictability brings me to an important problem which I often worked hard to overcome in the tape movements of Night Labyrinth: how to avoid a mechanical rhythmic feeling when using the MIDI sequencer as a performer. In heterophonic situations, the sheer complexity of the total mass of sound prevents the rhythm from sounding mechanical, even though the computer, of course, is playing very rigidly. However, when a single line is played alone by the computer, it can seem stiff and inhuman. Although it is possible to edit a "human feel" into the material, this is very timeconsuming and not as easy as it seems: real phrasing is not made up only of random inequalities, but also of directed inequalities that follow the shape of the musical line. Finding the right proportion between these two types of unpredictability can be a very tedious job.

My first solution to this problem was to play live any soloistic lines I had written, recording them directly into the computer so as to give them rhythmic warmth and fluidity. This technique quickly led me to experimentation with more elaborate controlled improvisation.

For the musician who can play an instrument fluently,

improvisation is a very efficient way of getting in touch with the rich musical subconscious. Before MIDI sequencers, however, using an improvisation in any but its unaltered, original form was almost impossible. Attempting to write down an improvisation is cumbersome and tends to impede the flow of musical thought, while simply recording it as is gives results that are at best uneven. By using sequencing software, I was able to record long improvisations and later edit them as

In parts of the tape movements, I could decide what sort of musical event I needed, and then record a long improvised line that met my requirements. I could then add as many further layers to the texture as were needed

to achieve the richness I wanted. Once this sketch was put together, I could edit it in detail. This process proved very efficient—in one (admittedly unusual) instance I was able to compose fifteen minutes of music in three days, a record for me-and it had the additional advantage of producing results that sounded both spontaneous and controlled, a combination I value very much.5

The MIDI standard in practical terms is merely an agreement about the kind of plug and the data format to be used when connecting one machine to another. It is obvious, however, that it has had tremendous influence on both the composing and the performing of music. The musical consequences of MIDI demand a good deal of thought if works using this technology are to realize its potential, and if they are to be more than artistically primitive. MIDI involves much more than just a wider range of sound: it requires new attitudes to composition and to the social aspect of making music in groups. Now that the composer alone with his computer can produce richness that would previously have required a whole orchestra, and now that there is no longer any intrinsic reason to think of a wind player, for example, simply as a convenient producer of wind sound, we must ask ourselves what people are really good for in making music. Perhaps the answer lies in our profound identification with musicians in an ensemble. If this is so, we must look to the possibilities of MIDI to find new ways to enrich the human interactions between the members of a musical group. Their differences are now less rigid and no longer pre-ordained; they can even speak with common or closely related voices from time to time while still maintaining their individuality. The fine, delicate equilibrium between the interests of self and group that is so much in evidence in good chamber music, the simultaneous blending with others while maintaining separateness that is intrinsic to chamber music, can then contribute to the human appeal of MIDI.

### **Footnotes**

- 1. This is an extension of a technique used by organists, who compose timbres by combining sounds at different pitches, which are then all played simultaneously from the same keyboard. Even on the organ, with just a few basic types of sound (flutes, principals, and reeds), this technique permits enormous variety and novelty of timbre construction since the "harmonics" thus added can be controlled precisely, and, on a good-sized instrument, even have a variety of timbres of their own. Classical organ registration recognizes a certain number of standard, acoustically "normal" combinations. However, registration is always a function of the type of music being played. If one looks at the organ as simply a rich sound source and if one is willing to explore the kind of harmony and texture appropriate to a given registration, the number of possible combinations becomes enormous.
- 2. In music without distinct timbres (music based entirely on continuous timbre changes) this problem is even more acute. It seems to me that without some way to define at least some of the participants as distinct individuals, there is no point in having a group of people on stage. In Night Labyrinth continuous timbre changes occur mostly in the tape movements.
  - 3. These characteristics are even built into the nature of MIDI itself, for MIDI is a gestural code. What is transmitted from one machine to another in MIDI is not the sound itself, but information about how it is produced: what note is played, when the note starts, how hard it is hit, how long it lasts, whether any pressure or other form of control is applied to its evolution. This information in turn affects whatever sound is loaded into the receiving synthesizer. Obviously the type of data that is sent is limited by the type of controller being played.
  - 4. While a sustaining pedal is available, it is unselective, and in any case it only affects the note-off, leaving all other aspects of the sound's evolution untouched. Other possible controllers that the percussionist could use to affect the course of a sound while playing have not yet been implemented in any standard, efficient way.
  - 5. In general, I was struck by the difference in speed of composition between the live and the tape movements. The former always took much more time. They could not be improvised to anywhere near the same degree, since they had to be playable and idiomatic for the performer on another instrument. They also had to be written down. Recent advances in software should make this problem

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# alan belkin midi chamber music

three performers, and are completely live. The second, fourth, and sixth movement are interludes for tape alone. The third movement is a solo for the wind player, and the fifth is a solo for the percussionist. Thus, in the outer movements all three performers play, while the inner movements alternate between solos for one of the performers and pre-recorded tape interludes. I see these interludes as somewhat unearthly and ethereal music, seeming to come from no definite source, in contrast to the other movements, where the sound is obviously produced by the performers. The spatial distribution of the loudspeakers in public performance enhances this contrast: the sounds produced by the trio are localized on stage, while those in the tape movements come from all around the room.

> The technology used in Night Labyrinth has enabled me to explore in an economic way a very varied range of expressive colours arrayed in large and complex forms. At the same time, I have been examining the human implications of a performance situation which involves MIDI and computer synthesis in general.

example, in the first movement, a low timpani-like sound is doubled by bells two octaves and a fifth higher in a fast rhythmic passage.1 At times I use such doubling to create a rich, complex, attack; at times I use it to enhance a sound's evolution over its whole duration.

These doublings make it possible to use conventional instrumental sounds in a new way, by mixing them into composite synthetic colors. For the listener, the effect is at once novel and familiar: he recognizes the component sounds, but on reflection realizes that their precise combination would be impossible in purely instrumental

I am interested in this problem of finding new contexts for instrumental sounds for several reasons. First, instrumental sounds are usually very rich. They are highly complex (as anyone who has seriously tried to synthesize them finds out very quickly): they often have attacks with substantial noise elements, and they generally evolve in interesting, non-mechanical ways.

A second reason for using these sounds is the sense of familiarity they evoke: it is easier for the listener to discern musical landmarks when he recognizes at least some of the terrain. The composer can use this familiarity to make the form of his piece more easy to grasp, particularly in a large work with a very personal harmonic language, or where the form does not include much repetition. The trumpet and string sounds that emerge from time to time in Night Labyrinth are cases in point. While these sounds go through evolutions and are used in contexts that would not be possible with acoustic instruments, the listener easily recognizes them and therefore can make some important connections across movements of the work. For example, a large melodic trumpet-like solo in the first movement is echoed by a similar one in the last movement. The music is not identical, but the sounds and general style of the two passages are closely related. When the same trumpet sound recurs in the penultimate (tape) movement, even though the music is quite different, it emerges as a familiar

Of course not all the sounds in Night Labyrinth are

familiar. Some are unusual variations on familiar sounds: sustained drums, violin attack combined with oboe sustain. Others have no similarity at all to any conventional instrument. At times, combining instrumental timbres with new, invented sounds creates intriguing results: the listener has a sense of hearing something he knows, but is unable to place it exactly, due to the mystery ingredient.

The sense of mystery—both in individual sound and in formal construction—is a major artistic preoccupation of mine. Another preoccupation is richness. These two preoccupations often guided my choice of sounds and combinations. As I have suggested, to me a good sound is one with a complex attack, and a continuous, intriguing evolution. In Night Labyrinth I avoid static, organlike sounds in favour either of complex sounds which attack strongly and then fade away (i.e., those with belllike envelopes), or in favour of sounds whose progress can be modified over time by the performer in the Way that, say, a violin note changes subtly in pitch and intensity in response to small movements of the violinist's hands. Such minute changes impart a lively quality to the musical line. In fact, this variety provides one of the

disagree; be sympathetic or combative towards each other; they can join together in saying the same thing, or go their own separate ways. However, for any of these forms of interaction to be coherent, the individuals must be recognizable. Further, they have to be recognizable even without being seen: radio and recorded performance are essential means of diffusion for electroacoustic music. While in instrumental writing the repertoire of sound that can be produced by one instrument is limited enough to define a "voice" for each performer, with the interchangeability of sounds that results from MIDI, some other way has to be found to achieve this definition. In fact, only with clear differentiation between individuals can the sharing of sounds between performers that MIDI permits become dramatically meaningful—as a sort of musical form of sympathy rather than just confusing to the listener.

To some extent the solution to these problems grows out of the type of controller the performer is using.3 Keyboards, for example, are conducive to polyphony, and require harmonic dispositions that fit under the hands. Percussion controllers are best suited to sounds without sustained portions, since there is no control possible over the evolution of a sound after its attack.4 On the other hand, wind controllers are well suited to playing sustained lines since they follow the natural continuity of breathing, and allow the performer a lot of control over the sound's progress.

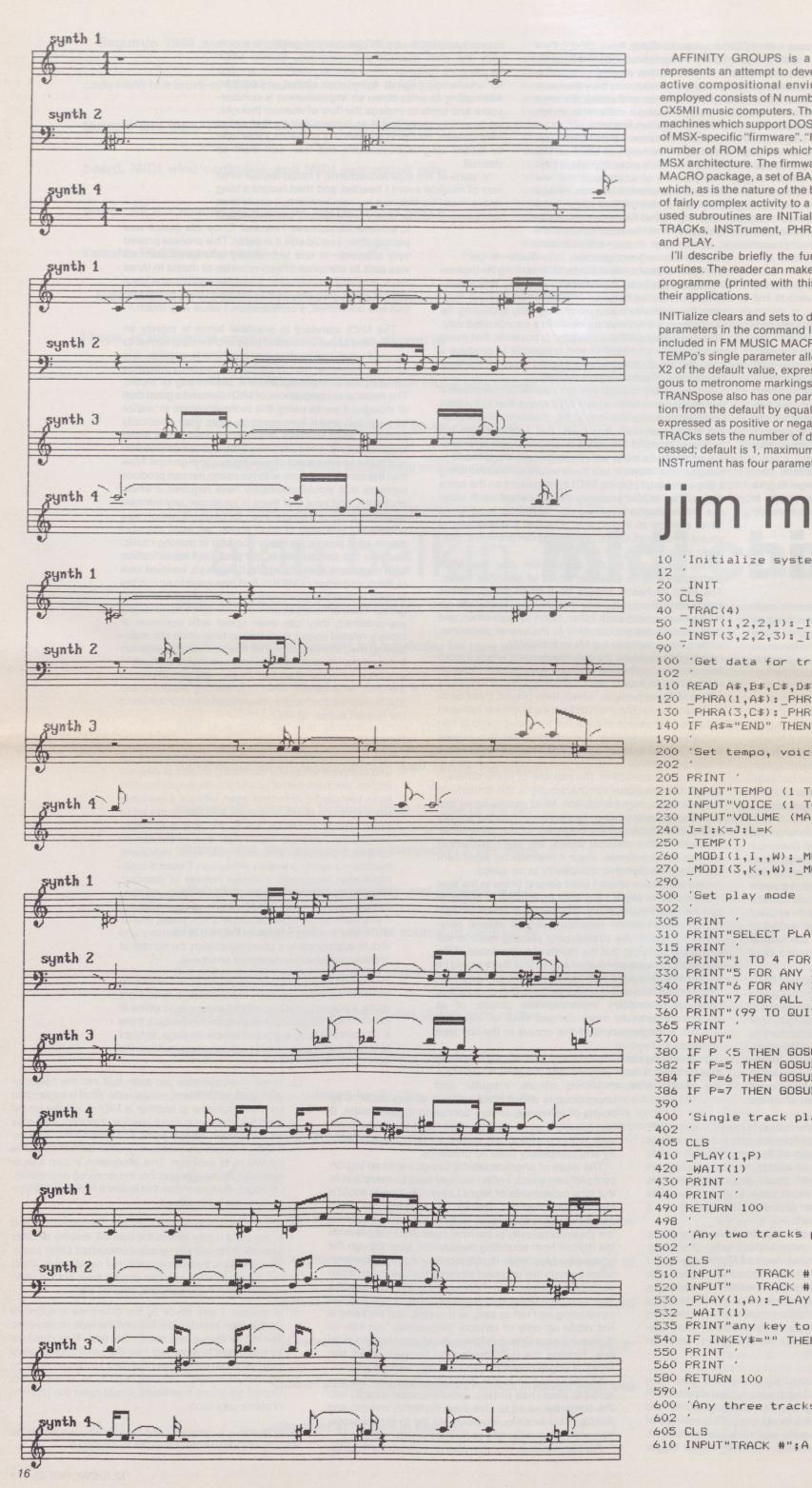
These differences between the different types of MIDI controllers suggest that a performer can be characterised by an approach to sound production—a repertoire of gestures—instead of just by specific sonorities. This also has the advantage of only asking the performers to do what they are best trained for. While it is quite possible, for example, for a keyboardist to operate a breath controller while playing, most keyboardists are not at ease "breathing" sound. (I am told that Yamaha found that the breath controller was the least used of all the s to the DX-7 synthesizer.)

When gestural characterisation is joined to a consistent position in space, performers can maintain strong distinct personalities, even while going through a wide range of sounds. Also, of course, certain sounds can recur for each performer, thus further solidifying his identity. All these techniques serve to limit the sounds that any given performer produces, thus giving him a distinctive mode or "style"

Even within the limits of his style, of course, any one performer still can play an enormous array of sounds. When writing the solo movements of Night Labyrinth, I attempted to exploit this possibility so as to give each performer multiple musical personalities. In itself, this idea is not new. However, because of the flexibility of sound made possible by MIDI, simple contrasts between registers or between one section and another more easily take on the character of dialogues, internal

In Night Labyrinth, then, the performers play from fixed points in space, and each has a limited repertoire of gestures for producing sound. These gestures are common to all the sounds in his bank. This method of characterisation works guite well for a few performers playing different instruments. However with a bigger

EQUAL OPPORTUNITY MUSICWORKS 43 15



AFFINITY GROUPS is a computer program that represents an attempt to develop a cost-effective interactive compositional environment. The hardware employed consists of N number (at least three) Yamaha CX5MII music computers. These are small, inexpensive machines which support DOS, MSX BASIC and a variety of MSX-specific "firmware". "Firmware", in this case, is a number of ROM chips which can be plugged into the MSX architecture. The firmware used is the FM MUSIC MACRO package, a set of BASIC subroutines (macros) which, as is the nature of the beast, reduce the invoking of fairly complex activity to a few keystrokes. The most used subroutines are INITialize, TEMPo, TRANspose, TRACKs, INSTrument, PHRAse, MODIfy instrument,

I'll describe briefly the functions of the main subroutines. The reader can make reference to the complete programme (printed with this article) for examples of

INITialize clears and sets to default values all the parameters in the command lines of all subroutines included in FM MUSIC MACRO.

TEMPo's single parameter allows a variation from .5 to X2 of the default value, expressed in numbers analogous to metronome markings

TRANSpose also has one parameter, allowing variation from the default by equal-tempered 1/2 steps, expressed as positive or negative whole numbers. TRACks sets the number of data strings to be processed; default is 1, maximum is 8. INSTrument has four parameters: track number,

The performance of AFFINITY GROUPS presents some interesting situations. The score (dataset),

number of voices, MIDI on or off and MIDI channel number. The program supports a maximum of 4 instruments and 8 voices.

PHRAse has two parameters, an instrument allocation

MODIfy instrument's four parameters are instrument number, timbre (selected from a list of 96), transposition and volume.

PLAY is the command that assigns tracks to instruments and executes the standard BASIC PLAY; the first parameter is instrument number, the second is track number.

AFFINITY GROUPS is a BASIC program which employs FM MUSIC macros. It is menu driven, allowing the performers a set of choices at twelve points during the compilation of the dataset. The dataset, or score, is 29 bars long (in 4/4) and in four parts. The parts are monophonic and the texture is contrapuntal. Very few simultaneities occur among the parts. The score appears in the dataset as 52 separate character strings which the PHRAse subroutine reads, concatenating one string to each part for each recursion. The performers cannot alter the dataset, but they can radically alter its manner of presentation. Actually, although AFFINITY GROUPS includes a specific dataset, the program will execute any recursive, concatenating structure. It would do a great job of Rzewski's Les Moutons de Panurge, for instance.

although fixed and complete from the outset, is never presented to the performers in any graphic form. They "discover" the score in performance, simply by listening to the results of their choices. They are also free to discover as much or as little of it as they wish with each recursion. It requires 12 concatenations of each of the four data strings to complete the set, and at that point another level of choice is introduced. One can continue to develop the now completely discovered set, or "escape" to unknown territory; however, once you've escaped, there's only one return possible to the main program. An attempt to escape a second time causes the program to quit. The performers can quit the program at any point after the full score has been assembled.

I began work on AFFINITY GROUPS with a number of objectives in mind; some of these have been met, others haven't. The work was written for the Canadian Electronic Ensemble and in some ways looks back to the halcyon days of analog knob-twisting, to an aesthetic based in what might be called virtuosic reaction, when the excitement inherent in assimilating and rationalizing the unpredictable and unexpected was the engine that drove the creative consciousness. It also looks forward, if somewhat gropingly, to that ideal for which microcomputers were developed in the first place—to put a very powerful tool for experiment, invention and creativity into the hands of as many people as possible, an ideal that, perversely, most commercial applications of technology to music steadfastly ignore.

I should also point out what AFFINITY GROUPS isn't. It is in no way intended to represent innovative programming; in fact the program itself is considerably less sophisticated than your average list manager. The code does, I would humbly submit, have a certain elegance and careful attention to good style; about what should be expected from a second semester computer science major. If the piece succeeds, it succeeds as music, not as a breakthrough in programming. As someone who has taught computer applications in music for several years, though, I do think that the FM MUSIC MACRO environment is one of the most hospitable in which a musician can learn the basics of (and BASIC) programming. Problems of structure, top-down and bottom-up design, handling variables and truth-testing are all confronted in an (almost) instant feedback learning situation which is much more satisfying, and efficient, than the one slogged through. Keeping alive the notion that serious experimental work is possible outside megainstallations and million-dollar budgets is important, if just to keep the vast majority of creative people who do not have access to these facilities from turning their backs on technology.

Jim Montgomery has been involved with electroacoustic music since 1970 when he came to the University of Toronto as a graduate student in composition, where he studied with Gustav Ciamaga and John Weinzweig, and composed in the studio using instruments designed by Hugh Le Caine. He is a founding member and continues to be active with the Canadian Electronic Ensemble, the world's longest-lived electroacoustic group. He is a past president of the Canadian League of Composers, is a lecturer in the Faculty of Education of the University of Toronto (electronic media) and is Artistic Director of the Music Gallery in Toronto.

4010 PRINT"Trill(T), sustain(S) or"

4020 PRINT"return(R) to previous menu"

4005 CLS

# jim montgo mery affinity groups

620 INPUT"TRACK #";B

```
10 'Initialize system
12
20 INIT
30 CLS
40 TRAC (4)
    _INST(1,2,2,1):_INST(2,2,2,2)
50
    _INST(3,2,2,3):_INST(4,2,2,4)
100 'Get data for tracks
102
110 READ A$, B$, C$, D$
120 _PHRA(1,A$):_PHRA(2,B$)
130 _PHRA(3,C$):_PHRA(4,D$)
140 IF A$="END" THEN GOTO 1000
190
200 'Set tempo, voice and volume
202
205 PRINT
210 INPUT"TEMPD (1 TO 200)";T
220 INFUT"VOICE (1 TO 46) "; I
230 INPUT"VOLUME (MAX 100)"; W
240 J=I:K=J:L=K
250 TEMP(T)
    _MODI(1,I,,W):_MODI(2,J,,W)
270 _MODI(3,K,,W):_MODI(4,L,,W)
290
300 'Set play mode
302
305 PRINT
310 PRINT"SELECT PLAY MODE"
320 PRINT"1 TO 4 FOR SINGLE TRACK"
330 PRINT"5 FOR ANY 2 TRACKS"
340 PRINT"6 FOR ANY 3 TRACKS"
350 PRINT"7 FOR ALL 4 TRACKS"
360 PRINT"(99 TO QUIT)"
365 PRINT
370 INPUT"
380 IF P <5 THEN GOSUB 400 ELSE 382
382 IF P=5 THEN GOSUB 500 ELSE 384
384 IF P=6 THEN GOSUB 600 ELSE 386
386 IF P=7 THEN GOSUB 700 ELSE END
400 'Single track play
402
405 CLS
410 _PLAY(1,P)
420 WAIT(1)
430 PRINT
440 PRINT
490 RETURN 100
498
500 'Any two tracks play
502
505 CLS
510 INPUT" TRACK #":A
520 INPUT" TRACK #":B
530 _PLAY(1,A):_PLAY(2,B)
532 WAIT(1)
535 PRINT"any key to continue"
540 IF INKEY = "" THEN 540
550 PRINT
560 PRINT
580 RETURN 100
590
600 'Any three tracks play
602
605 CLS
```

```
630 INPUT"TRACK #";C
640 _PLAY(1,A): _PLAY(2,B): _PLAY(3,C)
642 WAIT(1)
645 PRINT" (any key to continue) "
650 IF INKEY = " THEN 650
660 PRINT
670 PRINT
690 RETURN 100
698
700 'Play all tracks
702
705 CLS
710 PLAY(1,1): PLAY(2,2)
720 _PLAY(3,3): _PLAY(4,4)
730 _WAIT(1)
740 PRINT "any key to continue"
745 IF INKEY*= "" THEN 745
750 PRINT
770 RETURN 100
790
900 'Flag for second escape
902
910 X=X+1
999
1000 'Set global parameters
1002
1010 INPUT"TRANS (-12 TO 12)";U
1020 _TRAN(U)
1025 PRINT
1030 INPUT"TEMPO (1-200)";T
1040 · TEMP(T)
1045 PRINT
1050 INPUT"VOLUME (MAX 100)";W
1060 CLS
1099
1100 'Revoice and choose path
1102
1110 INPUT"WHICH VOICE# FOR INST 1
     (99 TO QUIT)"; I
1120 IF I=99 THEN END
1125 PRINT
1130 INPUT"WHICH FOR INST 2";J
1135 PRINT
1140 INPUT"WHICH FOR INST 3";K
1145 PRINT
1150 INPUT"WHICH FOR INST 4";L
1155 PRINT
1160 IF X>=1 THEN 4000
1170 INPUT"Escape (Y or N)"; Q#
1180 IF Q$="Y" THEN 3000
1185 CLS
1200 PRINT "SELECT PLAY MODE"
1205 PRINT
1210 PRINT "1 TO 4 FOR SINGLE TRACK"
1220 PRINT "5 FOR ANY TWO TRACKS"
1230 PRINT "6 FOR ANY THREE TRACKS"
1240 PRINT "7 FOR ALL FOUR TRACKS"
1250 PRINT "(99 TO QUIT)"
1255 PRINT
                               MODE"; P
1260 INPUT"
1270 IF P <5 THEN GOSUB 1300 ELSE 1272
1272 IF P=5 THEN GOSUB 1400 ELSE 1274
1274 IF P=6 THEN GOSUB 1500 ELSE 1276
1276 IF P=7 THEN GOSUB 1600 ELSE END
1290
1300 'Full single track play
1302
```

```
1320 _MODI(1,I,,W)
1330 _PLAY(1,P)
1340 WAIT(1)
1350 PRINT" (RETURN saves last choice)"
1355 PRINT
1360 RETURN 1000
1390
1400 'Any two full tracks play
1402
1404 INPUT"TRACK #"; A
1406 INPUT"TRACK #";B
1408 CLS
1410 _STAN
1420 _MODI(1,I,,W): _MODI(2,J,,W)
1430 _PLAY(1,A):_PLAY(2,B)
1440 _STAR
1450 WAIT(1)
1460 PRINT" (RETURN saves last choice)"
1465 PRINT
1470 RETURN 1000
1490
1500 'Any three full tracks play
1502
1504 INPUT"TRACK #"; A
1505 INPUT"TRACK #";B
1506 INPUT"TRACK #";C
1508 CLS
1510 _STAN
1520 _MODI(1,I,,W):_MODI(2,J,,W)
1525 MODI (3,K,,W)
     _PLAY(1,A): PLAY(2,B): PLAY(3,C)
1540 STAR
1550 _WAIT(1)
1560 PRINT" (RETURN saves last choice)"
1565 PRINT
1570 RETURN 1000
1590
1600 'Full four track play
1602
1605 CLS
1610 STAN
1620 _MODI(1,I,,W):_MODI(2,J,,W)
1625 _MODI(3,K,,W):_MODI(4,L,,W)
1630 _PLAY(1,1):_PLAY(2,2)
1635 _PLAY(3,3): _PLAY(4,4)
1640 STAR
1650 WAIT(1)
1660 PRINT" (RETURN saves last choice) "
1665 PRINT
1670 RETURN 1000
1699
3000 'Clear tracks for escape
3002
3010 _ERAS(1): _ERAS(2)
3015 ERAS(3): ERAS(4)
3020 CLS
3030 _TRAC(8)
3099
3100 'Get data for trill tracks
3102
3110 READ E$,F$,G$,H$
3115 IF E≢="END" THEN GOSUB 6000
3120 _PHRA(1,E$):_PHRA(2,F$)
3130 PHRA(3,G$): PHRA(4,H$)
3150 GOTO 3110
3999
4000 'Choose trill or sustain
```

4002

```
4030 INPUT" (99 to escape) "; Q$
4040 IF Q$="T" THEN 4100
4050 IF Q$="S" THEN 6100
4060 IF Q$="R" THEN 900
4070 IF Q$="99" THEN 10 ELSE 4005
4090
4100 'Select seq or ensemble
4102
4105 PRINT
4110 PRINT"Trill side: sequential or"
4120 INPUT"ensemble tracks"; 0$
4130 _MODI(1,I,,W):_MODI(2,J,,W)
4140 MODI(3,K,,W): MODI(4,L,,W)
4150 IF O$="S" THEN 4200 ELSE 4400
4199
4200 'Sequential play
4202
4230 PLAY(1,1): WAIT(1)
4240 _PLAY(2,2):_WAIT(2)
4250 PLAY (3,3): WAIT (3)
4260 _PLAY(4,4):_WAIT(4)
4270 GOTO 4005
4399
4400 'Ensemble play
4402
4430 STAN
4440 _PLAY(1,1): _FLAY(2,2)
4450 _PLAY(3,3):_PLAY(4,4)
4460 STAR
4470 WAIT(1)
4480 GOTO 4005
4999
6000 'Get data for sustain tracks
6002
6010 READ M$, N$, O$, P$
6015 IF M$="END"THEN RETURN 4000
6020 _PHRA(5,M$):_PHRA(6,N$)
6030 PHRA(7,0$): PHRA(8,P$)
6050 GDTD 6010
6100 'Select seq or ensemble
6102
6105 PRINT
6110 PRINT"Sus side: sequential or"
6120 INPUT"ensemble tracks"; O$
6130 _MODI(1,I,,W):_MODI(2,J,,W)
6140 _MODI(3,K,,W):_MODI(4,L,,W)
6150 IF O$="S" THEN 6200 ELSE 6400
6199
6200 'Sequential play
6202
6230 PLAY(1,5): WAIT(1)
6240 _PLAY(2,6):_WAIT(2)
6250 PLAY(3,7): WAIT(3)
6260 FLAY (4,8): WAIT (4)
6270 GOTO 4005
6399
6400 'Ensemble play
6402
6430 _STAN
6440 _PLAY(1,5): PLAY(2,6)
6450 _PLAY(3,7): _PLAY(4,8)
6460 STAR
6470 _WAIT(1)
6480 GDTD 4005
6999
```

OPPORTUNITY

EQUAL

# stu shepherd MICE reflections on the political economy of concert music in north america experience and observation of the author. It concerns concert music, its venues, its audiences, and its creators. It is written from the viewpoint of a composer of notated

We have not developed an audience of younger people for music of the past, let alone music of the present. Music education has so deteriorated that we're not creating a knowing audience. We have only a tiny number of people who really care in any serious way. It's ridiculous not to face the fact that contemporary music, or serious music in general, plays very little role in our society.

The truth of the matter is nobody really gives a damn.

- Milton Babbitt1

concert music. This bias is not intended to denigrate the crea-

tive contribution of other individuals within the productive sys-

tem for concert music whose experience is not directly

reflected in the statements which follow. Nor is it intended to

denigrate the achievements of composers of music, in concert

music and elsewhere, who do not make use of notation in their

The geographical designation, North America, has been

used to refer collectively to Canada and the United States of

America. This liberty was taken for the sake of terminological

economy, but with great reluctance in view of the rich musical culture of the Republic of Mexico.

INTRODUCTION:

**TOWARDS SEEING THINGS** 

AS THEY REALLY ARE

This article concerns the relationship which exists

between composers of concert music and the general

population in the United States and Canada. In writing

this article my objective is to give voice to my personal

disquiet with paradoxical inconsistencies which I have

identified between my role as an artist and the social and

political ideology of our continent with which I am large-

In both countries the prevailing ideology is demo-

cratic. To be sure, in all aspects of our political and

economic lives we are so far from achieving an ideal

form of democracy that the actuality is a caricature of

the intention. Likewise, it is possible, even in a perfectly

developed state, that democracy can take on the charac-

ter of a tyranny of the majority from time to time. It is for

this reason that a fundamentally democratic point of

view can embrace the notion of counterbalancing

antidemocratic checks, taken in support of individual

liberty, as they have evolved in the political institutions

of the United States, and more recently, of Canada.

Similarly, we must recognize that democracy, in a rela-

tively pure and unchecked form, because it undermines

the privileged position of elites upon which economic

support of the arts has historically depended, is in a

material sense hostile to the creation of works of art.

Even so, because a democratic organization of society

and its institutions offers the greatest hope for the main-

tenance of fair and equitable relationships between

human beings, and therefore for the encourage

ment of individuals in their several creative vocations, it

is exceptionally conducive to an artistic mode of being.

Over the long term the inherent human propensity for

creative self-realization is most closely actualized in all

areas of social life, cultural and otherwise, for all individ-

uals, when the will of the people is expressed collectively

through democratic rituals and relationships where

In the nineteenth and twentieth centuries artists in all

disciplines have taken on a function of social criticism in

their work the importance of which has become increas-

ingly prominent among their various creative objectives.

Although music has lagged behind its sister-arts in this

respect, it nonetheless has followed along consistently

at a step behind them. To be sure, the critical function

was already present in the music of pre-Napoleonic

Europe; generally, however, in this historical context a

much more significant role for the composer of music,

as a vocational propagandist for hire, was the ideologi

cal support of entrenched elites. With the erosion of the

moral and political authority of various social entities

connected with royal Europe (church, monarchy, nobil-

ity, landed gentry, warrior caste, etc.), over time and

through the migration of Caucasian peoples to other

every person's opinion carries equal weight.

ly in agreement.

We say "C'mon guys; let's write something we can rehearse in four rehearsals, something that other professional, community or university orchestras could have a chance at." How many times do we hear that musicians would like to perform Canadian music, but it's too hard? We believe composers can be just as creative with real time signatures.

[Following a "terrible backlash" against performances of contemporary Canadian music that resulted in the cancellation of several hundred Hamilton Philharmonic Orchestra concert subscriptions:

These people told me, "Frankly, we think you're leading us down the garden path."

- Boris Brott3

1. Milton Babbitt, "Nobody Profits", News of Music, Fall, 1987/Spring, 1988, 1-2.

2. S. James Wegg in Jeff Bateman, "The 1986 PROCAN Orchestra Awards", The Music Scene, July/August, 1986, 9.

3. Boris Brott in Bateman, 8.

the composer's position as social spokesperson has become increasingly autonomous, and his/her critical function increasingly predominant over the propagandistic. The decline in the position of the established authorities has through a circular and re-inforcing relationship accompanied increased social and political democratization in both Europe and America. As the traditional propagandistic value of music to entrenched social groups became increasingly clear to opposing democratic forces on the wax, the emerging interests saw the need to put the composer at an ever greater distance from corrupting political allegiances and the material and commercial interests associated with them. The composer thus took up an increasingly ambiguous position whereby he/she was to act on behalf of society as an independent and critical advocate of democracy

continents, within the vacuum of such superior authority

vate, unchecked by experience in the broader society illusions about themselves, their motivations, and their social and economic position. In contrast to the experience of the great majority of the population, the life of the American artist is one of great material hardship; this is especially true for musicians. Nonetheless, by institutionalizing subsidy (in whatever meagre amounts) of a category of citizens who are not accountable for the subvention, a wedge has been driven between them and the remainder of the mainstream population.

The result is, for our concert music composers, the worst of both worlds. On the one hand, by creating a special and exceptional kind of support system for those who choose to define the vocation of composer as a calling (in addition to a career), our society has detached them from effective interaction with the mainstream and isolated them in a special and privileged "underground"



yet oppose the establishment of thorough-going democracy through the continuance of his/her position in a privileged vocation supported by the population yet outside of the political economy and not accountable to it.

However, especially in North America, the willingness of the nation to support the composer in this detached position (as the democratic alternative to the manipulative control of the composer by exploitative elites) has proved to be more theoretical than practical. Public support of music under emergent American democracy, both republican and loyalist, has been niggardly, stinting, and, as a collective social responsibility, late in coming. Further, in the imperfect, if gradually improving, condition of the actuality of democracy, many segments of North American society have shared less in national prosperity and liberty than others. While the arts have flourished in North America as the desire for selfexpression of its peoples has profited from the generally favorable material conditions of the continent (i.e., to individuals as individuals within the marketplace), nonetheless, the greatest contribution to indigenous musical culture has come from the least advantaged segments. These segments have in fact exerted the least control over the publicly accumulated surplus wealth available for musical culture. Thus the greater part of musical development in North America has occurred outside of any considered plan sponsored by the national political and economic leadership. Rather it has developed from the ground up, largely in ignorance of the heritage of the musical culture of royal Europe. Unfortunately, in the absence of the aesthetic bulwark of a continuous, selfconscious, resonant tradition sanctioned by the national leadership, it has proved susceptible to assimilation by the hugely successful commercial sector. Consequently, as a vocation, music in North America has become by this point mostly a commercial matter within the entertainment industry.

As far as this latter sector is concerned, it is clear that the attempt to preserve critical objectivity by moving outside of society, though nobly motivated, was an illusion ultimately bound to fail: the advantages of independent thought have been rendered practically ineffectual as social and political artistic expression. In fact, this detachment, often far from contributing to insight, has given composers of concert music the freedom to culti-

economy. However, by failing to provide this separate economy with adequate financial support for subsistence and artistic production, it has driven composers into extreme competition with one another for limited resources. Ironically, the supposed detachment of the composer is thereby undermined; in order to survive, he/she is forced to engage in the very intra-professional political maneuvering and extra-professional compromise (with representatives of the commercial marketplace) that the democratic ideology would have the artist avoid. While many concert music composers are forced to live in conditions of impoverishment, individually and collectively they have accumulated a strong vested interest in their peculiar and unique status within things-as-they-are. Moreover, in the process, the critical insight that this small segment of dedicatedly selfconscious artists might bring to the broader popular arena has thereby been siphoned from (commercially) accessible music.

On both a personal and professional level I have concluded that things-as-they-are are unacceptable and that on our side, composers of concert music must scrupulously re-examine the conditions of their profession and its relationship to their society and its ideology. I am personally only in the investigative and reflective stage of such a process—far from having developed my own extensive agenda through which a more honest, productive and organic relationship might be brought about between North American composers and their society. Naturally, some possibilities have come to mind in the course of my speculation to date; these have been of a relatively specific and localized nature, far from a condition in which I could suggest them as considered alternatives to present conditions. However, of one thing I am certain: as artists, composers must be prepared to consider changes of the most basic kinds (particularly of the financial kind) in their relationship with their national societies. This might well involve the extreme alteration, even dissolution, of our most important public and private institutions for the musical arts.

Like Milton Babbitt in the quotation which opened this article, composers of concert music commonly complain that the population in North America is not interested in the work of living American and Canadian artists. However, composers must realize that it is intrinsic to the nature of our cultural institutions as they are presently constituted that this must be the case. If composers genuinely wish that their relationship to the population should change, that they should more effectively communicate with their fellow citizens, they must accept that fundamental economic and institutional changes will be necessary. In music, as in the economy, North America

must (belatedly) move out of the Keynesian era. Above all else, composers must come to grips with the special nature of North American institutions for the arts which are at their origins vestiges of the royal system of another era and continent. Although allegiances have shifted over time, these institutions remain fundamentally elitist in nature and are now totally out of step with our American democratic ideology. Further, although our professional ideology would have it that decisions are made within these institutions on the basis of merit and detached reflection, composers, as artists of integrity, must recognize that rewards are generally given for much less lofty reasons of a political and material, and decidely anti-democratic, nature.

Lastly, they must realize that, as professionals, composers in North America have acquiesced to pasturage by their societies. In general, over the course of the past two hundred years, artists, including the Johnny-comelately composers, have been at the forefront of social and intellectual movements which have advanced democracy and rights to individual liberty and self-

Among others, the following options have occurred to me given in no particular order of preference). These have beer of a relatively specific and localized nature, far from a condition in which I could suggest them as considered alternatives o present conditions.

- i) Establish on a clearer and more honest basis a distinction between corporate support of composers where the musical product is intended as a form of publicity for the corporation consistent with its public image and marketing objectives, and corporate support of composers which is intended purely and altruistically for the critical advance of the musical art and has, apart from tax advantages, no ulterior motivations.
- ii) Establish, as a ubiquitous condition of corporate support of composers, personal relationships between individual executives on corporate donations commit tees and individual composers. Encourage executives to make decisions on commissions on the basis of their own tastes and preferences in music.
- iii) Directly involve as participants non-professionals and representatives from presenting and performing institutions in all bodies involved with planning and funding in the musical arts, including awards juries for
- iv) If public awards juries are to remain in operation reconstitute them, at least in part, along the lines of juries in the legal system proper, including a random and disinterested selection of jurists from the genera population.
- v) Greatly increase the emphasis in public and corporate funding of the arts in support of general services in music (e.g., recording, development and provision of instruments, drafting and notation of scores, music copying and reproduction, publishing, documentation, promotion) to reduce the costs of these at source (relative to the funding given for specific creative projects to specific individuals). Make these benefits equally available to all individual citizens without
- i) Favour the support of cost-efficient technologies including digital and electronic technologies, as opposed to costly labour-intensive historical instrument technologies
- vii) Encourage as far as possible productive formats which maximize available efficiencies in distribution to intended market seaments
- viii) Discontinue all, or almost all, public support for music performances, recordings, and broadcast diffusion, except for music which is entirely created and realized in all aspects by living persons, especially North Americans.
- ix) On the model of television broadcast in Iceland, establish periodic moratoria on the performance, broadcast. and institutional instruction of historical music (e.g., a prohibition one day out of every week, one week out of every month, one month out of every year, one year out of every decade).
- x) On the model of North American smoking bylaws, require that in all public places with piped-in "classical" background music there be equal and equivalent sonically segregated areas with piped-in contempor ary music; alternatively, prohibit by law all "classical" background music in public places; alternatively, prohibit by law all background music.
- xi) Establish a permanent bilateral (Canada/United States) secretariat for the subvention of music to ensure that any of the preceding arrangements would not give rise to disputes under the provisions of the Free Trade Agreement.

Nonetheless, on a more limited scale, an institution for art music, building on the European legacy, but in part as a democratic response to it, has established itself in North America. In Canada in recent decades it has become increasingly the fashion to refer to music produced by this institution as "concert music". 1 Here there has been preserved a much greater consciousness of the role of music as an expression of individual and national creative aspirations (as distinct from a vehicle for exclusively material and commercial gain). However, the absence of an elite with a strong motivation to underwrite concert music, coupled with a general reluctance in the population, including the political and economic leadership, to take up the slack, has rendered ineffectual the desire to establish a vibrant, detached and critical cultural institution for music. In fact, the result has been to create polarized and dualistic conditions for the art whereby two solitudes exist side-by-side with an unbridgeable gap between them. On the one hand, there is a huge commercial sector, oriented totally to economic necessities for profit in the immediate present, which is totally accessible to the population and attuned to its experience, if only for the objective of crass manipulation. On the other hand, there is a minute, relatively detached, non-commercial sector, with a strongly perceived critical mandate, which exists apart from the experience of the general population, and is almost completely without effect upon it.

▶ fulfillment. Nevetheless, these latter have their enemies within our societies as they are presently constituted, many of them from within the ranks of the economically and politically powerful. While composers have achieved for themselves by this point in time an unprecedented level of freedom of expression they have made an accommodation of a different sort in exchange for subvention by these powers of their own special and separate economy. They have accepted an existence of obscure contentment at the experimentalist and esoteric fringes of cultural endeavors precisely where their critical contributions will have the least effect. The larger sphere of national musical life has been abandoned to exclusively commercial interests.<sup>2</sup> Precisely where action speaks loudest in our society, namely at the source of one's income, composers of concert music have sacrificed the ability to make potent statements in strategic fora of the marketplace in exchange for meagre vestigial trappings of aristocratic privilege. By confusing freedom from popular accountability with freedom for detached critical thought North American composers, in contradiction of their democratic responsibilities, have in deed allied themselves with elites, similarly vestigial in nature, in other spheres of society

Inherent in this same confusion there is an obfuscating assumption that there are but two possible arrangements which might exist between a democratic society and its composers of music: namely, a complete integration of music within the commercial arrangements of the marketplace, or a complete separation of it from the rest of society inside an independent economy subvened from the surplus wealth generated by the "real" one. Even were the North American marketplace a genuinely "laissez-faire" arrangement (which it is very far from being), we have learned in non-cultural sectors that unfettered rationalism frequently works at crosspurposes to humanistic democratic objectives. It is inherent in the nature of democracy only that we have the collective right to make whatever institutional arrangements we collectively determine to be appropriate; "we the people" remain in control. Nothing precludes special protections in the area of the arts which promote the independent critical thought of composers. Such protections might even include a measure of political insulation as an insurance against transient cultural tyrannies of the majority. The error that composers must seek to eradicate is the manipulation of such insulation as an anti-democratic avoidance by an especially privileged group (in this case themselves) of the responsibility of ultimate accountability to collectively expressed popular attitudes

Unfortunately, this is precisely the strategy, undertaken consciously and unconsciously, through which North American composers of concert music today attempt to achieve the greatest possible freedom of expression in their works. It is ultimately an impotent and cynical kind of freedom not in keeping with the creative and positive spirit of democracy, the artistic expression of which should embrace a fundamental confidence in the goodwill of our fellow men/women in the face of the transitory illusion of separateness.

# **NEO-ROMANTICISM AS A** METAPHOR FOR THE SOCIAL IMPOTENCE OF CONCERT MUSIC

The principal focus of my reflections in this article will be a discussion of the two major institutional conduits in North America through which surplus wealth is channeled to the composers of concert music. However, over the course of the past half-decade, a movement in North American concert music has coalesced which is specifically interested in the nature of its audience, and especially (and, for concert musicians, atypically) that portion of it which is drawn from outside the music profession. Composers identified with this movement, described with increasing frequency as "neo-romantic", have observed that the non-professional audience for concert music is drawn to the concert hall principally by the repertoire for eighteenth and nineteenth century music, and not by that for twentieth century and contemporary music. Some have stated explicitly that they, like their audience, find the expressive stylistic resources of historical European music to be superior to those which have supplanted them to this point in our own century. Consequently, in order to communicate more sincerely and effectively with the non-professional audience for concert music as it actually is, they have appropriated elements of the historical styles in their own contemporary works.3

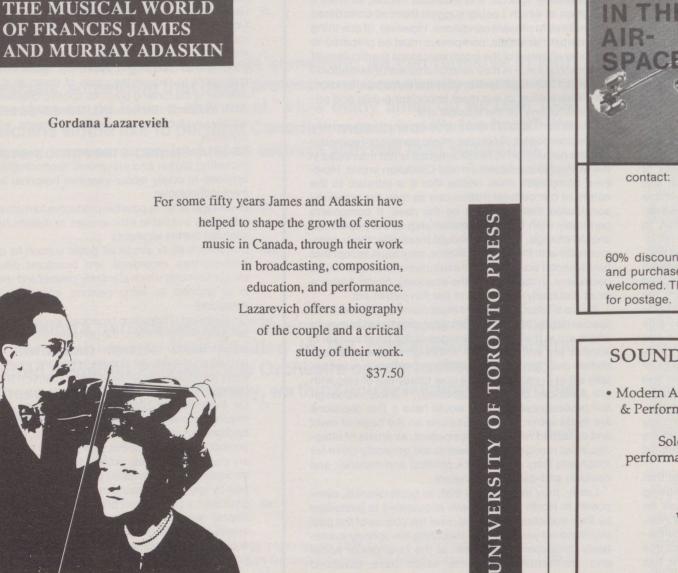
In terms of the mandate for contemporary artists as it has evolved over the past two hundred years this tack comes at a heavy cost. Although the relationship is more one of a coincidence of probabilities than an absolute requirement between intention and necessity, there has been a strong correlation between the critical role for concert music and the abandonment of these historical stylistic resources. Explicitly and implicitly, by electing to follow a self-evidently reactionary solution to the problem of the alienation of the audience, the neoromantic composers, on the whole, have in their turn rejected the role of criticism which I have outlined in my introduction. In the absence of the in situ political, economic, ecclesiastical, and military interests on whose behalf the components of the historical European styles were originally developed, this course amounts to a vote of aesthetic abstention on the part of such contemporary composers: neither a critical opposition to the existing order of things nor an embodiment of the values and beliefs of the national leadership of the day. In a democratic context, where there is implicit the obligation of every person to be informed on present-day issues and to participate in the decisions concerning them, the message which neo-romantic music expresses so clearly through its rediscovered accessibility is only a resounding "no comment". Unfortunately, under the conditions of the power relationships as they actually exist in our contemporary, pluralistic, North American society, "you are either on the bus or you are off the bus". Through abnegation of the responsibility to speak critically through the work-of-art for the benefit of everyone,

the composer of neo-romantic music implicitly endorses the decisions which are made by dominant interests on their own behalfs. However, the neoromantic works by and large fail to reflect a real understanding of those interests, or to comment upon them in any way, positively and negatively. Unlike the prototypal masterworks of European classical music (which have in any case largely achieved their master status only in our own age in accordance with present-day interests), as individual works they will hardly qualify as monuments in which are crystalized the leading humanistic and intellectual advancements of our day.

Even so, with so much said, it must be admitted that neo-romanticism is one of the few substantial new directions (albeit, in reverse gear) which North American concert music has taken in the last quarter of the present century. However estimable it may be on its own merits, the level of controversy it has raised within the broader community of composers of concert music quarantees for neo-romanticism a position as an influential artistic movement.4

In other words, neo-romanticism is equally important on account of attitudes it has helped to lay bare among composers who are not in sympathy with it. Raw nerves have been touched which are directly connected to long-cherished assumptions. Regardless of the solutions which the neo-romanticists have adopted, the issues which they have chosen to address expose the politically and economically vulnerable position of cencert music within democratic North American society. On the one hand, it is clear that the creators of neoromantic music put little stock in experimentalist virtues of recent decades: innovation, original personal style, non-linear compositional systems, the frontiersman's approach to timbre. On the other hand, it is equally clear that for the first time in over half a century a change of direction has occurred in concert music which is popular with performers and audiences alike, indeed accepted by them with equal measures of encourage-

American and Canadian musical thinkers who oppose neo-romantic music as a compromise of aesthetic integrity with base commercial motivations and as an assault on hard-won stylistic and conceptual advances from Schoenberg to Boulez, Ives to Feldman, are confronted with the paradox that this music conforms with the expectations of the non-professional audience for concert music and in so doing with the egalitarian and democratic aspects of our indigenous political ideology. Precisely because composers of concert music, compared to other music professionals, are aware of their mandate as artists, it is revealing to observe the demoralization which has arisen through the intrusion of a force as "conservative" as neo-romanticism. In this respect neo-romantic music is performing a function which parallels those of contemporary issues outside of music (e.g., feminist opposition to pornography, nicotine blue laws, the right to life of the unborn) which have thrown into factiousness and confusion "progressive" alliances which seemed natural, automatic and permanent only a decade ago. In this case accommodation to the eco-





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nomic realities of box office and cost efficiency, which includes a suspension (partial or total) of music's critical role, simultaneously assists the long-overdue democratization of the concert music institution

In view of the recently rekindled interest in North America in the career of the Soviet composer, Dmitri Shostakovich,5 and particularly in the repression of particular stylistic features of his music by Joseph Stalin and the Soviet cultural apparatus on political grounds, it is worth noting how confused our standard dualistic terminology, which opposes "progressive" with "conservative", has become. In Stalinist Russia neoromanticism was imposed on the Soviet composer from the top down by an authoritarian leadership within an agenda of stylistic simplicity, accessibility and populism. In North America today, concurrent with the liberating currents of "glasnost" in all aspects of life in the Soviet Union, a Stalinization of concert music is occurring voluntarily and spontaneously on the part of composers within the bosom of the continental bastion of free-enterprise individualism. Where composers are most closely and directly attempting to respond to the desires of the people (insofar as the audience is a surrogate for the people), the resulting artworks are quintessentially authoritarian. Such a development confounds the categories of linear progress which have underpinned the major stylistic and conceptual evolutions of our century. By so doing it highlights the increasing irrelevance of European dialectical and teleological modes of thought within the contemporary North American context. The inadequate categories, "progressive" and "conservative", and the imagined continuum between them have been drained of their meaning for discussions on music, just as they have been drained of meaning for all aspects of contemporary life.

The desperate and futile attempt to circumvent the present-day isolation of North American concert music through a retreat into the past renders inescapable the conclusion that the expressive power of this music as a unitary social language within a resonant living tradition (a tradition already in an advanced stage of decay in nineteenth-century Europe) has been severely and irreparably diluted by a hundred years of critical "progress". As I will shortly elaborate, a claim to the status of a universal vehicle of communication can no longer be made for concert music (nor, for that matter, for any other kind of music, nor for all music in general).

From the viewpoint of the individual concert music composer who continues to follow a path independent of the preferences of the audience for concert music,6 the truth of the matter is not that nobody really gives a damn but rather that nobody else really gives a damn. However, it is pointless and unfair for such composers to hold the neo-romanticists to account for the divergence of interests between audience and composers. As I will also explain further, such independent-minded composers of concert music, who, it must be remembered. until very recently have systematically monopolized the limited resources available to the small enterprise of contemporary concert music, are equally and likewise at fault in clinging to outmoded and imported concepts promulgated by our conservatories and universities which guarantee the social isolation of concert music. In particular, the "masterpiece" approach to music, which has at its core the notion that special chosen individuals are superior to the rest of humanity, is painfully inappropriate to American democracy. It is pointless, not to mention unfair, to couch our reflections on the relationship between concert music and its audience in terms of styles and stylistic progress. Composers of concert music would do better to take a hard look at the greatly changed position of their profession with respect to their

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society as it is, to its ideology, and to its political, economic and social elites. I offer what follows as my contribution to such a re-examination.

# **ECONOMIC CONTEXT:** CONCERT MUSIC AND THE MARKETPLACE

Concert music stands in a paradoxical relationship to the marketplace for all musics in North America. The conventional stereotype of a concert music composer, advanced alike by arts journalists and the textbookwriters of our academic institutions, portrays him/her as an individual of exceptional talent, especially of formidable intellect, who through dispassionate observation documents in sound the essential characteristics of our age. The stereotypic composer is attuned to advancing technology, to up-to-date innovations in style, and, not the least, to progressive humanistic insights concerning the human condition. Further, in contrast with popular musicians from the private sector, he/she is independent of crass commercial and political influences.

However, to the observer close-at-hand to the composer, this picture has more illusion than substance. Quite to the contrary, even a minimum of objective observation and reflection upon the life of the concert music composer as it is actually lived reveals that, in spite of this ideology of unfettered creativity, composers are, in fact, closely identified with financial and industrial benefactors and/or allied with entrenched coteries of peers who are de facto agents of an autonomous bureaucracy within the bowels of the state.

Given the precarious existential position of composers, this is not surprising. As individuals who attempt financial self-sufficiency through the production of specialized artifacts for delectation, documentation and reflection, composers inevitably must come to terms with the public and private sector agents of those who shepherd the material well-being of society. Given the specialization of labor characteristic of our economy minimum conditions are necessary in order for artists to flourish within their vocation. Like all professional groups in North American post-industrial society, composers of concert music aspire to, and are expected to aspire to, professional self-sufficiency. At the same time, as producers of unique, non-material, intellectual products, composers are at a professional disadvantage: the existence of their profession is dependent on prior achievement of more immediate material objectives in other sectors of the economy which generates a surplus sufficient to underwrite a vocation for aesthetic speculation in sound. While the extreme hardship endured by the great majority of individual concert music composers is not to be overlooked, support for the vocational category in North America has increased steadily during the present century up to the present day. Though the absolute numbers are still miniscule, more and more composers are able to make their livelihoods through

composing concert music. The factor which most obscures both the real nature of the profession of composer today and the nature of the recent improvements to its general conditions is a legacy of the relationship between composers and aristrocracy in pre-Napoleonic Europe. The academic/ journalistic stereotype assumes not only that the present-day profession is a direct extension of the historical one, but also that it remains in practical ways its

If pursued in starkly realistic and honest terms this assumption does have some merit. In both periods a self-sustaining profession of composition is supported through surplus wealth from materially productive sec-Canada's "Living Music" Label
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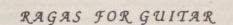
tors of the economy, though it is generally necessary for even the most celebrated composers to supplement their incomes through other activities in music. In both periods the professional composer exists at the sufferance of, and works directly in the service of, privileged elites within the society of the day. The principal difference which emerges is the very much diminished position of concert music today, and this goes doubly for contemporary concert music, in terms of national profile, status, and especially proportionate share of financial resources within the total available for national mus-

However, more to the point, the assumption is not pursued at all in realistic terms. On the contrary, as the conditions in royal Europe have receded through the gauzy filter of time, the nature of the profession histori cally, and moreover of the individuals who populated it, have been greatly distorted through successive generations of commentary. Indeed, our present-day impressions of the conditions for music composition in royal Europe have taken on the character of a mythology, a mythology which makes convenient the emasculation of the critical role of concert music composed in our own

This mythology is ubiquitously promulgated by the professions of music journalism, musicology, and instrumental instruction in conservatories of music, the practitioners of which are three sub-species of worm which have found for themselves an easy way to become fat off the very dead, and therefore very defenceless, putrefying corpses of composers (indeed, much fatter than the corpses themselves had the luxury of being at the times of their original habitation).7 While anecdotal titillation is useful to these professions for the earning of supplementary income from writing biographies, liner notes, program notes, etc., the impression given of the music itself is one of a refined and pure art with its own pristine inner logic and divinely inspired momentum. Economic exigencies and relationships were influential only as circumstantial taps, permitting or obstructing the flow of the natural waters of creative genius but otherwise leaving its substance completely uncontaminated. It is important to remember that it is professionally important to the present-day commentators to present the reputations of the deceased individuals in whose corpses they have established themselves in the best possible light; for this reason the royal composers are now routinely described through exaggerations and superlatives never bestowed upon the still-living. Indeed, as the most promising corpses have been identified and occupied over time (with the remainder left to rot in obscurity), all of those who remain in memory have been elevated to the status of genius-titan.

Further, as it is up to us who live in posterity to pay for the belated and posthumous insights of such commentary it has been necessary to establish that it is to everyone's benefit that we do so. Hence it has been important not only to establish a hermetic pantheon of genius-titan composers but also to make a claim for the universality of their creative bequest for all time: we are informed that music, and especially concert music of royal Europe, is a universal language, throughout all orders of society and across all borders. Within this universal language the works of the pantheon of royal Europe were at the zenith of human expression in sound.

Likewise, as the facilitators of this divine bequest to humanity, the aristocracy of royal Europe have likewise enjoyed posthumous rehabilitation. While a small number of mean-spirited aristocratic antagonists are essential to the plots of composers' anecdotal biographies, generally our present-day commentators are flattering to the economic and political leadership of royal



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Europe for its ability to recognize divine genius when it saw it and for its unstinting support, in consequence, on behalf of the lower orders and generations-yet-unborn. As the perfected refinement of all music as universal language, the masterworks of the genius-titans are, it is retrospectively alleged, an intentional bequest to all humanity from their creators. The conspicuous consumption and self-aggrandizement of the aristocracy was an unfortunate facade concealing the nobleperson's burden as the surrogate consumer of genius on behalf of everyman and everywoman. While the average stablehand and chambermaid experienced little of the fruits of genius first-hand, nonetheless this music was in an ultimate sense, it is now recognized, written for them.8

Consequently, the legacy of the concert music of royal Europe as it is reinterpreted by commentators in our own day has a curiously paradoxical character. On the one hand, it is a special and precious category of music, distinguished by its exceptional degree of perfection and refinement in comparision to the quotidian music of the less talented individuals which has deservedly been forgotten. On the other hand, it is at the same time a universal expression, for the benefit of and (at least potentially) accessible to all of the nation and ultimately to all of humanity.

Like all mythological scenarios, this one contains within it several grains of truth. As part of a self-perpetuating but ultimately insane and self-defeating spiral of collective professional suicide (see below), the stylistic language of the composer of contemporary concert music has become particularized to the point that it is often unintelligible to anyone other than himself/herself and his/her immediate students. In contrast, the common practise, as it evolved in royal Europe, was indeed a universal language of expression of which the works of individuals, geniuses and non-geniuses, were but individual manifestations. In fundamental matters of harmonic integration, melodic coding, rhythmic and metric organization and instrumental conventions all composers wrote in the same style.

Similarly, to a much greater extent than is true today, there was a much greater area of stylistic intersection between music for the princely elite and music for the common people. In fact there was an enormous amount of feedback, and in some cases interchangeability, between refined aristocratic art music on the one side and popular song, instrumental music, and dance forms on the other.

Further, to an extent much greater than is now the case, the immediate financial benefactors of concert music were personally and regularly acquainted with the composers of music. Moreover, they were often themselves technically educated in music (which was, bear in mind, a common practise of music) and therefore in a position to comment critically (in a technical sense) upon it. As a result there was a congruence of intention and understanding between composers and the economic and political leadership which has in our time all but completely vanished.

Be that as it may, the mythological confection of "classical" music contains far more air and sugar than it does real nourishment. At the time it was written, very little benefit of this universal music of genius filtered down to the great majority of the population. In particular, very few of the common people ever got to hear it, nor was it intended that they should. It was created expressly and exclusively for the aristocracy who immediately underwrote it. In style, in character, and in form it conformed to the requirements of this elite for ceremony, entertainment and propaganda.

Further, in all but its most superficial aspects, only this small elite were in a position intellectually, let alone economically and socially, to profit from concert music. Professional "classical" musicians of our own day who, through a bizarre and unprecedented co-incidence of circumstances, have enjoyed several years of training in this historical music should not be misled by their own experience. "Classical" music required for its actual consumers at the time it was written the same kind and extent of training which present-day professional interpreters (of the same historical repertoire) receive. Indeed, often as performers, and occasionally even as composers, such amateur consumers could hold their own with the professionals of their own day. Such circumstances were possible only under economic, political, and social conditions which allowed a highly privileged elite the leisure time to receive the necessary education. Moreover, there is nothing to suggest that at the other end, among the less privileged orders, there was anything like the same capacity for informed and thorough consumption. Like the non-professional subscribers to orchestral and string quartet concerts in our own day, in the absence of a thorough immersion in the music, there is nothing to suggest that such listeners penetrated beyond superficial satisfaction with mellifluous consonance, instrumental effect, and simple

Indeed, our present-day commentators all-too-often overlook the strongly negative reaction, even from the educated consumers of the nobility, the often strident criticism of many "classical" "masterpieces" at the time of their first audition. Such criticisms were precisely aimed at the perceived (or imagined) dissonance, formlessness, strident timbre, and willful experimentalism for which twentieth-century and contemporary works have similarly been castigated. Where such criticism is acknowledged by contemporary commentators, this

occurs anecdotally with a wink and a chuckle, suggesting a lapse in the generally consistent ability of the royal elite to recognize and support genius. In fact, as aspects of both aesthetics and fashion, such attacks were commonplace

Equally to the point, to the extent that genius was able to accommodate itself harmoniously with circumstance and receive some measure of social recognition in the event, this occurred at a terrible two-fold price which both composers and the population would be quite unwilling to pay in our American democracies today, and quite rightly so. The economic system which supported the artistically productive integration of composer with a small privileged elite entailed as a necessary precondition the wretchedness and ignorance of the vast majority of the population, the Platonic slave-class whose exploitation generated the surplus of wealth and leisure time necessary for the support of concert music by the immediate benefactors. Likewise, the manipulation and suppression of artistic expression was as direct, as complete, and as final as the opportunity for informed, sympathetic, personal feedback from these benefactors. Surely the advantages did not justify the cost which was paid in terms of efficiency and humanity.

Nonetheless, this mythology not only exists at the present time but exists almost without challenge; the marginal role which the concert music institution (including the performance institution for the historical repertoire) plays in contemporary North America does not afford to its beleaguered adherents the luxury of a vibrant and encompassing pluralism. Indeed, this myth of a "golden age" of concert music functions in the public relations of concert music as the fundamental argument in the claim for exceptional subvention. By alleged virtue of its exceptional standards of excellence and its universality twentieth-century Americans must be convinced that the music of royal Europe merits a special position outside the democratic political arena and outside the marketplace wherein indigenous and commercial musics must struggle to survive. Unfortunately, even composers of concert music, whose interests are by no means identical with those of parasitic journalists, academics, and convervatory drones, have uncritically thrown in their lot with this Camelot version of music history in exchange for a pittance from the corporations and tribunals of arts-council Byzantium.

It is to be emphasized that exceptional support for newly created music in North America, from corporations and from the state, goes almost exclusively to (composed) concert music. This represents but a very small proportion of the total population of musicians who are creating new works of music. This tiny number of musicians, together with the musicologists and the performers of historical royal music, have gone through a very narrow and specialized kind of training which is based in a repertoire by and large unfamiliar not only to the general population of the continent but also to the vast majority of individuals in North America whose profession is music. Concert music composers, like concert music performers of "classical" music, have been thoroughly steeped in the mythology of the royal pantheon of genius-titans. Further, their musicologist colleagues, who have learned the same ropes as the composers and at their side, are secondarily useful to the procurement of exceptional funding for concert music by conferring upon their composer-colleagues the mantle of mastercomposer as it has been handed down from Camelot. Thus the mythologizing of historical music has become useful to the shell-game of contemporary music.

We are led to believe, notwithstanding the apparent irrelevance of contemporary concert music to our own era and continent, and notwithstanding the thinly disguised snub to the indigenous musics which the North American population actually patronizes through its consumer support, that future generations will be grateful to us for our foresight and generosity in protecting a special category of musical enterprise from the storms and stresses of democratic give-and-take. Alas, the interests of the population, at present and in posterity, are much more poorly served than the mythology would suggest. Far from guaranteeing the edification and inspiration of the population on whose backs the support for exceptional subvention actually rests, the mythology actually disguises and encourages a wink and a handshake between composer and executive, and between composer and mandarin, literally at popular expense. This tendency is abetted by the increasingly depersonalized nature of social relations in North America which reveals only the financial and material mechanics of relationships but not the motivations of the parties involved.

The opportunity for the creator of concert music to support his/her existence through the fruit of his/her labours as he/she chooses to define them is given in exchange for acquiescence of two basic sorts. Within the concert music institution these correspond in general to the conduits through which material sustenance reaches the composer and to the venues at which contemporary works are presented.

On the one hand we find production on behalf of corporations. In this case the composer is encouraged to make limited contact with the public and by so doing to legitimate the financial success of some corporate patron in return for its patronage. This type of arrangement, in the United States long entrenched and highly successful on its own terms, is on the rise in Canada today. Financial support is channeled to the composer

by the board of directors or donations committee of the corporation. Usually, however, the public relationship which is emphasized is the one between the corporation and a performance institution or institution of endowment. In turn, the latter independently expend a small portion of donations received for the commission of new works.

The expense is considered by the givers to be a promotional (advertising) cost. As a well-researched factor of market price, it is actually paid for by the consumer of the product or service of the corporation. These ultimate donors of sustenance to the artist likely have no experience of the works they help to bring forth, indeed, likely no knowledge of them whatsoever. Even the immediate first-hand donor, the member of the corporate donations committee, becomes involved with a work to the extent of identifying aspects which might compromise the impression which the corporation seeks to establish in the public consciousness of its products, services, and behavior as a collective citizen.

The usual venues for this type of intellectual product are the concert halls of our wealthiest concert music ensembles: symphony orchestras, opera companies, choral societies, and a handful of chamber music groups. Typically the capital and operating costs of these ensembles including rental of the halls, are substantial. Support is received from a large number of corporate and financial donors.

Consequently, under these circumstances for concert music production it is important that the work of art not give offence to the public and that its creator not draw undue attention to himself/herself as an agent of social and economic criticism. Legitimation of the donors is expanded almost to the dimensions of tradition through the strong historical associations of the "golden age" mythology, with its instrumental icons intact. In fact, the contemporary artifacts form but a small special collection within a much larger institutional museum in which classics of pedigree are ritualistically recycled on a continuing basis.

There is much to be said for such recycling on its own merits. It must also be emphasized, insofar as the contemporary works are concerned, that in this context there is a public of non-professionals, of which the corporate representatives comprise only a minority proportion, which does experience first-hand new music of its own time. Unfortunately, this audience is chiefly attracted by the repertoire of the long dead geniustitans. The intrinsic worth of the entire repertoire, ancient and modern, is of relatively low consequence among the motivations of the consumers who actually attend the public spectacles. To be sure many consumers are attracted by the warmth and variety of the sound (especially at concerts of orchestral music) and have through basic education and loyal attendance achieved an intuitive understanding of the historical language; they have a sincere if naive interest in history. Nonetheless, such motivations are often outranked by display of social rank, ostentatious self-aggrandizement, fashionable one-up-man/woman-ship, and, in the case of the corporate representatives, legitimation of economic advantage.

As it is, the patrons (and very often even the performers) barely tolerate music of the present day, especially works of a relatively experimental character. Unlike the blood aristocrats they succeed, the corporate representatives are generally too busy or too disinclined to take the time to understand these testimonials to their impersonal generosity. It is very uncommon at the present time for individual benefactors to patronize individual artists one-on-one; largesse is received from an anonymous and depersonalized board. At best the concert experience is for almost everyone, both the corporate representatives and the rest of the audience, an out-of-context exercise in nostalgia into which contemporary

music is an ugly and unwelcome intrusion. As I have already discussed, this state of affairs has given rise to a new current in contemporary concert music, neo-romantic music. In general, neo-romantic music is intended for these relatively accessible public venues which receive corporate support. The attempt by neo-romantic composers to come to terms with the real nature of the audience at such venues merits recognition and approbation. Similarly, the aspirational motivations of the concert-goers, donors included, to understand and encourage contemporary music which attempts to meet them halfway should not be discounted. Nonetheless, through a combination of mutual falsehood and the force of circumstances, the nostalgic and revisionist agenda of neo-romantic music creates a chasm between the composers and this public, a failure to engage one another in the present, the chief symptom of which is an actual debasement of the associative language of music in favor of instrumental effects and shallow references to a history which never was.



On the other hand we find production of concert music within the orbit of autonomous organs of the state. In this case the artist apparently is free to follow his/her fancy to the furthest extreme he/she wishes. The price to be paid in exchange is a form of lonely internal exile: occasional performances, often with haphazard performance standards, at obscure venues—generally, smaller, humbler performance spaces with limited production and promotional budgets. Where the composer receives payment for his/her work there is in fact additional pressure applied to encourage him/her to speak, in the music and in his/her verbal explanations of it, in an esoteric, often imported, language of culture, indeed in one of a Babel of such languages, unfathomable to the vernacular masses, and indeed to many of his/her professional colleagues.

The typical venues in this case are euphemistically designated as "alternative spaces". These venues are usually older buildings converted from industrial or commercial functions: warehouses, storefronts, gymnasiums, pornographic movie houses, and the like. They are located in run-down areas of urban centres often some distance from residential boroughs and districts where more legitimate entertainment is concentrated. They exist on shoe-string operating budgets, most of which is provided directly, if anonymously, by a state agency through a special system of secret tribunals. The remoteness and discomfort of such venues in combination with the esoteric nature of the spectacles presented discourage attendance by the public at large. The audience for presentations therefore consists overwhelmingly of other artists.

A secondary, though somewhat more palatable, alternative venue is the concert hall or classroom of a university music department. In this case the facilities for performance are of better quality as are the amenities for the comfort and safety of the audience. However, an additional layer of institutional insulation coupled with a similar institutional discouragement of commercial advertisement likewise guarantees an audience comprised almost exclusively of other artists.<sup>9</sup>

Whatever the venue, it is highly likely for any such performance that part of the costs will have been underwritten in some way by grants from city, state, provincial, or national arts councils. Since its introduction to North America in the 1950s, the arts council has been a valuable institution for the indigenous arts. North Americans are therefore greatly indebted to European precedents, especially to that devised by Lord John Maynard Keynes in Great Britain, which attempted to reconcile the legacy of royal Europe with the increasingly democratic organization of society in this century. In an attempt to address such social and political changes, the "arm's-length" concept was adopted on this continent as a fundamental condition for public support. To prevent the manipulation of artists by politicians, autonomous councils were established to see to the distribution of public subvention to artists on a regular and continuing basis. Within very broad and general mandated guidelines, decisions concerning such support are made, not by ruling politicians or bureaucrats directly responsible to them, but by panels of artists with established professional credentials. Usually at a given level of political authority (state, provincial, federal) such panels are organized by discipline. Usually, there are juries for the commission of musical works from

composers, or sittings of generalized music juries given over to the particular aspect of commissions.

Despite the original and continuing good intentions of council founders and functionaries, residual aspects of the royal system have persisted to the present day which, in combination with the arm's-length principle, have served to put the non-commercial artistic community, including composers of concert music, at an increasingly great distance from the rest of the population. In particular, the notion that a protected elite with a special mandate should control the distribution of subsidy has driven a wedge between composer and citizen. In the subvention of contemporary concert music it is the composers themselves who have supplanted the aristocracy of blood in this privileged position.

Over the years, these agencies, like all institutions, have increasingly taken on a character which best protects their emergent vested interests. Once a certain degree of institutional momentum has been achieved there inevitably has ensued an apparatus to protect the interests of a narrow constituency of insiders which quite naturally establishes conditions for membership in terms of its own aesthetic and financial objectives. In the United States this tendency has been tempered somewhat as a gesture of accountability in reaction to increasing privatization of the arts sector during the Reagan administration. In Canada it has continued unchecked since mid-century.

Because of the strong influence of royal, especially British precedent, the arts councils have escaped the pressure for checks and balances which figure so prominently in general in the political ideology of the continent. In the United States this paradoxical development was in no small part due to the early and enthusiastic sponsorship of the idea of councils by Nelson Rockefeller, governor of the state of New York, and John F. Kennedy, president of the United States, both of whom in their individual ways embodied peculiar admixtures of aristocratic autocracy and grass-roots liberalism. It is actually more remarkable that the recent Canadian Bill of Rights, otherwise so strongly influenced by the judicial check enshrined in the constitution of the United States, has had almost no repercussions for procedures in terms of the arm's-length councils.

In this vacuum of accountability, the arts councils have established a position for themselves like that of the armed forces; they are indeed autonomous, beyond immediate control of the elected government. They have moved as well outside the control of the population itself and for all practical purposes far from access of public information. Like the armed forces, the councils have their own judicial system. Unlike the armed forces, the deliberations of the council courts are completely confidential; even the identity of the judges (euphemistically referred to as jurists) is a secret until well after the deliberations have been concluded. The judges are appointed by an unelected functionary in consultation with a small circle of existing and previous judges who are exclusively other artists. Neither the general public nor even the constituency of artists-at-large is

Further, the distribution of public monies involves an apparatus of policing and evaluation. At its most extreme (e.g., dance music in Canada, concert music in the state of New York), given the anti-democratic nature of the institution as it has evolved, this apparatus has taken on the character of a secret police. Agents of intelligence and evaluation are recruited from the same small circle of artists to report in secret on the professional activities of other artists in exchange for wages. 11 Once again, the identity of the agent and the contents of his/her report remain confidential until long after the executive decisions have been made which are based upon them. It is ubiquitously true across the continent that when subsidies are awarded to the composer, he/she himself/herself is obliged to file confidential reports on his/her creative activities with the agency. Of course such monitoring is a just and prudent vehicle of accountability concomitant of public subsidy. At the same time it is an intrusion on personal and aesthetic privacy and a great waste of precious creative time; its loss would not be lamented under a reform or abolition of the council

To an extent far greater than in the production of concert music for corporations the relationship between artist and benefactor is obscured. As far as the subvention of new works of concert music is concerned, the real financial base of the support, the taxes on the general population, in no way corresponds to the real interest within the population in the artist's products (i.e., almost none). 12 This is especially evident on account of the foil which exists in the historical repertoire for which popular support is deeper and more genuine. More to the point, even the relationship with the direct first-hand benefactors, the members of the council juries as conduits on the public's behalf, is obscured. The identity of jurists is kept secret from the artist. After the artist has presented his/her case (in concert music this occurs only at second-hand in writing and on recorded tape) no communication between judges and judged is

Further, and this is particularly true in concert music in comparison with other disciplines of the arts, communication through the work-of-art with the general public is actively discouraged by professional taboos enforced through tribunal decisions.<sup>13</sup> The principal taboo in concert music today is an implicit (and some-

times explicit) prohibition of commercialism. Needless to say, it is impossible to reduce this concept to a set of practical guidelines which the aspirant to the inner circle may hope to follow with confidence of success; what one may do and may not do, which itself is in a continual process of evolution, is acquired only by osmosis through a long immersion in politically successful music. Nevertheless, this taboo is highly influential. The popular commercial music of our culture is firmly rooted in a distinctively American indigenous experience; concert music is rooted in an attitude and tradition imported from abroad through the filter of contemporary commentary. In order to redress the imbalance which would result through the freely expressed preferences of citizens (in our society through the marketplace), artists are weeded out precisely on the basis of the perceived commercialism of their intentions. While it is possible for the concert music composer to go much further in this area today than ten years ago (i.e., to incorporate precisely those musical aspects which are relatively familiar to the population and which therefore promise the most common ground with it), nonetheless the taboo remains strong.14

Consequently, even were it possible to maintain the universal anonymity among all the individuals involved which is assumed as an essential foundation block of the council system, North American composers are doomed by the vestigial trappings of a foreign and distorted mythology to remain forever at arm's length from their fellow citizens. Nevertheless, we can discern in the desire for this objective anonymity on the part of founders of the councils and their present-day mandarins a genuine hope that the system might work in a just, humane, and rational way.

Alas, as is characteristic of all secret and autonomous governments, these agencies, together with their evolving constituencies, soon became webs of personal alliances and ideological nepotism. What may continue to appear to insiders today to be innocent professional chit-chat among a small circle of colleagues in fact long ago metamorphosed into a limited and privileged circulation of valuable information through confidential leaks. Such information is a professional advantage for those privy and is commonly, if often unconsciously, traded against future goodwill.

In reality, an entire secret sub-institution of insiders exists which consists of alliances among representatives of three institutional kinds. First, there are the employees of the agency itself, both the permanent mandarins and the rotating rosters of secret judges (and, in some cases, intelligence gatherers). While the intention often remains confidentiality in the genuine pursuit of objective impartiality, what actually transpires is a clandestine channeling of public funds to artists who have developed the greatest degree of political acumen. (Fortunately, political and artistic skills are not always mutually exclusive.) Second, there are the administrators of performance venues and favoured ensembles who ration the available performance opportunities within a similar, not completely conscious, exchange of favours. Lastly, there are leading academics in the universities who preside over the whole institution as a class of high priests giving a distant lustre of legitimacy based on esoteric knowledge of the global mythology of "classical" Camelot for the benefit of the general public who seldom experience the artifacts first-hand. Of course many of these academics are themselves composers. Similarly, the membership of all three categories overlaps considerably

How different this is from the idealized myth of the 'golden age" of concert music. Far from an apex as the most perfect expression of a national music, North American concert music has become an obscure and arcane complex of loosely inter-related cabalistic codes outside the experience of the general population and of the economic and political leadership. Apart from its creators and (to a degree) its performers, few citizens are interested in it; few are even aware that it exists. There is no informed and sympathetic class or caste of aristocrats who directly and personally support the music or its creators, interacting directly and personally with them. The mandarins of the councils and the sages of the academy, the closest parallels which our society has for such a class, insofar as they interact with the population themselves at all, serve more to insulate composers through jargon and mythology from the danger that the people might know them than to assimilate and reconcile them with their fellow citizens.

Not only is decision-making in support of concert music made at arm's-length from the political leadership, and in a democracy, hence from the population, but also the works themselves are very much characterized by this estrangement. Only in the most vague and abstract sense are the works of concert music of and for the population of North American democracies. They are for today and forever (and likely a very short "forever" at that) created exclusively for their composers and for a few fellow artists. Such a music can have no posterity; the repertoire of contemporary concert music will, for the most part, inevitably die an obscure death within a generation of the political expediencies which produced it. Even the temporarily successful nostalgic works of the neo-romantic variety, once their harmlessness has outlived its usefulness to transitory corporate images, will fade from human consciousness as not-sointeresting curiosities.

Our public councils and corporate boards are syn-

thesizing in concert music today what only warfare was able to accomplish in bygone times: lost generations of composers. Our musical art consists with increasing preponderance of works which Morton Feldman called "disposable art": works without purpose, integrity, or human resonance, created for single performances out of immediate political expediency in the desperate game of commission-hunting.

Insofar as the claim for the universality of music is concerned, a claim already highly dubious even in the case of royal music, any validity for living composers was long ago out-paced by events in the general context of our continent and century. The evolution towards economic and social justice has inevitably come at a heavy cost to concert music as a global, continental, or even national language of cultural expression. In our (even imperfectly) democratic society no one any longer has the time for an elitist kind of art, apart, perhaps, from the artists themselves. As concert music composers have held aloof, and been encouraged to hold aloof from interaction with the population at large, the field has been abandoned to commercial interests. As in all areas of contemporary life, musical expression in North America has been diluted, leveled, and atomized in step with the mass mercantile strategies of our increasingly material society, the obscurity and alienation characteristic of interpersonal relationships in general, and the commercial and technical debasement of spoken and written languages. By default, through the absence of critical composers within the society, the universal in music has become a matter of the lowest common denominator.

Whether the concert music composer seeks his/her outlet through production for corporate venues or through production for a small and highly political circle of his/her peers, it is simply howling at the wind to lament that nobody gives a damn.

# COST-EFFICIENCY OF THE CONCERT MUSIC INSTITUTION

The social faction of concert music creators in North America is both highly polarized within itself and also largely insulated as a whole from the rest of society. This is especially true in Canada where there is a stronger royal tradition of non-responsible state intervention in society and economy, fortified in the arts by the Keynesian precedent in Great Britain. In fact, as the tensions created by the popularity of neo-romantic music give witness, a more generalized overview reveals an ongoing ideological struggle within the concert music institution in North America between parties which are principally indebted to corporate largesse on the one hand or to political access to the public purse on the other. However, to reiterate an opening remark, to see the opposition purely in stylistic terms veils common anachronistic attitudes about the social position of the composer which account in part for the predicament of his/her isolation under both productive modes.

It is more illuminating to observe that the maladies of both, when expressed in economic terms, have their origins in a similar condition: the extreme cost inefficiency of the artifact. In neither stream does the public patronage of the artifact take the form of a genuine interaction between the artist and the consumer through the essential nature of the artifact and so support the subsistence of the creator. In this respect both commercial music and competing art musics of fundamentally indigenous American origin do a far more effective job. In concert music of both public and private modes huge deficits between performance receipts and production and operating costs must be recouped on the basis of motivations which are remote from the essential purpose of the artifact: commercial advertising of unrelated products and services on the one hand, pervasive institutional politics on the other. While the artists themselves are often unaware of it (though also often cynically open-eyed), in both cases a sleight-of-hand is involved in which the general public is the eventual unknowing financial patron of an elitist (if hardly generous) underground welfare system.

In neither case is the larger public consulted about its interests or preferences. In neither case, aside from the few who can occasionally afford to attend the private sector spectacles, is the public even aware of the artifacts which are being produced. In both cases the real nature of economic support is obscured and disguised by anonymous, depersonalized, and inaccessible corporate boards and state agencies. Moreover, though the magnitude of scale is much different, the root of the inefficiency lies in both cases in the overwhelming reliance on outmoded instrumental technologies and conditions of artifact consumption (live audition of large numbers of performers by small numbers of consumers).

As large amounts of public wealth are, relatively speaking, squandered in the inefficient system of production for concert music<sup>15</sup> it has been convenient for the parties involved to cultivate in compensation, in part unconsciously, the ideology that art is a commodity which ought to be, and in our supposedly open and democratic society, is, for free. It is held that the artifact, like sex, is somehow demeaned through involvement in commercial exchange. <sup>16</sup> In this connection both the cultural agency of the state and the corporate board are highly effective vehicles. In the case of the former, the real costs of artifact production are seen to be borne not

within the program of the elected government by the taxes on the population and on materially productive economic entities (including corporations) but at a stage removed by an anonymous institution, the arts council, which exists autonomously at arm's-length from the state and any other corrupting influences, dispensing largesse on the basis of aesthetic merit. This expedient illusion finds its counterpart with the corporate board. Likewise it is obscured that the contributions of corporations are reflected in the costs of their products and services. Rather it is made to appear that such support is a matter of innocent beneficence motivated by public interest supplied from the coffers of some timeless vault of goodwill which exists independently of the day-to-day commodity relations of our society.

Under both conditions the public and the independent artist lose equally. The public is effectively insulated from direct interaction with the art for which it is paying; even the mandarins and executives themselves, wrapped as they are in cloaks of anonymity, receive little personal satisfaction through interaction with the artifact. For the artist's part, and this is truer in concert music than in any other discipline of the North American arts, he/she is encouraged to consider the products of his/her labour as a special and unique class of commodity which has no commercial value. He/she is the agent of a public institution of aesthetic charity and fortunate enough to receive subsistence welfare payments from time to time for his/her efforts. Not only are his/her products completely lacking in intrinsic commercial value, they are also compromised in their acknowledged spiritual and aesthetic virtues as soon as a price tag is

The measure of the composer's own responsibility for his/her social isolation emerges when a reverse logic is applied to the above observations. If a commercial manifestation is alleged to undermine the essential nature of the artifact, it follows that only where commercial influences are excluded can real art be said to exist. In other words, the corporate- and state-funded institutions claim together for themselves the exclusive monopoly in society for legitimate works of art. In this connection even the most extreme individuals in the public sector arena take pains to establish their work within a tradition of pedigree extending directly from the master composers of royal Europe. With the legitimating cooperation of the academic music institution, which itself likewise exists on the arm's-length appropriation of public and corporate wealth, and is even more woefully out-oftouch with its temporal and geographical context, the products of this particular segment of music production are designated as uniquely qualified for a special protected status outside the storms and stresses of the commercial marketplace. This group makes use of highly specialized and esoteric musical vocabularies as a sieve which can be used to legitimate the filtering of claims for public funds from outside its membership; the artist thereby simultaneously achieves the elevated status of other specialists of our age. This exclusive virtue of course must remain unsullied by commercialism or compromise with the limited mentality and experience of the population. Thereby all of the available support is channeled exclusively to this small protected segment of composers of concert music while all other musicians of whatever alternative stripe are kept drooling at arm'slength from the gravy boat. As victims of this selfserving, self-fulfilling logic all forms of music which are closest to the experience of the population are left to

The supreme irony is that out of necessity, competing American musics have had no alternative to being costefficient other than accepting extinction. The economic and political leadership which manages collective social capital has defined all other musics as "other-than-art"; so reduced to the status of commodities for cheap entertainment their existence is justified exclusively by their performance on the spread-sheet. To be sure an important consequence of this has been the commercial prostitution of these alternative forms on a vast scale. Nonetheless, it is in the commercial marketplace for music that the significant evolution of instrumental technology has occurred along with the development of far more efficient distribution systems for artifacts than in the concert music institution inherited from Europe. 17

It now remains for composers of concert music to set for themselves the task of putting such resources to critical use in the service of North Americans.

# CONCLUSION: "ASK NOT WHAT YOUR COUNTRY CAN DO FOR YOU . . . "

Even so, in taking such a step concert music composers must avoid the all too easy temptation to look to innovation, and especially to technological innovation, as an easy remedy for their predicament. The medium may be of the message but it does not itself exhaust the definition of the message: in the absence of thought, while the nature of the art may change substantially through the alteration of its technology, nonetheless, the creative intention remains no less compromised by persistent thoughtlessness. The cause of the social estrangement and ineffectiveness of concert music does not lie principally in its instruments but in its creators, and, more than anything else, in their attitude towards their fellow citizens, towards the brother-and-sisterhood of human beings.

For the past five hundred years, the last one hundred under American leadership, Western society has increasingly looked to technology in order to circumvent the political and social problems which have arisen on account of human greed, pride, and insecurity. While it has not lacked inspirations of a more intrinsic and fundamental nature, of which the modern interpretation of democracy has been the most promising, nonetheless, at every critical pass it has opted for technical rather than humanistic answers. These have never addressed the fundamental problems but have merely increased the consequences of conflict or its avoidance at each succeeding stage. Near the end of the second millenium, as a race we have reached the brink of disaster through our careless reliance on technical expedients adopted without consideration of their consequences: ever more destructive instruments of war as deterrents alternative to honest reconciliation, ever more efficient strategies for exploitation of the natural environment as a reaction to its wanton depletion, ever more complete rationalization and concentration of the species of animal and plant bred and cultivated as an avoidance of the need for the equitable distribution of sustenance, and ever more fundamental and ubiquitous contamination of water and atmosphere as aspects of the refusal to admit to our wastefulness.

During the century of American leadership the agents principally responsible for this rush towards disaster, this mad spiral for more capital accumulation, more production, and more consumption, regardless of real human needs, have been corporations, especially corporations originating in the United States. 18 The response of artists, including composers, has generally been to hold aloof from direct involvement with the corporate economy: either to withdraw into a refined and perfect world of the imagination or to criticize from a safe and distant vantage point above and far from the fray. Hypocritically, at the same time composers have solicited the direct (but not personal) support of corporate donations committees or have sought subvention at arm's-length from the quotidian economy from a tax base which is principally provided by the corporations. What they have failed to acknowledge through these stances is that corporate management, like all vocations, is comprised of human beings with a dual creative and

In addition, composers have largely overlooked the accumulating evidence that individuals in other political and vocational groups are universally of the same dualistic nature, and that they are quick to manifest this when given the opportunity. Labour unions, socialist political parties, fundamentalist religious movements, and military autocracies, when given the upper hand by circumstance, have all proved highly susceptible to the same diseases of power-lust and materialism.

Above all, they have not come to grips with the fundamental truth of their own economic position: North American concert composers, as members of a vocation adjunct to an elite, are directly and indirectly in the keep of corporations. For this reason they have been seduced by the elitist mythology of musical Camelot which encourages them to take from the surplus wealth of modern corporate society while avoiding the responsibility to live in it, to change it by working within it.

However, by this point, it has become clear that vital, critical, musical art cannot live outside of the society which it hopes to improve, nor can it have any effect in the abstract. Composers can no longer allow themselves the illusion that they are genius-titans with pearls to throw before swine. They must abandon their dusty pedestals to the academics; they must step down into the marketplace to work alongside all of the people; they must work in small ways, quiet ways, and humble ways, the only ways in which things are ever really accomplished.<sup>19</sup>

As it stands, as participants in the evolution of the ideology and practise of humanism, North American concert composers have been out-paced by events. Leading composers of the early nineteenth century-Beethoven, Mendelssohn, Chopin and Schumann, for example—were humanists for whom humanism was ins, pickled in formaldehyde inside the mausoleum of musicology, they have been made into oversimplified caricatures, as one-dimensional as they are exaggerated, of what they really were in life (i.e., struggling human beings like the rest of us), in this aspect the mythological characterization of these genius-titans can be accepted as accurate. Such composers of the early "Romantic Period" truly were at the forefront of intellectual and creative currents of their day for which the betterment of all humanity was a special and keenly felt objective. However, in this historical period, the newly developing contradiction between the support of these individuals by aristocratic and bourgeois elites, and the democratic and egalitarian implications of the ideological movements they in turn supported, was still sufficiently masked that these composers were with integrity able to enjoy the best of two opposing worlds. However, over the course of the nineteenth and twentieth centuries this equivocal position of concert music composers became increasingly difficult to maintain. While the humanist core of intention remained largely intact, with increasing frequency it was necessary for composers to condition and qualify their views in order not to jeopardize elite financial support. During the same period, and especially with the transplantation of concert music to

North America, the old elite which had acted as social broker on behalf of concert music gradually was supplanted by the new elites of commerce and industry whose activities were much more strictly confined to their specialized vocational responsibilities. As a result, composers of new concert music were increasingly isolated within society, yet they nonetheless refused to abandon their self-perception as a superior class of human beings worthy of the continuation of their traditional special status. Ultimately, at worst, the embracing humanism of the early nineteenth century gave place to to a cynical, bitter, mean-spirited condescension to other orders of society, for example, on the part of Schoenberg, Webern, and Babbitt.20 Over the course of the last forty years, with equal measures of cynicism and bittersweet, the estrangement of concert music has been accepted by composers as the permanent natural order of things and institutionalized within our arts councils and universities.

As we approach the new millenium, it appears that humanity in general is entering a period of intensive reflection; a distinguishing feature of this is a widespread willingness to entertain previously excluded possibilities in order to come to grips in a way more fundamental than heretofore with matters which threaten the extinction of the human race. In all parts of the globe we hear new cries quite out of character with recent historical contexts, "abertura", "solidarity", "glasnost", "free trade", along with a revival of an old cry in new places, "democracy". The peoples of the world are demanding that the promise offered, first by North American and then by French democracy, be taken literally at its word: there is a general interest from the grass-roots up in global cosmopolitanism, a new acceptance of the value to humanity in differentness and in the equality of differentness. However, atypically in human history, these cries are not being made by or to heroes and demagoques, in fact are occurring within a climate of general skepticism concerning entrenched leadership everywhere. The promise of human betterment is no longer the property of heroic national saviours historically predestined to rise to great occasions, of clever intellectual giants from ivy-covered learning institutions whose wisdom receives overdue recognition at the eleventh hour, or of artistic geniuses whose masterpieces finally illumine in complete resplendent perfection the road to the New Jerusalem. It now arises from the daily experience of everyman and everywoman who have grown weary of the fruitless grand schemes of great leaders and are deciding to take matters into their own hands.

It is to this spirit that composers, together with their fellow musicians and artists of other disciplines, must now respond. They must humbly understand that they are responding, not leading. They must accept the insight that the face of human goodness is banal; if this comes dear to the exceptional nature and status of art, then it is a price worth paying. They must abandon the demagoguery of their concepts, take the quiet middle way, accept their real context as their material. They must give way to the feminine side of the creative character, to transform the objective world through the face-less nurturing of what is accepted.

To do this composers must move into society, which means in large part to struggle from inside the postindustrial market economy. This does not mean to surrender to reckless laissez-faire materialism; this means simply to work with what there is. Concert music composers must learn to act in concert with humanity. Such an attitude requires that there no longer be any room in concert music, as there is no longer room elsewhere, for privilege, for special treatment of exceptional classes of beings, for secret decisions made in bureaucratic boardrooms, for manipulation and intrigue as the cornerstones of decision-making. There is of course a great danger of material seduction and co-option in moving from the institutional sanctuaries of concert music: however, composers are far worse off continuing to live with their illusions inside them. Composers must work to transform their councils from agencies for composers to agencies for society. They must leave off the academy altogether as an institution where the accumulated weight of vested interest has rendered it utterly hopeless of reformation.21

In the new age of reflection concert music does have something of special value to offer to society, especially in North America where thought is so greatly undermined by material diversions. The very essence of the composer's art is extended reflection. A terrain they know well, composers can help their fellow citizens to find their way through it.



# Footnotes

1 This term is almost as inaccurate, equally as awkward.

and easily as pompous, as the term "classical" music for which it is intended as an updated improvement. Music so designated generally has some more or less explicit connection with tradition stemming from the elite music of royal Europe and depends to a greater or lesser degree on extraordinary public or corporate funding for its realization. In recent years the latter qualification has come to count for much more than the former. Although it is intended that much of this music should receive at least one public performance before a live audience, inclusion in the category is not necessarily conditional upon a live concert. At the same time, self-evidently, much music which is performed in concert situations is excluded from the category on other grounds.

2 I admit that it is somewhat circular to centre speculation on the current state of the musical art in an area which has become so esoteric as contemporary concert music. This centrality of concert music is only a reflection of the occupation and professional life's-experience of the author, upon whom, indeed, other contemporary musics have been highly influential. Nonetheless, in its unusually reflective, critical and self-critical nature I find that concert music has something of potential great value to offer contemporary society which is generally lacking in other musics; in the twilight vears of the twentieth century, American civilization and world civilization are clearly entering a period of reassessment. However, many of these other musics are ubiquitously more available than concert music precisely because they are more in tune with the technology and socio-economic infrastructures of our own age and continent. In a pluralistic society where music has many valuable functions it would be presumptuous to suggest that concert music should be re-instated at the cultural apex.

3 My interest in style in this article is generally an indirect one. Although I do not mean to imply a one-way causal relationship between economic foundation and cultural superstructure, my remarks here intentionally emphasize the reactive nature of style as an outer manifestation of political and economic circumstances. Nevertheless, because neoromanticism is a major aesthetic movement in concert music in the last quarter of this century which is motivated by an agenda for popular accessibility, my remarks at this point reflect a concern with style which does not continue in the sequel.

4 In this connection, only the widespread adoption by concert music composers of digital devices as ubiquitous working tools and the feminization of the profession of composition and of concert music generally are developments of comparable importance whose ultimate consequences will transform the nature of concert music in the twenty-first century.

5 This interest included two new productions in 1988, in Toronto and San Francisco, of his highly political opera, Lady Macbeth of Mtsensk.

6 The careers of such composers are, however, much less independent of the politics of commissioning and concert programming.

7 There are a small number of exceptions to this zoological characterization, a few of whom I have had the pleasure of knowing personally (R.S. Beckwith for the longest time). In the face of the overwhelmingly parasitic nature of their professions I hope that these individuals will take the generalization as a foil for the extra measure of respect in which they are therefore held.

8 For the music of Beethoven and subsequent composers of the ninetheenth century the scheme has been adapted somewhat. In conformity with developments in the economies of Europe generally, the vocation of the composer became more precarious under conditions of market capitalism than it had been under those of feudal-aristocratic agrarianism. Some composers, blessed by luck and entrepreneurial personalities, did very well by the change of conditions. However, it became easier for others to fall between the cracks, no longer with the benefit of the social safety-net inherent in feudal relationships. It happened with increasing frequency during the nineteenth century that, after perishing from a lifetime of abject misery, a composer would be recognized only after his/her demise. In order to accommodate this change in circumstances for the post-Napoleonic era. present-day commentators append the complication of a time-lag by which a requirement for genius is that it be ahead of its time. This does not compromise the supposed universality of the composer's intentions but merely presumes a somewhat greater degree of self-confidence on his/her part when he/she puts his/her ear to the rail. Curiously, while it is generally alleged that the pace of human achievement has been accelerating through the past two centuries, in this one area of endeavour the time-lag between creative assertion and recognition has been growing progressively longer.

9 "Other artists" in this case may include a substantial proportion of students in forced attendance through the necessity to submit concert reports in accordance with the requirements of their academic courses.

10 It in fact remains something of a mystery to me precisely how arts council juries are selected in Canada and the province of Ontario. None of the composers whom I queried on the subject had much of an idea either. The procedure would seem to be relatively informal, at the discretion of arts council officers, who must only be assured that the individuals chosen have politically unassailable professional reputations. As it was explained to me by a council insider, the situation is more complicated than it sounds. Composers with a good batting average at landing commissions are frequently too busy with their projects and with the other activities, principally academic positions, on the basis of

which their credibility is established, to sit on the juries. This means that much of the deciding is actually done by composers who are at the stage in their careers of just breaking into the game, who get the occasional commission but, relatively speaking, have some time on their hands and could use the stipend. This is precisely the stage of career where charges of political favouritism are most likely to be leveled. Nonetheless, somehow it all gets worked out.

11 In both of the cases cited, the agents of the councils in practise often intentionally "break their cover" out of distaste for the clandestine nature of their employment. While the motivations for such a recourse are laudable, a new difficulty is thereby introduced: namely, the possibility of an exchange of favours is thereby increased, further undermining the already highly questionable objectivity of the institution. See below.

12 In the subvention of concert music generally, taking into account all of the activities and musical styles supported, there is much greater congruence. It is unlikely that the population, if consulted, would favour continuation of the extreme bias to "classical" music. Nonetheless, within the area of "classical" music, the skewing in favour of the historical repertoire shown by the proportionate awards of the arts councils is paralleled by the preferences of the public.

13 I was introduced to the nation of taboos in concert music by the American composer, Morton Feldman. As he explained it, the taboo is not something which is proscribed by the profession as a lapse in good taste or aesthetic judgement on the part of the composer. Neither is it a matter of technical error, a piece of evidence that a composer has not mastered his/her craft. A taboo may well prevent a composer from making a musical decision which conforms with his/her best aesthetic instincts and craftspersonly skill. Rather taboos are forbidden fruits through the abstention from which the wise old men and women of the profession, the inner circle, may recognize one another. They are a subtle kind of regulation, often involving only the extent to which a certain ingredient can have its way in a musical work. In aesthetic terms they are merely aspects of fashion, yet even as such can strongly effect a composer's professional well-being as a member of the club to an extent completely out of proportion to their intellectual substance.

14 The area of intersection between commercial music and concert music is therefore a high risk area. It therefore tends to attract today the daredevils of the emerging generation of composers, for example, Scott Johnson and John Oswald.

15 This comment applies both to the performance of the historical repertoire of royal Europe and to concert music freshly composed by living North Americans. However, of these two categories it is the former which is especially wasteful as it is labour-intensive and inherently unsuited to the contemporary technology and marketing structure for product distribution. To be fair, a minority of the latter are actually at the forefront in the exploitation of efficient technologies of production and cost-effective distribution strategies tailored to targeted market segments.

16 In contrast, the concert musician's counterparts in the visual arts have never put much stock in this attitude. The objective tangibility of the artifacts in this discipline are inherently congenial to commoditization and possess, in addition, the unique advantage of spatial specificity; although as a rule they are fairly portable, they otherwise possess all the speculative advantages of real estate.

17 A slight to the contribution of academic research institutions to musical technology is not intended. While a great deal of public money has been wasted inside these facilities in translating nursery language from an acoustic to a synthetic idiom, it is equally true on a comparative basis that good value has been given for research funding of instrument development which has ubiquitously affected the sonic environment of North America. Private and public research facilities alike for electronic and digital music have been, in cooperation with commercial performers, the incubators for instrument development in the absence of interest on the part of concert music performers. However, on account of the same disinterest of concert music performers, only in commercial music has it been possible to market-test the new technologies to ascertain their habitability by human beings. When popular musicians have complained about the inhumanity of specific innovations the prototypes, like many of le Corbusier's experiments in architecture, have been over-hauled or abandoned.

18 Nonetheless, though not by intention, the corporations have contributed enormously to meeting many real human needs, particularly material needs, on an unprecedented and previously inconceivable scale, both in North America and also throughout the world.

19 Within the North American context, this is a particularly English-Canadian point of view.

20 Schoenberg's Society for the Private Audition of Music, Webern's initial open admiration for the Nazi Party, and Babbitt's "Who Cares If You Listen" article are extreme illustrations. To repeat, it is to be emphasized that this accompanied an opposing and paradoxical continuation and amplification of the longing among composers, including all of the composers here cited, for universal humanistic reconciliation.

21 This statement, as far as I can determine, applies uniquely to the *musical* academy.

**Stuart Shepherd** is a composer based in Toronto, Ontario. His recently released recording, *Birthday Music* is available from: S A du nord, 166 Beaconsfield Ave., Toronto M6J 3J6, Canada.

## announcements

Opportunities for artists.

Robert Godin of Soundarts Press tells us that he is starting a new magazine called PT, for Performance Text. Robert would like to hear from text artists who wish to submit pieces for publication. Write him c/o Soundarts Press Editions, P.O. Box 2463, Springfield, MA, USA, 01101-2463.

Performance artists are being offered support by New York City's Franklin Furnace, "the last Word in Museums". The Furnace is currently accepting applications for both grants and performance opportunities at the Furnace, which range between \$2000.00 and \$5000.00. The same application can be sent for both opportunities: a résumé, 50-word description of the proposed piece, a video (1/2" VHS) or slides, press clippings, any other support material and an SASE. Those applying for grants should include a budget and must be prepared to perform the piece created in New York State. Write to the Franklin Furnace, 112 Franklin St., New York, NY, 10013, for details. Telephone: 212-925-4671.

Michele Greci writes that after a year of intensive work he is able to "present the new GRECI' guitar, in which the characteristics and the conception of the first instrument are normously improved . . ." An acoustic guitar with a great deal more power and sound duration than traditional guitars as well as being better designed in many features, the GRECI guitar may be of interest to performers on this trument. Michele Greci can be reached at 00185 ROME, Via Bixio No. 91, ITALY

Those interested in exploring non-human sound making can contact two organizations we found out about from Experimental Musical Instruments. The Nature Sounds Society organizes a wide range of activities and publishes a newsletter. They can be reached by writing The Nature Sounds Society, Natural Sciences Dept., The Oakland Museum, 1000 Oak St., Oakland, California, USA 94607.

A British academic journal, Bioacoustics: The International Journal of Animal Sound and its Recording has recently begun publishing.

Inquiries should be sent to ABA Academic Publishers, P.O. Box 97, Berkhamsted, Herts HP4 2PX, England.

The first issue of Electronic Cottage International Magazine is to appear in March, 1989, The magazine's areas of coverage include home tapers and cassette culture, electronic audio folk art, experimental/avant-garde music and networking. For more information, write to Electronic Cottage, P.O. Box 3637, Apollo Beach, Florida, USA 33570.

MUSICWORKS would like to extend its congratulations to Cecil Taylor, Sylvia Smith and Smith Publications and Peter Garland and Soundings Press who were awarded the American Music Center's Letters of Distinction on December 22 in New York.

British Columbia composers, or composers who have resided in British Columbia for at least one year, may enter the Vancouver New Music Society Competition for Young Composers in British Columbia, 1989/90. Open to nposers 30 years old or young, the competition is biannual. For information and application forms, please write the Vancouver New

respondence with others. With your participation this should be the start of many exciting exchanges! Please send us your networking

## new releases

With this issue of MUSICWORKS a new feature is inaugurated, in which we invite all our readers to participate. We are offering a free listing of new releases: books and recordings of interest to MUSICWORKS readers. To have your items listed, simply send us the relevant

Preventing Physical Problem in Violin Playing: A Guide for Teachers by Vic Pomer. Canadian price is \$13.75 plus \$1.00 handling; US dollars \$12.00 plus \$1.00 handling. Overseas orders add US \$2.75 handling charges. Available from University of Ottawa, Department of Music, 50 University Priv., Ottawa, Ontario, Canada, K1N

1988 Song Writer's Market: Where and How to Market Your Songs, ed. by Julie Wesling Whaley. Publisher, F&W Publications, 1507 Dana Ave., Cincinnati, Ohio, USA 45207.

Gordana Lazarevich, The Musical World of Frances James and Murray Adaskin, University of Toronto Press, \$37.50 cloth.

Ragas for Guitar, six authentic East Indian ragas transcribed, adapted and arranged by Michael Kleniec. Previously unavailable in western notation. Available from Gamelon Music Publications, P.O. Box 525, Stn. "P" Toronto, Ontario, Canada, M5S 2T1, for \$10.00 plus \$2.00 shipping charges.

By Michael Repoulis, a series of works for solo guitar incorporating Baroque and 19th-century motifs with contemporary jazz rhythms. For ordering information, please write Sunrise Publications, 345 Adelaide St. W., Suite 204, Toronto, Ontario, M5V 1R5.

from Centrediscs, the label of the Canadian Music Centre, an album in the chamber music idiom for varied instruments by Jean Papineau-Couture, called simply "Jean Papineau-Couture." "Shadowbox" is an album of electronic compositions by Chan Ka Nin, David Jaeger, Larry Lake, Denis Lorrain and Pierre Trochu. "Masquerade" brings together three wind octet works, by Malcolm Forsyth, Gary Kulesha and R. Murray Schafer . Each piece features a different solo instrument: bass clarinet, horn and harpsichord. Orchestral ic of contemporary Quebec composers Michel Longtin, John Rea and Claude Vivier is played by the Orchestre Métropolitain on the album of the same name. Walter Boudreau conducts. Ten works for a capella choir and choir with instrumental accompaniment make up the album "Due North". All compositions are by British Columbia's Stephen Chatman. For more information write the Canadian Music Centre Distribution Service, 20 St. Joseph St., Toronto, Ontario, M4Y 1J9. Music for justly intonated NED Synclavier dig-

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# correspondence

## diffusion! a personal view alan belkin

held its annual meeting at the Music Gallery from September 8-11, 1988. Approximately 100 composers from across the country talked, played and listened to each other's music for

four intense days. I was present at all of the concerts and some of the talks and the following represents my personal reaction to the event. (Thus my selection of what to discuss here reflects only some of what interests me; I don't pretend to be

The best part of such an event, to me, is meeting and talking to other composers about what they are doing, as well as hearing a lot of music that is very different from my own. This forces me to confront and clarify what I like or dislike about other people's music and thinking, and thus helps me to learn. The music I end up liking may have little or no obvious resemblance to my own style—which can facilitate learning from it (less danger of imitation). I think the "community" art of our group's name is important here: a community is a friendly association of equals, where the members can benefit each other

Members of the CEC gave talks, on subjects such as:

-learning from failure in multi-media works: the need for slow, patient experimentation to find the way in this very new area (Claude Schryer)

-the importance of campus/community radio for diffusion of electroacoustic music (David Olds)

-some thoughts on sound installations in public places: a whimsical, and not-sowhimsical proposal for an Institute of Musico-Acoustic Design (Charles de Mestral)

-the diffusion (or better, the "projection") of electroacoustic works in performance, developing the idea (now widely accepted in France, but not much seen elsewhere) of playing the work over an orchestra of loudspeakers, and making the presentation of the works in space an integral part of the composition

-the McGill MIDI tool kit-software for allowing the computer to take part in a live generating music (Bruce Pennycook)

-granular synthesis (Barry Truax) -studio reports from a number of institutions -the current state of computer music copy-

ing (Elma Miller) In the concerts, some works I found of particular interest were:

-Istvan Anhalt's Birds and Bells, composed in 1960, using sine tones, a work meant to evoke the sense of exultation the composer experienced at the end of World War II in Hun-

gary. The work exhibits a lot of interesting detail quite difficult to achieve using the technology of the time -Diana McIntosh's Eliptosonics, a very amusing takeoff on the kind of piece, quite common in contemporary music concerts, where the analysis in the program notes is so

imposing—and incomprehensible—that it

dwarfs the effect of the music itself. Including

acting piano and slides. Eliptosonics is struc-

tured as a sort of crescendo of verbal preten-

tiousness and obscurity, ending with slides of

The Canadian Electroacoustic Community the composer topsy-turvy, buried in paper over her piano.

-David Keane's Lumina, a multimedia work for tape, tenor, and slides. Against beautiful and colourful images, often of stained glass, an intense melodic line evolves. The tape accompaniment is made up of intriguing origi nal sounds. The composer has obviously paid a great deal of attention to harmony and to finding a convincing overall shape for the

-Elliot Freedman's Reflections on a Metal Sea, a sensitive composition formed of wavelike phrases mixing harmonic and nonharmonic sounds. Again, a careful attention to harmony made this piece stand out for me.

-Brent Holland's The End of the Wharf, where two television monitors displayed evocative images that suggested natural marine shapes without often becoming completely definite. The music complemented the images with attractive "water music"

-Gustav Ciamaga's On Hearing the First Koto in Spring, a quiet, elegant piece using definite pitches (one of the few works to do so pitch, it seems, is "out") and serially ordered melodic lines played in a koto-like timbre and set against a very reverberant background. Occasionally other bell-like sounds complement the "koto". Cadences are clearly marked; the work breathes convincingly. I enjoyed the nplicity and expressive directness of the work. It made its effect by being coherent, sensitive, and aurally appealing.

. mourir un peu, Itinéraire / by Francis Dhomont which is, the composer tells us, "about departure . . . and escape". The three movements of the work that were played at the CEC conference were dramatic, at times nostalgic, and formally very well constructed. Using generally unpitched materials, Dhomont manages to bring together varied sounds into an emotionally meaningful whole. The work demands (and received) a virtuoso performance at the console by the composer.

-Fantaisie by Yves Daoust, a nostalgic tour of old Radio Canada tapes going back fifty years. It is a well-organized collage of all kinds of material bringing together humour, senti-The usual tape treatments—speeding up, splicing and so on-are used deftly with a

good sense of their musical appropriateness. -David Rokeby and Daniel Scheidt presented works which use the computer live to generate sound in response to a performer. This exciting new area has much potential.

Finally, some general reactions: 1) Pieces which remain very loud for a long time leave me feeling desensitized.

2) The average length of the pieces played was about twenty minutes. I find that unarticulated, long, continuous pieces, and works that rely essentially on loops, bore me very fast. In music, twenty minutes is a long time and a work needs a lot of development and variety if it is to satisfy me. (Obviously, I don't have an affinity

for minimal music.) 3) Only two works featured humour prominently (McIntosh and Daoust). These works were welcome relief in (very long) concerts. I would like to hear more such pieces in future. Too much seriousness—at times, pretentiousness—gets tiring in a musical

marathon like this weekend. Finally, I want to reiterate my feeling that the social aspect of these meetings is vital. I look forward to the excitement and variety of next year's CEC meeting.

## electroacoustic community spirit: an observation chris meloche

During the weekend of September 8 through ne 11th, something unique took place at the Music Gallery in Toronto. It was a meeting of a group called the Canadian Electroacoustic

mmunity or CEC for short. Meetings, as such, are usually not unique, out this one was special. It brought together a group of people with the common goal of exposing electroacoustic music to a much vider audience. The people who they are empting to reach are not only situated oss Canada's vast expanse, but also spread

The world of electroacoustic music may still be alien to many listeners, but it is creeping nto the consciousness of great numbers of people around the world. The Canadian Electroacoustic Community is an organization dedicated to bringing the diverse persons nvolved in the electroacoustic scene across Canada together under one large umbrella. The umbrella covers people who work fulltime and part-time in this field as well as those who work in universities (or other institutions)

and independent musicians I have belonged to the CEC for about two years and I have found it quite stimulating to be a part of this organization. I have received their newsletters and responded to surveys, paid membership dues . . . all of those nice things that one associates with belonging to an organization or a club. It was not, however, until I attended the "Diffusion! CEC Electroacoustic Days" 1988 meeting/conference/ concert series I could truly say that I felt like

part of a "community" Suddenly, I found myself among 150 people who had many common interests. Suddenly, my musical tastes did not seem like they were rom some alien galaxy. Suddenly, I came face-to-face with so many people whose names I had seen in print over the years. Suddenly I felt like I was smack dab in the middle of a "community" where I belonged. Basing myself in the city of London, Ontario does seem to generate a feeling of isolation sometimes. While I do get very good response to my music and very pleasing turnouts to my concerts, there has always been a bit of a void in he area of people who actually "produce" this

type of music locally. The CEC event was, indeed, a strange experience for me! I am quite used to feeling like an outsider when it comes to large social occasions, but now the situation was different. I was constantly walking up to people, staring at their name tags and saying, "Pleased to meet you!" And what's even stranger was that I was pleased to meet them. It wasn't some sort of shallow cocktail party introduction. One could genuinely feel quite excited about being around such a stimulating circle of musical

While I was certainly pleased to be surrounded by this group of people, I must admit that I felt a bit of a paradox. It seemed as though many of the participants were members of institutions and (perhaps unconsciously) seemed to put across the idea that this type of music can only be produced by people that are part of an institutional music program. I think that this a dangerous idea to perpetuate! From a personal point of view, I

sometimes felt as though I were a part of a "sub-community" of electroacoustic composers who work independently in a private studio and were probably considered "less serious" for not having an institutional connection.

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We deeply regret the passing of poet and writer

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write a memorial article discussing bp Nichol's

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While I am not connected with a university music department, I find that this does not hinder my ability to create electroacoustic compositions. I may not have a Synclavier or a Fairlight or a 24-track recorder, but I have a well-equipped private studio that allows me to carry out my personal composing and recording tasks. In fact, I believe that the type of environment that I choose to work in can actually be much better for the creative nature of electroacoustic composition. Working with 4 or even 2 tracks can teach a discipline that does not develop when one can record on 24

And now on to the festivities . . . The weekend of activities consisted of the presentation of more than a dozen papers whose subjects ranged from "computer composition" to "how one gets music played on the radio". The evenings were packed full of music with one concert on Thursday evening and two concerts on both Friday and Saturday.

The music that was played was as diverse as the papers that were presented. Although it could be a somewhat trying experience to sit through many neural barrages in a row, I was certainly glad to be able to take in such a wide offering of so many different styles of electronic/acoustic offerings.

This event had an international flavour. It was difficult to believe that this was a conference that encompassed only the works of people currently working in Canada. I guess that we tend to underestimate ourselves in many areas. This weekend certainly proved to all involved that Canada can hold its own in many respects, not the least being the amalgamation of music and technology.

During the last day of the proceedings we learned that the Canada Council will provide funds that would allow the Canadian Electroacoustic Community and the Canadian Music Centre to collaborate on the archiving of Canadian electroacoustic works in the form of DAT tapes to be dubbed from original master

The next major CEC event, "Convergence", will take place in Banff, Alberta in November, 1989. I hope that the atmosphere surrounding those proceedings will be as positive as that generated by "Diffusion" at the Music Gallery.

Congratulations to all of those involved with organizing this event, especially Jean-François Denis (CEC president), Myke Roy (CEC vice-president) Robert Normandeau and to all of the many people involved in the selection process for the music and papers. Without the efforts of these people, this "community spirit" would not have materialized.

Chris Meloche is a composer who uses electroacoustic media, based in London, Ontario.

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The title of this issue, Equal Opportunity, besides being an appropriation of the working title of Paul Rapoport's article "Equal Opportunity for Equal Temperaments", implies discussion of political music and musical politics, a questioning of the musical status quo. In varying degrees of subtlety this theme applies to protest music and the design of unique musical instruments. Each article deals with some method by which people are taking control of their music: financially, in the provision of low cost music systems; theoretically, in the creation of personal compositional strategies; or socially, in general speculations about the place of concert music in contemporary culture.

#### in this issue

- Is This Good for Canada? Murray Adaskin interviewed by Gayle Young on the occasion of the Adaskin Years Festival in Victoria, BC, March, 1988.
- Freedom is Rising Popular Black Music in South Africa, by Lucie Edwards. Observations by a Canadian living in South Africa.
- The Political Economy of Concert Music in North America, by Stuart Shepherd.
   Observations by a composer of concert music.
- Some Equal Temperaments are More Equal than Others and Decidedly More Temperamental by Paul Rapoport. A discussion of compositional approaches to divisions of the octave into more than twelve tones.
- When the Sound Has a Form of its Own by Hugh Le Caine. Speculations on the use of pre-recorded sound objects in composition.
- Midi Chamber Music by Alan Belkin. A description of the use of MIDI systems in the composition Labyrinth.
- Affinity Groups by Jim Montgomery. A computer program that generates compositions using affordable equipment.

#### on the cassette

- Affinity Groups by James Montgomery
- Night Labyrinth by Alan Belkin
- Birthday Music by Stu Shepherd
- Etudes by Easley Blackwood and songs by Paul Rapoport
- Invocation and other selections by Hugh Le Caine

#### upcoming

- Paul Dutton writes about the contributions of bp Nichol in relation to music and electroacoustic composition.
- Kathy Kennedy describes outdoor music events by R. Murray Schafer.
- Tina Pearson discusses her work for voice, flute and movement.
- Wende Bartley writes about Bulgarian women's choral music.
- Helen Hall discusses the music of percussionist Fast Forward.
- Wende Bartley interviews Laurie Clarke about the process of the piece she performed at the Newfoundland Sound Symposium.
- Trevor Wishart describes his work in sonic arts, using mouth, hands, lips and other body-generated sounds.

