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The aims of the Institute

A small number of pianola owners and musicians have been concerned for some time at the unnatural break between the world of music rolls and the world of music. Few members of the musical public know much about player pianos, and the Institute aims to bring about a better understanding and appreciation of the instrument in a number of ways.

Plans have been made for a regular journal, public concerts, a lending library of rolls, a travelling exhibition, and in addition, a roll and information archive is to be established, with a small collection of player pianos for listening and study purposes.

The Pianola Institute will endeavour to preserve, research and document the pianola's history, to improve the instrument's present standing, and by the commissioning of new compositions, to ensure that it remains an important musical force for the future.

The Directors of the Institute are:

Louis Cyr, Keith Daniels, Mike Davies, Denis Hall, Rex Lawson, Donna McDonald. Company Secretary: Claire L'Enfant.

The Patron of the Institute is Conlon Nancarrow.

It is possible to support the work of the Institute by joining the Friends of the Pianola Institute. Membership enquiries should be sent to Mike Davies, 9 Jillian Close, Chestnut Avenue, Hampton, Middlesex, England.

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Editorial

Hugo Cole, whose obituary follows this editorial, was a staunch ally of the pianola. He was the only member of the London music critics' circle who knew about player pianos, and he kept a shrewd eye on the Pianola Institute throughout its first decade. We are very sorry to lose his presence, but thankful for his memory, which will continue to inspire us in the same gentle way that Hugo himself did for so many years. We send our sympathy to his wife and family.

At times it can be quite awesome to contemplate the wealth of knowledge that is lost through the mortality of our species. Denis Hall's article on reproducing pianos quotes two excerpts from the writings of the late Harold Bauer, touching the merest tip of a Duo-Art iceberg – how the various Aeolian specialists in Britain and America differed in their approach to the finest details of their pianos. This subject is almost completely undocumented.

Indeed, every aspect of player piano history is imbued with a wealth of unrecorded human experience. Countless teams of piano technicians, design engineers and musical editors must have exchanged encyclopaedic amounts of pianola lore that never found its way into print. Harold Bauer's allusions to the Duo-Art are but one tiny example of this lost world. Stravinsky's arrangements for the Pleyela are shrouded in the same historical brouillard, as Louis Cyr finds in his CD review of the *Rite of Spring*. Had Igor worked at some distance from Paris, he might perhaps have left some correspondence on the subject, but instead he rented an apartment in Pleyel's factory, and like the niceties of the Duo-Art, his instructions were all transmitted by word of mouth. In London the history of the pianola was handed down over cups of tea in New Bond Street; in Paris over a bottle or two of champagne in the rue Rochechouart.

To some small degree one can read between the lines of existing literature to help discover a few hidden truths. Edward Schaaf's compendium for would-be roll arrangers implies different attitudes to the foot-operated player piano between the Home Counties of England and the suburbs of New Jersey, where the American style of non-Themodist 'pumper' was prevalent, a contrast not directly noted in literature of the time.

These days we try to be a little more objective, as Bill Vince's comprehensive report on the Huddersfield Pianola Project testifies. But although we document our contemporary scene as carefully as possible, the challenges presented by, say, the transfer of articulated lorries to pianola roll, are sometimes difficult to explain in print.

The immediate future of the pianola in contemporary music looks better than it has for many years. Festivals in England and Germany have featured newly composed works, and Rex Lawson reports on an awakening interest in the USA, where Conlon Nancarrow's compatriots are beginning to hew out their own tracks through the Sierra Pianola. Conlon, our patron, has been ill for a while, and we send our best wishes and greetings to him and his wife.

If there is a lesson to be drawn from the disparate articles in this issue of the Pianola Journal, it is that such writings can only form a part of a greater truth. It is also important to share experiences in practical ways and by means of the spoken word. To this end we are particularly pleased that AMICA, the Automatic Musical Instrument Collectors' Association, is for the first time this year holding its annual convention outside North America, in Britain and in Holland. Members of the Pianola Institute are involved at all levels in this enterprise, which is perhaps the nearest equivalent in the 1990s of the factory apprentices' cups of tea in the 1920s.

One thing is certain: wherever pianolas and music rolls are to be found, some of their closest secrets will be hidden in many thousands of tiny little perforations.

Hugo Cole

The Pianola Journal records with regret the death on March 2, 1995 of Hugo Cole, a founder director of the Pianola Institute.

Hugo Cole was both a gentle man and a gentleman. He loved music and was consistently kind and courteous to those who loved it too. As a music critic for the *Guardian* and *Country Life*, his sharpest words were reserved for those who dishonoured the art by not performing as well as they could.

Born in London on July 6, 1917, Cole was the son of a well-to-do barrister whose success in matrimonial cases enabled his son to devote his life to music. At Winchester, he learned the horn and cello, but at King's College, Cambridge, he read natural science and spent a year researching the movement of cockroaches' legs. Simultaneously, he was a good enough cellist to freelance with the Hallé Orchestra and the D'Oyly Carte Opera Company.

A conscientious objector, he was rejected by the Friends Ambulance Unit during the Second World War because of his very considerable stammer and it was not until he began studying with an Alexander teacher that he achieved the body posture and relaxed control which enabled him to speak with clarity.

In 1944, having played the cello professionally for several years, Cole enrolled in the Royal College of Music in order, so he said, to learn to play the instrument properly. He also studied composition with Herbert Howells and spent two summers in Paris receiving tuition in composition from Nadia Boulanger.

In 1950, his first children's opera, *Asses' Ears*, was performed by Rokeby School in Wimbledon, south London. Five years later, *A Statue for the Mayor and Persephone* were given by students of Wimbledon High School. The music was tuneful and did not demand more than the children were capable of. His skill in writing both librettos and music for amateurs led to his winning an opera competition organised by the John Lewis Partnership Music Society. *The Tunnel* inaugurated the auditorium in the company's new Oxford Street store on October 24, 1960. It focussed on a railway disaster during Britain's railway building boom of the 1840s and was designed to show off the Music Society to best advantage. There were eighteen solo parts and a generous amount of work for the chorus.

Cole produced a total of five children's operas, including *Flax into Gold* (1957, first performed 1966), *The Falcon* (1968) and *The Fair Trader* (1971). He wrote a substantial amount of choral music in the 1950s and 1960s, including *A Company of Fools*, with a text by James Kirkup, and *Of the Nativity of Christ*, with words by the fifteenth century Scottish poet, William Dunbar. His

last piece of chamber music was *Winter Meetings* (1975).

Just as he discovered that he preferred composing to performing, so Cole later discovered that he preferred writing to composing. In 1964, he became the music critic for the *Guardian* where his reviews were notable for their astuteness, for the breadth of knowledge which they unostentatiously displayed, and for his sympathy with the difficulties faced by both composers and performers. In later years, he always intended to give up his music page in *Country Life* but, happily for his readers, never managed to do so. His newspaper colleagues remember him affectionately as a modest and unassuming man who rode his bicycle to concerts whenever he could.

Cole was the author of four quite different books, including *Sounds and Signs* (1975), a study of modern notation, *The Changing Face of Music* (1978), and a biography of Malcolm Arnold (1989), a composer whom he greatly admired.

He leaves a wife, Gwynneth, whom he married in 1949, two daughters and five grandchildren.

Whose Fingers on what Piano?

Denis Hall

A criticism sometimes levelled at the use of reproducing pianos to recreate performances of many years ago is that the piano played by the pianist is not the same as the one on which the piano roll record is replayed, and that the acoustic of the recording studio cannot be the same as the room or concert hall in which the reproducing piano is playing. Since any pianist will respond both to the instrument and the environment in which he is playing, then by their very nature, reproducing pianos and their recordings must be fundamentally flawed in their attempts to 're-enact the artist', the phrase used by Ampico in the 1920s. This article will concentrate solely on this topic and will deliberately ignore other strengths and weaknesses of piano roll recordings.

There is undoubtedly something in this criticism, but a deal less than the detractors of the reproducing piano would have us believe. That fine English pianist, Harold Bauer, wrote in his autobiography *Harold Bauer – His Book* in 1948:

"I spent many hours in the offices (of the Aeolian Company) editing and correcting the paper rolls on which my performances had been mechanically recorded for the pianola, later electrified and re-named the Duo-Art.

"I made from first to last some two hundred records, taking infinite pains in the editing that was essential to their completion.

"The final result was always somewhat discouraging in spite of all this trouble, for the reason that the dynamics, set to produce certain effects on the piano which was being used for such editorial purposes, varied when the record was played on another piano. This was due to minute differences in quality of tone and resistance within the action, and there was no way of overcoming the difficulty."

On a slightly different tack, but on the same related subject, he wrote in a letter to W. C. Woods, the American Duo-Art recording producer and editor, in 1922:

"I am very curious to see if I shall be able to do work which will be satisfactory for both Europe and America, for there of course is the difficulty which has been hitherto encountered. I was particularly struck by Cyril Scott's records, which he corrected in London and revised in New York. I heard the two rolls (of the same piece) and in my opinion there can be no question that, admitting the New York version to sound better in New York, the original London version undoubtedly sounds better in London.

"This is very curious and interesting and I shall try to examine very carefully

wherein this difference lies. One thing I have already noticed. In the regulation of the soft pedal, the hammers are brought closer to the strings than over here, so that soft pedal effects will produce more difference in New York than in London. I have examined a number of upright pianos and feel fairly sure that I am not mistaken, but it might be well for you to compare measurements. I shall let you know of anything further which strikes me. I am rather inclined to think that as public taste in piano tone here is different from prevailing standards in America, your dynamics will frequently prove too high to give best results on instruments regulated for the greater lightness and brilliancy which has always characterised European pianos."

These are the only such comments the author has come across by a recording artist, and they cannot be ignored. Nevertheless, Bauer made his first rolls for the Duo-Art reproducing piano in 1915 (5627 – *Etude* Op 10/12 – Chopin) and was active right up to the very late 7451 – *Etude Post.* Nos. 1 & 3 (Chopin) issued in 1932, so one may deduce that he was not as discouraged as all that. He was prepared to record the solo part only of Saint-Saens' Second Piano Concerto for the Duo-Art specifically for public performance with orchestra, hardly the act of an artist with no faith in the process. To put this roll recording activity into perspective, he did not start to make discs until Victor signed him up in 1924. From then until 1929, 12 double-sided 78 rpm records were issued, far fewer titles than of piano roll recordings.

The differences between the recording and reproducing pianos were not commented on publicly in the hey-day of the reproducing piano, hardly surprising when piano roll companies were commercial concerns out to make money. Nevertheless, if the whole process had not worked, we should not now have a legacy of more than 20,000 classical reproducing piano rolls left to us. The differences between the recording and play-back instruments were evidently not considered insurmountable to most pianists, including the very greatest.

The piano roll companies took steps to minimise the differences in two distinct ways. Firstly, they owned or had very close ties with certain makes of pianos. For recording purposes, Aeolian (Duo-Art) used Weber or Steinway pianos, Ampico the Mason and Hamlin, Chickering or Knabe, and Welte-Mignon in Germany, Feurich or Steinway. The instruments would obviously have been kept in first class order both as to the consistency of the touch and the voicing of the hammers. The makes listed were also the top brands to which the reproducing actions were fitted. This meant that there would be basic similarities in the recording and reproducing instruments, and before the latter left the factories, they would be regulated and voiced to respond in a known way to varying weights of touch reproduced in the rolls. Because the pianos were normally supplied for use in private houses, they were in most cases grands of 6' 6" or smaller, or uprights. The recording pianos seem to

have been medium sized grands, certainly not longer than 7', and there are contemporary pictures of large uprights being used for editing purposes. There were a very few even larger instruments manufactured for special purposes, so we do have evidence that the roll recording companies were not against fitting the reproducing actions to all sizes of pianos. There are Steinway and Weber concert grand Duo-Arts; the author has seen a Chickering 9' Ampico dating from the '20s, and Welte in their early days showed illustrations of a *vorsetzer* (cabinet reproducing player) attached to what is probably a Feurich concert grand.

In the way described above, then, it was possible to deduce that basic similarities existed between the recording and reproducing pianos. There would, however, still be slight differences in the response between individual instruments, and between the different models. An upright Weber would obviously have different characteristics for example from a 6' 6" Steinway model 'A' grand. This was recognised, and given the time, experience and skill, it is quite possible to 'fine-tune' or match a reproducing action to the piano in which it is installed. Edwin Welte, in a letter written in 1947 to Richard Simonton, an American Welte-Mignon specialist and enthusiast, deals specifically with this point:-

"A Welte-Mignon or any reproduction piano of musical value is no instrument for mass production. The finishing of every single instrument was of great importance. No two pianos are perfectly alike, not even the Steinway grands. The expression springs had to be carefully selected for each piano. This had to be done with the help of a test roll which contained all the movements of crescendo and forzando and the respective intensity of the touch. In Freiburg, Bockisch (Welte's brother in law) was watching it and in America, myself".

We do not have any similar contemporary writings for the Duo-Art although the facts are there to see in any piano which is still in its original state. The two springs on the regulators of the Duo-Art expression box come in a number of different strengths. Within a limited range, these springs determine the build-up of the dynamics from *pp* to the maximum loudness the reproducing action will play. American and English pianos are fitted with expression boxes which, while being the same in principle and compatible with each other, differ in their physical design. The maximum level is fixed in the American pianos by the setting of the levers connecting the accordeon dynamics to the knife valves, and in the English installations, where the relationship between the movement of the accordeon dynamics and the knife valves is preset, by the tension of the spring on the modulator between the suction pump and the player action.

Ampico, once they had settled down to installing what became their standard "A" action, which was the same for both upright and grand pianos,

issued quite specific regulating instructions which allowed for a degree of matching the performance of the player to the piano in terms of determining the level for *pp* playing and that for the loudest *ff* required.

What has survived in the way of criticism of the performance of



Label of demonstration 78 rpm record published by the Aeolian Company.

reproducing pianos from their hey-day is generally enthusiastic, as most of it is in the form of testimonials published by the roll companies. More objectively, there are five gramophone record sides made in the '20s and '30s of reproducing pianos. One is a demonstration record which the Aeolian Company in England made in the mid '20s of a Duo-Art piano playing Grieg's 'To Spring' played by Grainger. Through the dim, backward recording, one can hear a performance characterised by very smooth operation of the dynamic system, and the effects known to be on the roll are clearly being reproduced, although it is difficult to judge the overall dynamic level of the

piano. Then there are four 78 rpm sides of a Welte piano issued in 1934. The author has heard one of these, of Grieg playing his *Bridal Procession* Op. 19, No. 2, and it is one of the most impressive demonstrations of the Welte system he has come across. The piano (probably a Steinway 'O' grand) plays with a wide dynamic range, and the expression and pedalling sound completely natural. The roll may have been played slightly too fast on this disc, possibly to get the complete performance on the 78 rpm side. It is included in a Simax CD 3-disc set of historic performances of Grieg's music. Along with the 1934 recording of the Welte roll are two other performances of the same work – Grieg's own 1904 disc, and a modern recording of the Welte roll. The relative times quoted are:

Grieg 78 rpm disc	2' 54"
1934 Welte recording	2' 40"
Modern Welte recording	3' 11"

These two sources are the only examples of recordings of reproducing pianos made when they could have been prepared for the sessions as the manufacturers intended. While it may be hasty to form a general opinion from two short examples, these do confirm that the performances sound realistic as piano playing and the reproducing actions seem to suit the pianos in which they were fitted.

There is no contemporary evidence, apart from Harold Bauer's writings, of any serious criticism of roll recordings from the point of view of the differences between the recording and reproducing pianos placing any great shortcomings in the authenticity of the results.

The first occasion known to the author, where it was suggested that the difference between the recording and reproducing pianos might be a significant factor in the validity of piano roll recordings, was in a talk given in 1979 by the pianist, David Wilde. This was only one aspect in his overall condemnation of the reproducing piano. He played recordings of his own performances of the same composition on two occasions using different pianos which revealed differences so extreme that it seemed to the author they were more to do with the mood of the pianist on the particular day than very much with the physical differences of the pianos. In his dismissal of the reproducing piano, it should be noted, he used some extremely bad examples of recordings which he chose to assume were of correctly functioning instruments. Since that day, critics of the reproducing piano have continued to jump on this band wagon, that differences between the recording and reproducing instruments create a basic weakness in the medium.

How serious is this difference, and can it be eliminated, or at least reduced to the point where it becomes an insignificant factor?

Any piano, by its very nature, starts to deteriorate from the day it is made. The humidity and temperature of the room or hall in which it is kept may affect the soundboard; the more it is played, the greater will be the effect on the tone quality produced by worn hammers; the voicing which was so carefully applied to the hammers will be lost, altering the response to the pianist's touch. And if it is a player or reproducing piano, 75 years of exposure to the atmosphere will almost certainly have wreaked havoc with the player action. Before one can start to listen seriously to recorded rolls, then, the instrument has somehow to be restored as nearly as possible to its condition when new.

How is the technician undertaking the work to know what he is aiming at? Does the piano of the 1990s differ from that of the 1920s? There exists documentary evidence that the tone quality admired today is not the same as what was regarded as the norm 70 years ago, a view supported, among others, by Alfred Brendel who describes the old sound as "rounder". Pianos pre-war were not expected to be as loud as they are today. Steinways are on record as confirming this, that modern pianists ask for a more brilliant, louder tone, which they provide in their concert instruments. The point at which "brilliant" becomes "hard" or "clangy" or "strident" is very subjective, but it is a fact that pianos generally during the reproducing piano era were not expected to be as powerful or bright as the instruments of today. The author does not believe that even Harold Bauer's European pianos with their "greater lightness and brilliancy" would strike a listener today in that way. Gramophone records of pianos dating from the 1930s usually give a good idea of how fine concert grands of that time sounded, and even the Bechsteins, noted for their brilliance, have a warmth absent from many new instruments.

The restored reproducing piano, then, should be characterised by a full, warm tone. The voicing and regulation must enable a pianist to have good control when playing quietly, but nevertheless be able to produce a satisfying volume of sound of pleasing quality in loud passages. Since the reproducing action plays with the same power throughout the compass of the piano and cannot make allowances for irregularities as does a live pianist, it is necessary to ensure evenness in volume, as far as possible, from the extreme bass to the high treble. To this end, it was usual practice to voice the instruments softly in the bass, progressing evenly to a more brilliant treble to compensate for the greater power produced by the heavier, longer, bass strings. Given a fine instrument in the condition described, it should be possible to match a reproducing action to give something like the results envisaged by the recording pianist many years ago. What is involved in rebuilding and regulating a reproducing action is another subject, but it should be noted that the people who worked intimately with reproducing pianos when they were being developed and manufactured had musical discernment as well as

technical ability and the restorer of a reproducing piano must also have both qualities if the result is to be successful. The reproducing systems were scientifically designed, but there is an element of art in setting them up to play properly!

Given an instrument which functions more or less as it did when new, does it matter if it is an upright, or a small grand, or even a full sized concert model? The recording pianos were medium sized grands up to about 7' in length. While there is obviously a difference between a 7' instrument and one 9' long, the difference is not enormous. A 7' piano is large by any standards, and except in a large concert hall would be very adequate for recital purposes. Reproducing pianos are rarely longer than 6' 6" a size which is large enough to be treated as a serious musical instrument without too much compromise in the scaling, so that the bass has a good quality, the region which is weakest in small grands. The main differences of a larger piano are likely to be the greater dynamic range, and the weight of bass tone it produces from the longer strings, a feature which is compensated for in the voicing, as noted above.

One may, then, argue that the roll companies found that they could make their reproducing actions function properly in most sizes of piano. The finer the quality of the instrument, the better the rolls would sound. A well recorded roll played on a concert grand reproducing piano working really well is a very exciting experience.

What in the opinion of the author has a much greater influence on the results when listening to recordings of reproducing pianos is the studio acoustic and microphone placing chosen by the record producer and balance engineer. It is ironic that most people have no alternative, when listening to reproducing piano performances, but to listen to them on CD or LP, which completely negates the intentions of the piano roll companies, that the owner could listen to the artist playing the piano in his own home. The rolls were recorded and edited in the knowledge that generally they would be played in domestic conditions with the listener sitting close to the piano in an unreverberant, carpeted, curtained, soft-furnished room. The artist could play at speeds and use phrasing and pedal effects which would come off in the home, but which would be lost in a large concert hall. This would not be done consciously by the artists any more than would be the case with disc recordings in the late '20s and early '30s, where the piano sound is very 'forward' so that every detail, down to the smudged note, is clearly heard. It is necessary, then, when attempting to record the reproducing piano, to have absolute clarity in the studio, in fact, a rather dry acoustic, not a typical approach to piano recording these days. The most successful commercial recordings over the years have exhibited these characteristics, and whether the pianos used have been 6' or 9' grands, the results have been equally successful. It may be that

the average modern concert grand is so aggressive in tone that recording in a church or other large auditorium is the only way to tame the sound, but reproducing pianos should not sound like that anyway.

Reproducing pianos were made from 9' concert grands right down to small uprights. Irrespective of size, the better the piano, the more convincing and authentic the reproducing roll is likely to sound. However, the piano and the reproducing action must both be in first class order, and the latter be perfectly matched to the piano. Only then can a fair judgement be made, and the listener needs to be able to hear exactly what is going on by means of a recording made in a studio with an extremely clear acoustic. In these conditions, the author strongly contends that when listening to a well-recorded roll on a fine reproducing piano, it is indeed "the master's fingers on your piano" (Welte-Mignon).

Punching Pianola Rolls

An Education Project at the Huddersfield Contemporary Music Festival 1994.

Bill Vince

Introduction: Music and the National Curriculum in British Schools.

Donna McDonald

The National Curriculum has established a set of principles, together with targets which it expects pupils at state funded schools to be able to achieve at various levels of their development. They can be applied with a greater or lesser level of sophistication, depending on the maturity and ability of the children in question.

Each stage in the National Curriculum for music requires pupils to be involved in composing and performing, listening and appraising. Teachers are expected to provide a balanced programme which builds on existing experience and ability while students are expected to be able to work individually, in groups and as a whole class. There is a strong emphasis on creativity because it enables children, whether singly or in collaboration with others, to compose and therefore to perform what they have written for their fellows if not for a wider audience. Composing in partnership requires pupils to listen to what they have written and to accept or reject it as a contribution to the overall piece. As a result, appraisal is also incorporated into the act of composition. Clearly, these principles do not preclude listening to and appraising works by established composers performed by professional musicians, but they do help to explain the present popularity of composition workshops in British schools.

The stress on creativity also explains why the National Curriculum expects children to use technology to create and record their compositions. They are expected to write music before they have mastered the fundamentals of notation, harmony and the other building blocks of music and so use computers and MIDI systems as a short cut to achieve their goals. In this context, the pianola serves as a variant on the more familiar keyboard and screen. Technology is also a great boon in primary schools which do not always have specialist staff and expect classroom teachers to present most if not all subjects, including those such as music and art in which they may have neither training nor skill.

For more than a decade, musical organisations such as festivals, orchestras and opera houses have undertaken music projects in schools, inevitably concentrating on creative activity. They are tremendously useful to schools because they broaden the children's experience and enable teachers who

have no musical training to enrich what might otherwise be a more restricted educational experience. Festivals and orchestras value education projects for their own sake but also see them as a means whereby they can establish links with the wider community. Schools work helps to create audiences for the future and encourages parents who have never been to a concert to attend a performance. In the guise of supporting their children, they discover that concert going can be a pleasurable experience. With luck, they will try it again without the prompting of an education officer.

The Project

Punching Pianola Rolls was devised as a participatory music project for young people with learning and behavioral difficulties. My aim was for the participant groups to work together with me as the festival's education officer, and Rex Lawson, the world's foremost pianolist, to devise new music for the pianola. It was felt strongly that the work should receive a public performance and be placed in a wider context so the world premieres of these as yet unwritten works were programmed into a recital to be given by Rex at the festival.

Rex Lawson states: "It should be understood from the outset that the pianola is simply an instrument ... like its close relative the hand played piano".

Initial discussions with Rex established his interest in the project and his willingness to lead its technical aspect, though he had had no experience of education work. Support was provided by me and by Tim Wright, a music graduate from the University of Huddersfield, now training as a facilitator with the Drake Music Project which uses specially adapted computers to enable young people with severe physical disabilities to compose music. Having discussed the outline of the project with Barbara Lawson, advisory teacher for music for Kirklees Metropolitan Borough Council, we invited two schools to participate.

Longley and Lydgate schools are both concerned with young people with moderate learning and behavioral difficulties. Head teachers from both schools were interested in the project idea and keen to become involved; indeed Lydgate had had some contact with the festival in previous years, being a recipient of concert performances from the "Live Music Now" scheme under the auspices of the festival.

Project Model

Following initial conversations with the head teachers at both schools prior to the end of the summer term 1994, more detailed discussions took place in the

autumn term with Jeff Coghill and Martin Ord, from Longley and Lydgate respectively, who would be the members of staff most closely associated with the project. These discussions concerned group sizes, the way in which the project would be structured and the end result. The following structure was agreed.

- Group sizes: fifteen pupils (plus at least one member of staff present), though Longley school found it logistically simpler to provide eighteen pupils and two members of staff.
- Teachers to do preparatory work on graphs.
- Four half day visits to be received from Rex Lawson, Tim Wright and myself, two to take place in October and two in November two weeks before the performance. The schools were to work on the project between visits.
- Rex to cut rolls after the last session.
- Performance of finished works in the Huddersfield Contemporary Music Festival on Friday, 25 November.

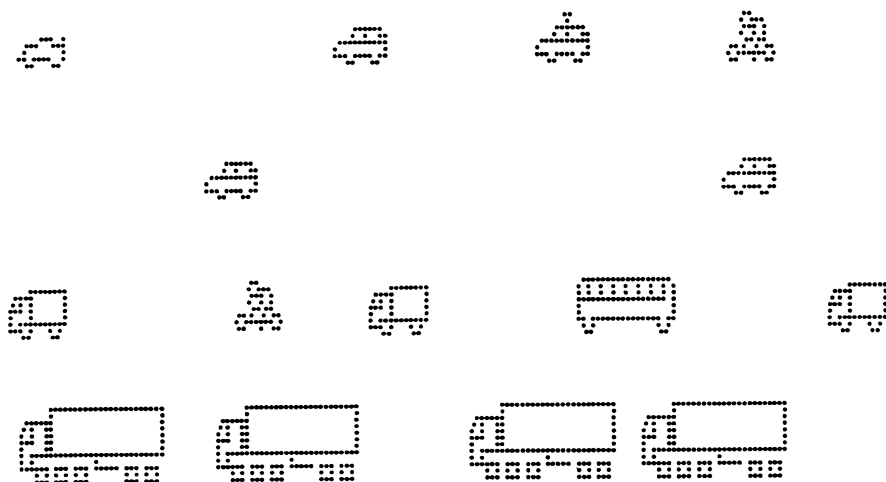
Session One

Rex came equipped with his push up, attached it to the school piano, inserted a roll and began to demonstrate the way in which the pianola makes music. All of the participants were invited to try pedalling a roll. At this stage, a roll was unfurled and the principle of perforations in the roll being equivalent to the striking of notes was explained. The examples of roll and pianola were backed up by further examples using Rex's own computerised system which simulates a piano roll which then drives an electric piano via MIDI. The groups noted the similarity between the appearance of a roll and the appearance of a graph. To demonstrate the possibility of changing marks on paper into sound, participants were invited to write their names onto the computer screen which then played back their names as musical sounds. The session ended with the whole group around the pianola taking turns in pedalling a pre-existing roll. It became clear during this session that eighteen was an untenable number to work with at Longley, despite the increased staff support, and it was decided to divide the group into two smaller ones for the rest of the project.

Session Two

At this stage the students were invited to draw their first attempts at a pianola roll. Large sheets of graph paper were provided, together with an explanation that the piano keyboard would ascend from left to right along the bottom of

the paper and that time would run from bottom to top. Aside from this, very little guidance was offered to the students. This was deliberate and allowed us to observe how much of the information imparted in Session One had been absorbed and put to use. The work produced by both schools could best be described as “drawings”. There had been some understanding of the



Excerpt from roll composed at Session 2.

principles, but the work was certainly visually inspired. This gave Rex and me some valuable guidance in planning the rest of the session and in determining the way we would approach the work from then on. We decided to input sections of the work produced into the computer system. The work was played back to the composers. The initial delight in hearing their work transferred into sound was tempered by the feeling that “it doesn’t sound much like music”. The groups then began to discuss the question “what is music?” and moved quickly to the idea of rhythm as a defining element. I then gave a short rhythm workshop based on clapping and counting games and we began to look at ways of notating various rhythms onto graph paper. The results of this session became Lydgate school’s first jointly composed piece. The Longley groups’ work fed into their completed piece.

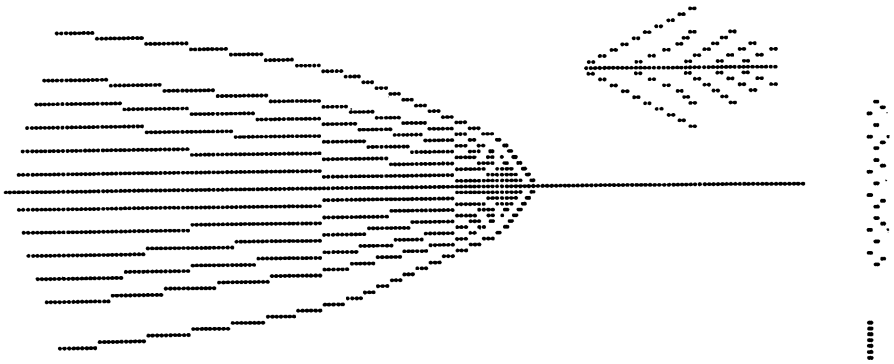
Interval One

There followed a two week break from workshops which allowed Rex time to input all the work produced so far into the computer. In the case of Lydgate school which had produced sufficient material for a completed piece, Rex took an editorial responsibility for ordering the work of individuals to run into one another to produce a finished whole.

Session Three

This session began with a playback of the work produced so far. We talked about the music and how it sounded. The feedback from both groups was positive, expressing surprise at how “professional” it sounded.

We then returned to a pre-existing pianola roll (Mars, The Bringer of War from Holst’s *The Planets*) and studied the roll while its computer equivalent played the electric piano. The group began to pick out musical features such as the strong, deep rhythms, chords and note clusters, extended notes and the movement of the “tune” across and down the roll. Having noted the visual appearance of these on the paper roll, the groups were again invited to produce their own graph paper versions of a roll.



Excerpt from roll composed at Session 3.

In both cases the quality of the resulting work was markedly different from that produced at the end of Session Two. Though there was still an element of “drawing” in the work, it was becoming clear that many of the students were beginning to experiment with the visual representations of the music phenomena we had just been discussing.

Session Four

This, the last session, was concerned with reviewing the work completed so far and composing “by committee” a beginning and ending to the piece, the body of which would be an amalgam of individual work produced to date. This was completed relatively quickly, each group now being familiar with the method of working and with the sound of the result. Who should perform the work was now a pressing problem. Rex was due to give a recital of twentieth century pianola music at the festival and this would include these three devised pieces. It had been agreed in Session One with the teachers and students that the

works be performed by a member of the composing groups, rather than by Rex. In the end Longley held an election and Lydgate decided by common consent who the performers should be. The final session at Lydgate ended with a performance of their first piece in its electronic form, alongside pieces by Stravinsky and arrangements of traditional Irish folk music for pianola.

Interval Two

This period allowed Rex to take away the completed pieces (by now named Pianoclasm 1, 2 and 3), put them into the computer system and take the disks to a roll cutting machine for the paper rolls to be cut. A rehearsal was arranged at the Cellar Theatre the day before the performance to allow the young pianolists to rehearse in the space and to help prepare them for the feel of the venue in advance of the performance.

The Performance

Most of the participating pupils were at the Cellar Theatre in Huddersfield on Friday, 25 November for the world premiere of their pianola pieces. The recital programme was:

Percy Grainger	<i>Molly on the Shore</i>
Igor Stravinsky	<i>Danse sacrale étude pour pianola</i> (from <i>The Rite of Spring</i>)
Arthur Honegger	<i>Pacific 231</i>
Longley School	<i>Pianoclasm 1</i>
George Antheil	<i>Ballet Mécanique Part One</i>
Paul Hindemith	<i>Toccata für mechanisches Klavier</i>
Witold Lutoslawski	<i>Variacje na tema Paganiniego</i>
Conlon Nancarrow	<i>Study No. 7</i>
Lydgate School	<i>Pianoclasm 2 and 3</i>
David Stanhope	<i>The Keel Row</i>

Rex Lawson introduced the programme, performed the works and demonstrated the pianola as the recital progressed (rather more than he had intended as Honneger's Pacific 231 became entangled in the mechanism and had to be re-rolled for a second attempt). Pupils from each school came forward to perform their group's work and were warmly received. Their

music was striking and sat well in the context of the other music performed. All of the young composers took bows following the performances of their pieces and were clearly moved by the sustained applause.

The Participants' Experience

Following post-project discussions with staff and pupils from Longley and Lydgate schools, the main conclusions reached are that the project was valuable and worth while, but that teachers feel the potential for follow up is limited owing to the specialised nature of the project and the equipment. The festival is currently looking at ways in which follow up work can be supported, especially by utilising the festival's good links with the University of Huddersfield's Department of Music. The longer term impact will depend on this to some extent. In the shorter term, a start has been made and, as Jeff Coghill put it, the pupils "now perceive themselves as being able to create music".

The Artist's Experience

Rex Lawson had no previous experience of leading a participatory music project. Though he has achieved world wide recognition as a performer and interpreter of music for the pianola, no one had ever invited him to undertake a project of this sort.

Rex's initial response was positive, though he did have a number of concerns. Chief among these was the level of learning and behavioral difficulties pertaining to the pupils. He was unfamiliar with the educational terms "moderate" and "severe" learning difficulties and had little idea of what to expect until meeting the staff and the pupils. A further concern came from his knowledge of his computer system and the large amount of time it would take to transcribe the drawings produced by the participating groups onto the computer system for playback. Even so, the amount of transcribing time was underestimated.

Support from Tim Wright and myself allowed Rex to concentrate on the technical and musical elements. It allowed him to split the groups into smaller units, or to work more intensively with one pupil, knowing that the rest of the group were still occupied with their compositions. Conversations throughout and after the project established that Rex was very happy with this arrangement. He felt "well looked after" and could "focus on the quality of experience being delivered".

This project involved a very heavy workload for Rex. Though he never expressed any disquiet, the actual amount of work he undertook was not budgeted for. The amount of material being produced was far greater than

could be transcribed onto the computer during workshop sessions. Rex spent a great deal of time outside the classroom transcribing graphic rolls onto the computer for use in the next session. Rex suggested that more time be made available for this in future projects and that he look at developing a scanning system to make the transition from paper to computer faster.

Rex felt that the structure and the staffing of the project were adequate and that the project was well managed with clear objectives and processes for achieving those objectives.

The Festival and Education

This project came about largely because the festival now has a part-time Education Officer with no additional responsibilities. This represents a major move forward from previous years, when responsibility for education was part of the Development Officer's brief. It was therefore possible for the festival to support the project by making me available to manage the workshops in addition to devising them and overseeing their administration. This was a significant factor in the success of the project, particularly given Rex's lack of workshop experience.

Punching Pianola Rolls was a first step towards increasing the accessibility of the festival's education programme to a wider public. Though the festival has worked with disadvantaged people in the past, it now recognises a need to strive to ensure a range of participatory opportunities for a wider range of client groups. This project contained an element of networking with outside individuals and organisations with expertise in the field of working with people with disabilities, learning difficulties and people with mental health problems, and the contacts made will be extremely useful in the planning and implementation of projects in future festivals.

Summary

Primary aims of this project were:

- to provide opportunities for creative composition by non-traditional means and to implement a quality workshop programme which would serve this.
- to provide a supportive and professional context for the work produced.
- to provide support and advice to client groups through all stages of the process.
- to increase accessibility to the Festival Education Programme.

Secondary aims can be summarised as:

- to increase opportunities for networking with other organisations with expertise in this area.
- to explore possibilities for partnership with organisations working in related fields.
- to develop the expertise of festival staff with particular reference to working with special interest groups.

Artists, participants and the festival all feel that *Punching Pianola Rolls* was highly successful in the terms which meant most to them. The support and workshop management provided for the artist, the workshops and performance opportunities given to the participant groups and the festival's opportunity to create new work and to network — all of these can be seen as particular successes. Special care needs to be taken with the longer term follow up work in the schools. They no longer have access to the pianola or pianola imitating equipment and will need assistance in consolidating the compositional experience they have already gained.

The success of this project, in conjunction with other education based events in the 1994 festival, has done much to raise the profile and underline the importance of an innovative and ground-breaking education programme as a vital and complementary element within the festival. The festival aims to continue investing in its educational programme in order to extend opportunities, extend the range of clients and develop a regional and national profile for quality arts education practise.

The Art of Player Piano Transcription

Edward Oswald Schaaf

Introduction: Dr Edward Schaaf – Player-Piano Composer

Rex Lawson

Dr Edward Oswald Schaaf is an intriguing musical figure of the early part of this century, whose compositions and arrangements occasionally turn up in American roll collections, but only very rarely find their way across the Atlantic to Europe. His musical style was somewhat florid, partly on account of his conception of the player piano as an instrument that could not easily bring out melodies without the doubling of voices or other contrapuntal assistance. Hitherto the player piano world has known very little about his life and work, which was surprisingly fertile, including nine operas, two masses, three string quartets, several symphonic works, and large quantities of music for military band.

We are pleased to be able to reproduce in this issue of the Pianola Journal Edward Schaaf's treatise on *The Art of Player-Piano Transcription*, published privately in 1918. As with all composers working for the player piano, his experience of such instruments was defined by those he encountered at first-hand, and by the style of playing them then in force. By contrast, for example, Hindemith and other German composers of the 1920s saw the player piano as a fully automatic device, since their compositions were inspired by the Welte-Mignon.

So in noting Schaaf's comments that the player piano is best suited to rhythmic music, one must remember that he was reacting to instruments and playing styles mainly in New Jersey at around the time of the First World War. It is eminently possible to coax lyrical performances from the player piano, given the right instrument and a determination to practise, but Edward Schaaf's intention was to provide dynamic contrast and phrasing at least in part from the arrangement on the roll.

Schaaf was born in Long Island in 1869 and trained in medicine at the University of Vienna and in Berlin, as well as at college in the USA. He took up practice as a physician in Newark, New Jersey, in 1896, remaining there as an entrenched bachelor, and devoting a very great part of his endeavours to the promotion of music for the player piano, and for New Jersey. Throughout his life he was very well known as a musician, and indeed he was the composer of *Hail New Jersey*, the official state anthem.

Landing today at Newark airport, it is all too easy to see the large industrial sprawl and to forget the cultural and historical side of local life. In fact there

are first-class libraries and museums in Newark, containing amongst other treasures the most important Buddhist shrine in the world outside Tibet. What remain of Edward Schaaf's musical works are housed at the Newark Public Library, a fine turn-of-the-century building in an idyllic central square somewhat at odds with the rough neighbourhoods that surround it.

The article and pictures that follow are reprinted by kind permission of the Trustees of Newark Public Library. As this Journal goes to press, a new roll of Edward Schaaf's Concerto for solo pianola is in preparation from Perforetur Music Rolls.

Preface

It is a difficult matter to obtain some sort of unity and order in the plan of presentation of a subject which has had no technical treatment, and in entering upon untrodden ground the subject is approached with all due diffidence. The whole treatment of the subject will no doubt have to be revised as often as the treatment of a rapidly developing medical science.

The player piano is rapidly adjusting itself to the highest artistic requirements, and is opening out a scope of hitherto undreamed magnitude to the imagination of the composer of piano music, and the task which the author sets out to accomplish is an exposition of the chief principles which govern player piano transcription generally, and to explain technical details, by which special effects may be secured.

This volume is not intended as an exposition of the art of interpreting player piano music; it deals with the intellectual, rather than the aesthetic, and concerns itself with the principles of expression only, in so far as they relate to the technical side of the subject.

EDWARD SCHAAF

Newark, N.J., 1914.

Rhythm

The rhythmical means of the player piano are rich, and the different kinds of rhythm possible of simultaneous execution open up an infinite variety of expression. As rhythmical variety is a fundamental law of beauty in music, the player piano possesses the power to enhance the beauty of a piece of music. The player piano's chief office as a rhythmical instrument is to accentuate the symmetry of a piece of music by means of figures, contrapuntal embellishments, etc., and the following example illustrates how the monotony peculiar to poorly arranged player piano pieces is brought about,



Cut No. 1

and how it is overcome when the rhythmic plan of a composition is properly grasped and developed:



Cut No. 2

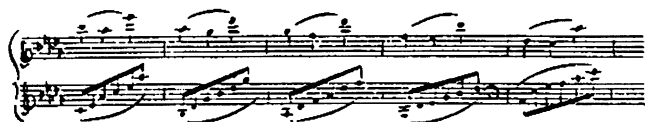
Although the “after-the-beat” waltz effect is here done away with, the symmetrical accents are preserved intact.

When a composition lacks a fully developed leading or principal theme, the rhythmical arrangement becomes paramount. In fact the player piano can be made to put life into the dullest sheet music by sheer rhythmical treatment.

So long as it does not interfere with the melody, i.e., pervert the character of the melody – the rhythmical element may be treated with the widest individuality and disregard of conventionalism. The most complicated and intricate rhythmic patterns may be written, and several of these may be executed at the same time, even in pianissimo. In this respect the transcriber may be allowed great latitude, and his flights of fancy need not be curbed so long as the character of the piece is not endangered. The following examples which illustrate the foregoing statements show how rhythmical treatment puts soul into the music.



Cut No. 3



Cut No. 4

While contrast is most commonly obtained by dynamical means, it is possible to achieve excellent contrasting effects outside of reliance on mere accentuation – by rhythmical treatment for instance, as in the following pause bar:



Correct observation of such a break in the rhythm is of the greatest moment in musical interpretation. The fermata here exceeds the positive accent in effectiveness in that it shows the musical phrases into relief. Correct interpretation of the rhythm is a very important attribute of piano playing and the player piano is supreme in this respect. In fact the rhythmic interest of up-to-date player piano arrangements has given fresh enjoyment to many classic gems.

Polyphony

The piano not being a melody instrument its real sphere becomes that of interpreting polyphonic composition. Classic music thus becomes the natural domain of the player piano.

Polyphony concerns itself chiefly with the outer structure so to speak, of a player piano composition, and the transcriber must bestow greatest attention on polyphonic details. Without impairing the greater power of the melodic scheme, florid parts must be adroitly introduced, and varied interest attained. Contrapuntal adornments should if possible spring from and be woven around some germinal idea of the piece. It would not sound well to merely load flourishes on a theme. They must sound natural and easy-flowing – there must be nothing labored or made-up about them. In this respect it were better if the composer made his own player piano transcriptions, for no one knows better than he the meaning he wishes to convey.

Polyphonic treatment is an important co-agent of the fundamentals (harmony, melody and rhythm), in adequately interpreting a pianoforte composition, for there is abundant evidence that player piano arrangements which adhere to printed copy fall grievously short in what is expected of player piano music now-a-days.

In the next example we see how a second melody can be super-imposed, together with further musical ornamentation without altering the main

rhythmic pattern, and without endangering the melodic clearness of the principal theme.



Cut No. 6

It must always be kept in mind that accompaniments however brilliant in themselves must not be permitted to assume a prominence which belongs to the melody. Considerable skill is required to balance the effect when there is danger of compromising the melodic design by ornamental music. If the melody is burdened or the balance of tone is endangered by polyphonic treatment the latter may be lightened – octave passages may be reduced to solo work, or the length of the note values may be curtailed.

But homophony is unsuited to the player piano, and the stiff machine-like arrangements are not the fault of the player piano's mechanism, but are due to lack of musicianship betrayed in the transcription.

Observe how the following bars of awkward music



Cut No. 7

become smooth and flexible when polyphony is made to invade it.



Cut No. 8

The elaborate employment of musical ornamentation is what the player piano demands. This enriches the effect and it may be stated as a general rule that the more polyphonus a transcription is the better it will sound. The player piano can negotiate almost any kind of rhythmic or chromatic passage with a fluency that is supreme. In the following example the ornamentation

has dynamic rank and, therefore, is not devoid of significance, and by its clear and perfect execution a certain piquant effect is conferred.



Cut No. 9

Melody

The melodic idea should ever be kept uppermost, and to this end the player piano transcription must be planned. A leading theme or melodic fragment should not be discounted by ornamental embellishments. If artistically arranged the ornamentation will aid in bringing the melody into perceptible relief, and any figure which fails in this may antagonize the clear design of the composition.

The player piano is even less a melody instrument than the solo pianoforte, because there is only a common emphasis to any one or more of the eighty-eight notes. There is no wrist action or forearm touch behind the tone, and fortunately for the player piano unaccompanied melody does not belong to its province. It makes up for its inability to deliver a cantabile passage in the surpassing excellence of its execution of pieces whose chief interest lies in thematic development. It is a fine art to weave embellishing passages around a melody without subduing or impairing it. In the following excerpt an orchestral effect is faithfully reflected in the player piano arrangement.



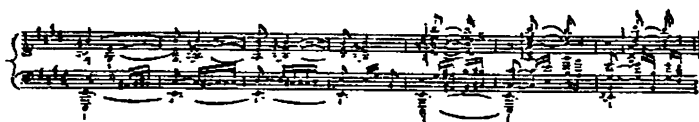
Cut No. 10

We cannot make the player piano do the work of a violin or of the human voice and portamento effects are of course impossible on it. Hidden melodic fragments which classic compositions oftentimes contain in addition to some leading melodic theme must be made to emerge. This is especially difficult since contrast must be obtained with a homogeneous coloring. The following example amply illustrates how this may effectually be done:



Cut No. 11

Melodies in the bass can bear greater stress than those in the higher register. In the subjoined example a melody placed just above a deeper pedal note is not overshadowed by the threatening looking accompaniment, beneath which it stands out conspicuously.



Cut No. 12

The player piano – an epic instrument

The player piano is seen to greatest advantage, not as interpreter of the love-song, but in its rendering of broad works, and especially where the aesthetic factor is overshadowed by the more important element of musical intelligence. As executant the player piano is, therefore, of the highest order – chiefly intellectual. Its failure, however, to respond to fine tonal shadings puts it out of the emotional class. The player piano concerns itself with the end rather than the means, with the matter rather than the manner. Always scholarly, never emotional, and entirely devoid of sensibility, it is best suited to abstract music – to epic composition, fugues, symphonies, etc., whose difficulties are surmounted by it in an extraordinary manner.

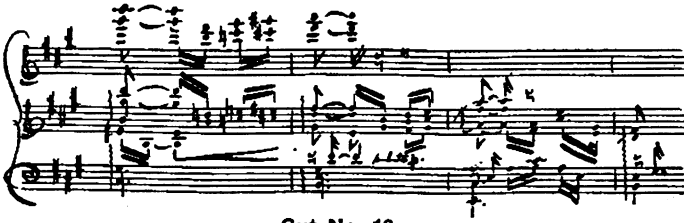
As expression is possible on it, the player piano is not altogether devoid of a certain individuality. Subtle grades of shading are not feasible, but intellectual expression is always possible. A difference between it and the virtuoso being that the player piano is interesting where the virtuoso is emotional. But sympathy and emotion are not the player piano's sphere – it is an epic instrument – and one that never foists affectation upon its audience.

Dynamics

The player piano has not behind its tone production the force that enables a virtuoso to bring about the finest gradations of tone; but its mechanism of

tone production is under perfect control and can be directed to grade its dynamics with mathematical precision.

Contrast in dynamical coloring is of excellent effect on the player piano and is easy of production. A sudden dynamic change like the following subito is very effective:



Cut No. 13

or by a sudden shifting of the plane of the harmony as illustrated in the next cut.



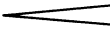
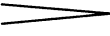
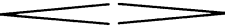
Cut No. 14

The player piano is almost unrivaled for effects of this kind. In long unaccented passages (of neutral motion) having their climactic point in the middle of the motion can be given a splendid swell effect. This is the case with mostly all spinning figures, and the next example illustrates this:



Cut No. 15

The player piano is not capable of the variety of dynamical accents at the command of the well equipped soloist, but it has certain devices of expression which control and modify the volume of sound. Following is a summary of its various dynamical effects:

- (a) Crescendo 
- (b) Decrescendo 
- (c) Swell 

- (d) Subito effect.
- (e) Treble may be softened while the bass retains the full volume of sound.
- (f) Bass may be subdued while the treble emits its full volume.
- (g) Bass may be softened while the treble plays still softer and *vice versa*.
- (h) Entire register may be played loud.
- (i) Entire register may be played soft.

The player piano cannot subtly modify the accent of a particular note in a group of notes played in the same register at the same time; it cannot satisfactorily perform staccato passages. But in place of these attributes it gives us surpassing clarity and precision.

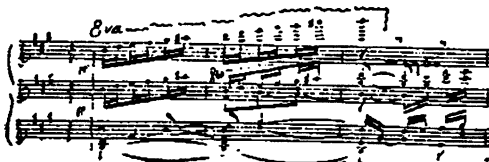
Phrasing

If the player piano transcription is not built on genuinely musical lines no amount of pedaling and pushing of levers will rescue it from eventual commitment to the scrap heap. With a properly built transcription intelligent phrasing is not only possible on the player piano, but in many instances it is most excellent. What virtuoso could possibly attain anything as smooth and polished as the following, where a sustained effect is beautifully carried out displaying the player piano at its best advantage?



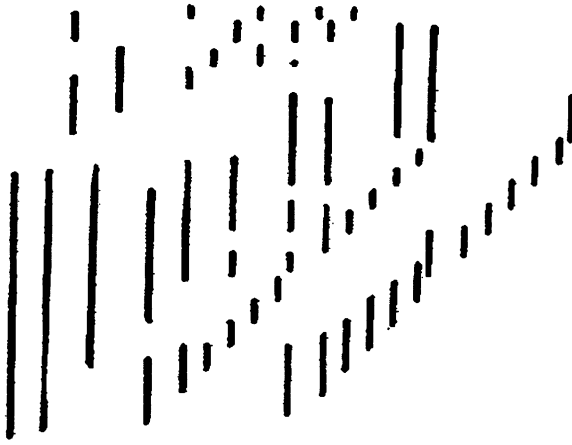
Cut No. 16

The sustained tones must of course be given their full value. The tracker bar knows nothing of slurring signs, phrasing and marks of dynamics. To illustrate; on the printed sheet we read:



Cut No. 17

Translated into player piano idiom this should become

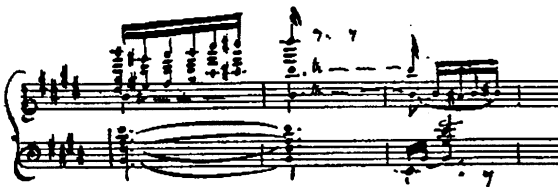


Cut No. 18

and such effects should dissipate the general impression that the player piano cannot phrase, for this passage is smoother and more even than anything that most individual pianists are capable of. This device of lengthening the first few notes of any arpeggio scale or extended passage is an important factor in master roll cutting and the author strongly urges its general adoption. As it supplants the wrist action of the virtuoso, it is a distinct aid to player piano interpretation.

To discriminate, to solve correctly just where and when to lengthen notes (or shorten them) – such discernment assumes familiarity with the inner beauties of musical phrases.

The following example illustrates the orchestral rule that the last note of a slurred group shall be made to overlap. The idea being twofold; to insure smoothness and to terminate the passage without a noticeable break.



Cut No. 19

The trills in bar 2 of this example perpetuate the animation of the first bar, thus preventing a noticeable break; the overlapping of the trill note in bar 3 insures a soft and round entrance of the melody.

The success with which orchestral ideas of this kind can be reproduced on the player piano is striking.

It is seldom that a piece calls for the same dynamical signs throughout, and it is important to study the unaccented notes of a composition. The supreme test of a master roll comes when the expression levers are not employed and the piece travels along on the merits of its own perforations. That is really the way to judge the transcription workmanship of player piano music. It should sound flexible and plastic without the aid of sustaining pedals. Phrasing, therefore, has a special meaning in relation to player piano music, the pianoforte sheet music conveying no indication as to how it should be done. To summarize: Smoothness should be obtained by giving extra length to notes that a skilled pianist would unconsciously accentuate; by adding judicious counterpoint (see chapter on Polyphony); by employing figures and animated fragments; by the overlapping devices; by employing grace notes; by arpeggios, etc.

Touch

Touch is an ennobling element that cannot be satisfactorily reproduced by the player piano. This is so because the player piano mechanism permits only a common emphasis for any note or group of perforations that pass simultaneously over the tracker bar. There is no wrist action – no forearm action behind the tone. And that is why the niceties of dynamic gradation do not come out in the “hand played” or the “regular” music roll selections. The volume of tone, however, can be modified although the tones produced are all of the same quality. In the place of force or wrist action the player piano gives us faultless technique, perfect control and modification of tone volume. Touch being the one beautiful attribute of individual playing that the player piano lacks, sympathetic or emotional interpretation is something outside of its realm. And touch being the chief basis of virtuoso pianoforte playing it can readily be seen that records claiming to truly reproduce the master pianists are not genuine. Some of the rolls for which this claim is put forward are padded with musical device out of all semblance to *bona fide* piano playing.

As the player piano does not allow itself to be governed by emotional impulse individual fancy is superseded by knowledge and discrimination in the making of the transcription. Thus the player piano can never be laid open to censure for affectation and mannerism. And while it cannot emit as clear a tone as the hand performer, it can accentuate a group of notes in an expressive manner and with a fair degree of force. Ever ready, the player piano needs no preparation for the production of a tone, and this fact enables it to play with greater uniformity, velocity and smoothness than any virtuoso is capable of.

The hand-played rolls

The widespread belief that the so-called hand-played rolls are a nearer approach to emotional expression, rests solely on an ingenious device which registers exactly the pianist's idea as to tempo. The claim that hand-played records simulate the human touch finds belief only with the uninitiated, for the perforations of the hand-played roll meet the tracker bar in exactly the same manner as do the perforations of the regular roll.

The accents of the human touch are all of the same dynamic value when registered by this invention. Thus the tempo only is registered, but not the degree of force. Therefore, the hand-played rolls are to be considered quite as much the product of musical mechanism as other rolls.

Player piano transcription

Technique and intelligence are the player piano essentials, the up-to-date transcriptions leaving little to the individual fancy of the operator, everything being represented in a clear unmistakable manner. To translate the content of a composition in terms of player piano music requires thought rather than feeling – thought that has behind it musical intelligence of the highest order.

It is to be regretted that our American public is saturated with a spirit that is opposed to serious music. Its chief demand is for musical pieces of the most frivolous character, and this exerts perceptible influence on the reproduction department of music roll manufacturers.

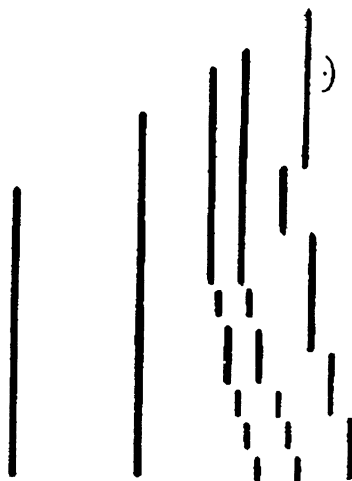
The character of a piece of music must always be upheld in player piano transcriptions, for nothing overshadows it in importance. This is a vital fundamental to consider, and nothing must be allowed to interfere with the composer's ideas which must be conveyed in the clearest manner.

Arrangers have formed some illaudable habits in the preparation of the master roll. One of them is the practice of shortening sustained tones which for harmonic reasons ought not to be curtailed. The excuse put forward is that long perforations buckle the paper. The employment of pin head perforations overcomes this danger. To be sure harmonic notes must be shortened a trifle when they precede their own repetition. This is essential and the pianist must perforce do the same, otherwise accentuation of a repeated note would not be possible. In this respect the player piano has a great advantage over the hand performer inasmuch as a tone which does not succeed itself (on the music roll) may be given its mathematical valuation; no preparation whatever is needed for a row of notes which do not succeed themselves.

The degree of shortening of notes which repeat, depends on the tempo. As a rule it is only necessary to lop off a small fraction of their value – just enough

to prepare it for a secure accent when it succeeds itself.

In some cases (see Cut No. 5) it is allowable to shorten the broad harmonic bass notes, thus



Cut No. 20

as their rich overtones swell the volume of sound to such a degree that the melodic note is overpowered.

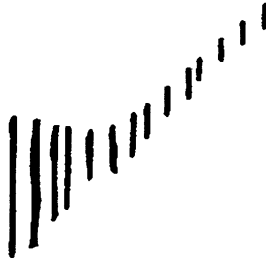
Cutting a master roll from the printed sheet of a homophonous pianoforte composition is a practice that is responsible for many of the mechanical music roll inflections. To-day, player piano transcriptions have advanced to a point where discrimination demands something more than the elementary performances that satisfied the player piano's first votaries.

Stereotyped doubling of the melody notes or of a harmony in the octave swells the volume of tone, but does not alter the homophonous characteristics of a piece. A popular waltz or march of the "after-the-beat" kind retains its awkward mechanical accents by such doubling. Only when polyphony is woven into it is this defect remedied.

Overlapping: This important orchestral device finds a grateful field in player piano music, being adaptable in a hundred and one ways. We do not here refer to the unmusical habit of prolonging arbitrarily nearly all sustained tones to such an extent that they extend way beyond their legitimate values, causing an incessant jumbling and conglomeration of tones and overtones.

Out of this orchestral idea of overlapping the tones there emerges a rule that if the first few notes of a scale, arpeggio or somewhat lengthy passage be lengthened, a legato effect is obtained which replaces the dynamical preponderance which an individual performer would impart to such a passage. Strength or force goes with lengthening and nowhere is the application of this principle better seen than in music rolls since the notes

cannot be struck with sufficient force to cause the strings to vibrate the desired length of time. This lengthening of the first few notes of a more or less rapid scale or passage and the overlapping of the remaining tones should be a fundamental principle of player piano accentuation. The following device therefore, imparts body to the scale and rounds it out:



Cut No. 21. Scale pattern.

In rapid descending passages the uppermost notes should likewise be lengthened, lest the effect be too hard and snappy.

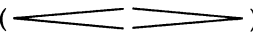
The opening of a group of notes is the strong point and the notes should receive lengthening.

When slurred notes of a more or less rapid rhythmic figure are of the same value the first notes should receive accentuation, *i.e.*, lengthening; the last ones having negative dynamic rank may be slightly curtailed. See example 25, which illustrates these points. But in a case where the rhythmic element has little dynamic rank as in Cut No. 3, the melody will float more gracefully if the figure be cut thus:



Cut No. 22

There is a notion prevalent that the high treble notes have no sustaining power. However true this may be of the unaccompanied tone, the sustaining power of the high treble is greatly increased by the overtones of the accompaniment below. The strings of the high notes having the damper action, should therefore, if possible be left open (*i.e.*, their perforations should be long enough) for the play of sympathetic vibration.

Trills: The employment of trills lends animation. When they are of considerable length trills are apt to demand a swell () which is effective on the player piano. For mechanical reasons the player piano cannot perform a single trill as well as an expert pianist. But it possesses an immense advantage in being able to trill an octave in addition to further

musical ornamentation. What pianist could perform the following, where a trill is placed in the centre of a vast harmonic scheme?



Cut No. 23

This is the proper place to point out that trill perforations which sound clear when the tempo lever is at 80 will be much less effective if set at 50, and may not be audible at 100. The space between the perforations of a trill must therefore be judiciously managed.

Animation: The devices which bring animation and vigor into a movement should receive careful study and attention. Trills, tremolos, arpeggios, etc., are all animating devices.

Breaking the notes of an octave melody into arpeggios lends decided animation.

An arpeggio passage like the following is well suited to the piano's harp-like nature.



Cut No. 24

The first few tones of arpeggios should be made to overlap. In terms of player piano idiom this would be



Cut No. 25

The velocity of the player piano is wonderful. It can grind out the fastest and most difficult looking compositions with Czernian evenness and uniformity. In this connection it is well to remember that an incorrect *accelerando* is more apt to impair a composition than a misunderstood *ritardando*.

Rapid iteration of full chords is tremendously effective.



Cut No. 26

It is important when cutting these chords that they be a trifle shortened so that they may succeed one another with firm accents.

The player piano is unexcelled in its even, rapid and uniform execution of the broken octave:-



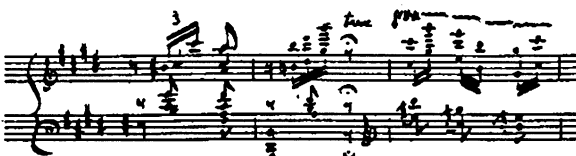
Cut No. 27

which is also more animating than



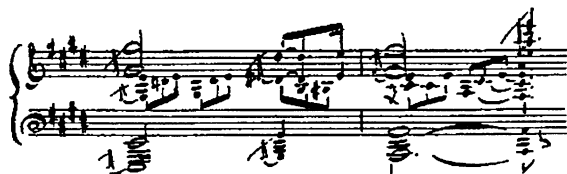
Cut No. 28

Grace Notes: These are an almost indispensable player piano asset. The *appoggiatura* brings the octave note into much greater relief. Coming at the termination of a piece the *appoggiatura* give a cachet to certain kinds of ascending passages, as in the following:



Cut No. 29

In the following excerpt the grace notes impart a charming effect.



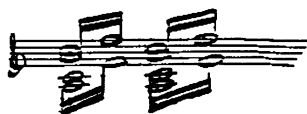
Cut No. 30

Tremolo and Pedal Points. Like the arpeggio the broken tremolo is a very important adjunct of player piano transcriptions; but its appropriate introduction into the arrangement demands taste. Both these devices are much overworked and thus become the antithesis of clean solid player piano performances. A music roll whose every chord is arpeggioed or whose every bar contains a tremolo violates style. When a sustained tone on the player piano does not retain its value long enough, and inevitably becomes weaker every moment, the tremolo is one of the devices by which this difficulty is eliminated. Some scheme must always be thought out to meet long pedal points, and the transcriber's ingenuity is here taxed to the utmost. The broken tremolo is effective especially where more than two notes enter into it.



Cut No. 31

is inferior to



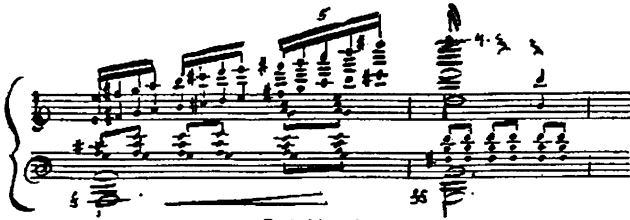
Cut No. 32

These are made more effective by the employment of a swell. Air is not as responsive as a virtuoso's fingers and that is why a single legato tremolo on the player piano is disappointing. Double it in the octave and you have outdone the expert pianist.

Brilliance: Ornamentation should not be carried to the point of pyrotechnics. Brilliancy has its limits. Fullness and motion in the treble parts make for brilliance, as in the next two examples.

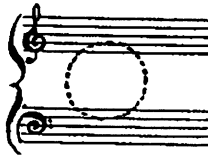


Cut No. 33



Cut No. 34

The principal point of concentration on the piano key-board (or in the orchestra, too, for that matter) is the register here represented by a dotted circle.



Cut No. 35

In nearly all extended piano works of importance this octave G to G receives the greatest stress. Thick scoring within this range props up and balances the upper and the lower parts.

Thematic Development: This is the realm of the composer who arranges his own player piano music. Themes must ever be artistically manipulated and their development should be the outcome of genuine feeling and contrapuntal study combined. Almost all piano compositions have the possibilities of fine player piano arrangements, and that transcription has not yet been written which shall reveal the full possibilities of the player piano. By means of fine transcriptions the player piano's appeal is broadened. It has entered the realm of musical art and it is to the composers who create their own transcriptions that the player piano world must look for its future development.

In concluding this brochure it may be stated that no mechanical effect will be discernible in any arrangement whose workmanship reflects close attention to the details discussed in the foregoing chapters. Thorough knowledge of harmony and the proper appreciation of counterpoint are the indispensable essentials of up-to-date player piano music.

Two Pleyela Recordings of *The Rite of Spring*: a review

Louis Cyr

a) Stravinsky: *The Rite of Spring*

1. Boston Philharmonic Orchestra, cond. Benjamin Zander (33'57)
2. The Pianola Roll [= the Pleyela rolls 8429-8437]: "Supervised by Igor Stravinsky – performed by Rex Lawson" (33'37) (recorded on a Bösendorfer Imperial Grand at Dulwich College, London, Sept. 30, 1990). Produced 1991. IMP Masters MCD 25. [Henceforth: RL-I]

b) Igor Stravinsky – Pianola Works. *Petrushka* (34'34): Pleyela Rolls 8441-47; *Etude for Pianola* (2'36): Aeolian T967B, and *The Rite of Spring* (34'25): same rolls as above. Rex Lawson, pianola (recorded on a Baldwin Concert Grand at the Performing Arts Center of the SUNY at Purchase, N.Y. in April 1991). Produced 1994. Music Masters Classics 67138-2. [Henceforth: RL-II].

Within less than a year Rex Lawson recorded the Pleyela hand-cut roll version of Stravinsky's *Rite of Spring* on two different pianos in two different studios, one on each side of the Atlantic. Since late January 1982 he and companion pianolist Denis Hall have been performing a seamless version of this nine roll Rite by alternately pedalling two Aeolian push-ups hooked onto two concert grands, for British, European and North-American audiences – at least a good dozen performances in all. *Petrushka* was eventually added to their repertoire as soon as rolls 4 & 5 were recuperated. It was therefore only a question of time before both works would find their way into the recording studio. That two such offers materialized for the same Pleyela Rite at such short notice is not Lawson's doing, of course. He would have been foolish to refuse either, as the worrisomely delayed release of RL-II would seem to indicate. As to the legitimate question why neither recording company nor the performer suggested he also apply his expertise to the Aeolian 4-roll hand-cut version of the Rite, the answer probably lies in Lawson's definitive preference for the more sophisticated reworking by the composer involved in producing the Pleyela rolls, whereas the Aeolian set is basically nothing more than a replica of the 4-hand score of 1913. And there are probably more stray copies of the latter still lying around than of the extremely rare Pleyela rolls.

Be that as it may, no written account has surfaced of any such seamless public performances of the pianola Rite before the above mentioned (only partial performances of separate rolls were reviewed from Paris in the 1920's). The RL-I recording can therefore be considered a world premiere of the Pleyela Rite, and RL-II the same of the Pleyela *Petrushka*. Strangely enough mention is barely made of this in either of the above documents: recording companies are usually quick to take advantage publicity-wise of such a coup . . . !

Either one of these recordings is therefore in itself a most welcome addition



Rex Lawson at a recording session for *The Rite of Spring*.

to the rather meager offerings presently available of any keyboard rendition of the Rite. Of the ten LP recordings of the 4-hand version produced between 1967 and 1985, only a couple have been transferred to CD, and only two new recordings of it have appeared on CD in the meantime.⁽¹⁾ So having two Pleyela versions within such a short time frame is a luxury indeed.

Paradoxically, the keyboard version that might fulfil one of Stravinsky's admitted objectives in perforating rolls for the Rite, is a 4-piano, 8-hand "arrangement" made in 1981 by Dutch pianist and composer Maarten Bon, available as LP in 1986 and re-recorded for CD in 1992 ⁽²⁾. Stravinsky did in fact admit to being fascinated with the pianola's unplumbed theoretical potential of playing all 88 notes at one stroke. And one does actually very easily hear additional rapidly ascending or descending flourishes of chromatic thirds or chords ('Introduction I', 'Augures', 'Glorification' . . .) or simply chords spread out over many octaves ('Jeu/rapt', 'Danse/terre'), both of which do correspond to some degree of "filling in the gaps", as it were, of the 4-hand version, especially including its own occasional extra "5th staff". But this is far from any equivalent of orchestral fullness that is obviously the main

purpose of the Bon arrangement. And it would be most unfair to judge Stravinsky's Pleyela achievement by this single standard.

If one looks first at the exterior trappings of both recordings to help determine one's preference, the balance would fall slightly in favor of RL-II. From the point of view of couplings, both have points in their favour. To be able to have both a piano and an orchestral version on one CD is a bargain and a premiere (RL-I)⁽³⁾. On the other hand, the Pleyela *Petrushka*, being itself a world premiere, along with Lawson's newer recording of *Etude pour pianola* gives RL-II a decided advantage all its own. The alleged reason (or "thesis") behind the RL-I's coupling of both Rites does raise some questions to be discussed further on, but we can be content to hailing their availability together. The detailed trackings of the Rite's individual scenes (in English) but minus the detailed track timings (RL-I) is nevertheless a plus that is perhaps not entirely compensated in RL-II by the detailed roll listings (in French), coupled with only a general tracking of both the Rite's and *Petrushka*'s major parts. It would have been so simple to have the best of both on the latter. RL-I's advantage is somewhat tempered, however, by a bit of shoddy editing, both of the Rite's scene titles in the accompanying leaflet and of the label data on the CD itself (not to mention the strange 1989 production date on the latter). The booklet for RL-II is unquestionably of much better vintage and its print is much more easily legible than the overcrowded three-fold leaflet of RL-I. The latter does, however, include lengthy translated excerpts of Stravinsky's first published "libretto" of the Rite: it appeared the night of the ballet premiere, May 29, 1913, in the Paris magazine '*Montjoie!*' (reference and credits unfortunately omitted). The RL-II booklet has the decided advantage of coming from one pen, Lawson's, who refers in one simple paragraph only – and that is quite enough – to the tempo question of the end of 'Danse sacrée' (the Rite's last scene), to which conductor Ben Zander, unfortunately and far from convincingly, devotes his entire commentary, which is somewhat presumptuously entitled "Righting the Rite". But there again, one learns a lot from both documentations, although Lawson's all-encompassing treatment of the subject turns out to be much more rewarding. As for the recording venues and instruments involved, repeated hearings on unsophisticated equipment revealed no major weaknesses. The Bösendörfer bass notes do tend to sound somewhat tinny and more thinly textured, but the Baldwin middle and treble ranges sound somewhat more muffled. Both instruments could have been at times less closely miked and provided with a bit more spatial resonance, in order to offset the dry, un-sostenuto and un-legato, more mezzo-forte effects of the rolls as perforated. Lawson's professional attitude seems to have been one of tampering in the least possible manner with this unique set of rolls as they are, not even correcting some of their glaring mistakes, until such time as perfect

copies can be obtained from them which the musician can then edit and interpret accordingly. The comparison promises to be interesting . . .

This writer's global impression is that for most music enthusiasts already familiar with the orchestral *Rite*, this (or any other) keyboard version will come as somewhat of a shock, at least a definite ear-opener, if not even a let-down in some parts, with perhaps utter surprise at some apparently totally different music (the final "tutti" of the *Cortège* in part I being the most striking example of the latter). The possibility offered through detailed tracking of RL-I, of springing from one orchestral scene immediately to its keyboard equivalent for purposes of comparison, may certainly provide a useful pedagogical key to understanding the *Rite's* original sound texture. Stravinsky's sketches clearly originated at the piano, and the *Rite's* ingenuous orchestral garb cannot hide the overwhelmingly percussive, chordal (vertical) and rhythmical sound core of most of its scenes. Lawson's obvious familiarity with the pianola's strengths and weaknesses allows him to sustain and articulate these characteristics most effectively, especially since frequent and sudden mood contrasts and changes require constant alertness and musical savvy not to degenerate into purely flamboyant and superficial fireworks. Both recording technicians have captured these dynamic impulses to the full and reproduced them without the least distortion. Stravinsky himself emphasized rhythmical ostinati and accents in his *Pleyela* re-working by adding frequent, multi-note, often full scale-length appoggiaturas to chords and bass impulses, or by doubling chords with lower octaves and fifths, by arpeggiating lower bass motifs, or by simply translating percussive rhythmic patterns into thumping clusters or rumbling trills.

Perplexing on the other hand are the more lyrical scenes of this *Pleyela Rite* (both 'Introductions', 'Rondes', 'Cercles', 'Action' . . .), where heavy, irregular plodding and stumbling seem to render the even legato playing of some trills and ostinati well-nigh impossible, where the expected support of the sustaining pedal is conspicuously absent, where emphasizing a melodic or thematic pattern even in the uppermost voices seems to present an insurmountable challenge⁽⁴⁾. Here again, as if acutely aware of the *Pleyela's* limitations, Stravinsky has characteristically highlighted a melody line with double, triple and even quadruple octaves, or sustained long, held-over notes by repeating or tremulating them with octaves. Stravinsky could of course have programmed the sustaining pedal into this *Pleyela* reworking of the *Rite* much more often than he has. One wonders why he didn't, whether this was an oversight or whether he left it up to the pianolist to rely on his musical instinct, adding it where he thought it most appropriate and effective . . . One thinks especially of the opening measures of 'Cercles', where the four successive bass notes (E ↓ F# ↑ C# ↓ B) of the 14 times repeated "bell" motif (♭ ♭ ♭ ♭) really sound ludicrous if left unattended to, like here, as

perforated, cut and dried staccato notes⁽⁵⁾.

Precisely this last example is flawed with a disturbing omission: half of the F-sharps are inaudible, since their corresponding perforations are missing from the roll itself. This raises the question of uncorrected mistakes, not all of which are as conspicuous as the one mentioned. Some have their origin in the 4-hand piano score of the *Rite* that is still sold today and where they still stand unedited. Others have slipped through the net of the Pleyela arrangement, for example: wrongly shifting chord repetitions towards the end of 'Augures', unnecessarily suppressed thumping F-flat chords (also in 'Augures'), presumably to allow the tripled octave-theme to emerge more clearly (so much so, however, that its E-flat major mode completely obliterates the clashing F-flat/E-flat chords); an audibly jolting chord shift in the first motif of the a' - a" parallel sections of 'Danse sacrée'; not to mention the many mistaken notes and chords. Such apparently careless "proof-reading" would seem to confirm the basic lack of awareness that the later conductor-composer Stravinsky demonstrated when confronted with instrumentalists' questions about errors in their score parts. Shouldn't he have noticed them spontaneously himself? Was proof-reading the least of his worries, once his scores were printed and circulating? Ansermet, Markevitch, Robert Craft and others would assume that ungrateful task for him, not without consulting him, of course, but sometimes assuming at the same time broader responsibilities (of score revisions) than simply correcting wrong notes . . . So perhaps we shouldn't be more fussy about these Pleyela discrepancies than the composer himself; besides he probably wasn't in charge of proof-reading the rolls. Except that when the Audiographic Duo Art/Pianola *Firebird* rolls of the late 1920's (as well as their contemporary Pleyela hand-cut counterpart) reveal a strangely corrupt version of the last section of the opening theme of the famous 'Infernal Dance' – mistakes that live on in today's printed 2-hand version, one may legitimately wonder why Stravinsky's ear would let such obvious errors go undetected and linger on unedited.

If in re-working the *Rite* for the Pleyela his priorities lay neither in "filling the gaps" with additional orchestral notes beyond the playing limits of four human hands, nor in absolute notational correctness, Stravinsky did continually lay emphasis on rhythm, accents, phrasing and especially on the precision of the interdependent tempi of the different *Rite* scenes. As Lawson puts it very succinctly but appropriately (RL-I): "Paradoxically, part of the attraction for Stravinsky of these metronomic rolls was his belief that they helped him to limit excessive freedom on the part of concert artists, and to that intent he was keen to specify roll speeds . . . [and] the number of perforations per beat in each section of the music, giving us an exact reflection of his ideas of tempi at the time". Absolute respect for coherently interlocking tempi were to be his lifetime "magnificent obsession", whether at

the conductor's stand, in the recording studio or in his supervision of the production of Pleyela rolls. But how precise were his tempi indications on the rolls? Since functioning Pleyelas are no longer available, how can we be sure such indications correspond exactly to Aeolian's roll speed indications and levers? And finally, how close do Stravinsky's own, and Lawson's, interpretations of the Rite come to the composer's ideal tempi?



The enclosed Table I of comparative timings of some relevant Rite recordings provides the basis for many more observations and comments than can possibly be retained here.⁽⁶⁾ Other conductors who enjoyed Stravinsky's favour, for a time at least, might also have been included (Ansermet and Markevitch, for example). Two further dubbings of Stravinsky live performances (in 1958 in Italy and in 1961 in Stockholm) are not included because the ageing composer was no longer in complete command of his conducting faculties, whereas in the CBS New York studios in 1960 Robert Craft was at his side, if not substituting for him, at least at some rehearsals, if not takes. The latter's latest recording is included because of his lengthy and close relationship with the composer and because his incredibly rapid performance threatens to outdo Antal Dorati for the fastest Rite ever . . . All recordings tabled are available on CD except Monteux' 1945 recording with the San Francisco Symphony, the timings for which, while coming from an excellent 78 rpm set, could not be appropriately equalized with the digital CD timings. The 'Danse sacrée' has been singled out in detail if only because it is the object of Ben Zander's extensive (and exclusive) attention. The tempi of the presently published scores have been retained, although a case could be made for the original metronomic indications in force at the time the Pleyela rolls were punched. For example: ♩ = 56 (instead of 50) for 'Augures', resulting in a total timing of 3'08 (instead of 3'30) which seemed to attract Monteux and the composer; a total timing of 35" for 'Evocation', in view of the later (1929) extension of the scene by about five 4/4 measures (the Pleyela and Monteux renditions reveal a mix of both version whereas Aeolian is cut strictly according to the original version); ♩ = 116 "sostenuto e maestoso" for the "c" sections of 'Danse sacrée', which was also later (1929) adjusted to the same 126 tempo of the rest of the scene (this relative "slowing down" of "c" has in fact been retained by both Monteux and Lawson . . .).

Table I reveals how divergent some of the "ideal" metronomic indications can be from performance practice: 'Introduction I', most of 'Introduction I', 'Adoration', 'Cercles' and 'Action' (interestingly enough the major lyrical sections . . .) are performed much more rapidly, even by the composer himself. Zander's and Lawson's much slower pace for 'Introduction II' are not convincing, especially RL-II's 5'38, practically one whole minute longer than his earlier rendition (this really constitutes the only perceptible difference between both Pleyela versions). Such abnormally slow tempi are all

	Pierre Monteux			Igor Stravinsky			Craft	Zander	RL-I	RL-II
	1929	1945	1951	1957	1929	1940	1960			
Introduction I	3'04	2'48	3'01	2'58	3'06	2'54	2'56	1991	1991	1994
Augures	3'08	3'10	3'17	3'20	3'38	3'11	3'04	2'58	3'21	3'13
Jeu/rapt	1'21	1'17	1'20	1'24	1'09	1'17	1'17	2'51	3'33	3'32
Rondes	3'06	3'08	3'07	3'16	2'45	3'00	3'05	1'14	1'20	1'19
Jeux/cités	1'55	1'56	1'58	2'00	1'50	1'47	2'00	3'00	3'25	3'29
Cortège	37	39	39	40	35	34	41	1'49	1'40	1'35
Adoration	30	22	24	22	20	22	27	38	41	33
Danse/terre	1'07	1'08	1'07	1'09	1'08	1'07	1'12	27	23	21
	14'48	14'28	14'53	15'09	14'31	14'12	14'42	1'05	1'01	1'02
Introduction II	4'14	3'38	3'41	4'10	3'31	3'50	3'41	14'02	15'49	15'04
Cercles	2'53	3'03	2'55	3'06	3'13	2'51	2'52	3'27	4'44	5'38
Glorification	1'28	1'34	1'33	1'34	1'45	1'35	1'34	2'59	3'28	3'25
Evocation	44	40	43	42	1'02	45	45	1'28	1'27	1'28
Action	3'10	3'10	3'08	3'03	3'29	2'59	3'18	41	46	41
**Danse sacrée	4'17	4'20	4'20	4'22	4'58	4'23	4'32	3'02	3'39	3'52
	16'46	16'25	16'30	16'57	17'59	16'23	16'42	4'15	4'04	4'17
Total:	31'34	30'53	31'23	32'06	32'30	30'35	31'24	15'52	18'08	19'21
**Danse sacrée								29'54	33'57	34'25
a' # 142	27	26	27	26	33	30	29	26	25	24
b 149	1'23	1'26	1'22	1'24	1'35	1'18	1'26	1'22	1'25	1'28
-a" 167	26	27	27	26	31	31	29	27	24	25
c' 174	38	37	39	39	43	36	37	35	35	38
-a''' 180	8	6	6	6	7	7	7	5	4	5
c'' 181	21	22	23	24	25	21	22	22	21	24
a'''' 186	54	56	56	57	1'05	1'00	1'02	58	50	52

Table 1: The Rite of Spring: recording timings (scene titles shortened)
 (* Metron.: timings strictly calculated according to metronome indications in score)

the more surprising than they seem to favour the emergence of some of Pleyela's inherent weaknesses referred to above ("piano/pianissimo" or sustained/legato playing, evened out tremolos or short recurrent ostinato motifs . . .). One would also have to mention the "b" section of 'Danse sacrale' as another instance of a tempo generally played somewhat faster (although the tempo pulse unit should remain unchanged).

By contrast, the very fast "ideal" tempi of 'Rondes' and of 'Glorification/Evocation' are hardly ever achieved in practice. The problem for *Rondes* most often lies in an excessively slow rendition of its parallel opening and closing "idyllic" frames. As for 'Glorification/Evocation', what is important is holding the exact same tempo, fast or slower, throughout both (the motivic  or  F# – E – D# cell is the obvious linking connection here). Fascinatingly enough Stravinsky has apparently integrated the eleven "signal" bass/percussion chords, that introduce 'Glorification', into the scene itself by putting them at the head of roll 7 and, judging by both Lawson's renditions, raising the prescribed ♩ = 120 tempo to 132 and maintaining the latter (instead of jumping to 144 after the chords) throughout both 'Glorification' and 'Evocation'. This makes good sense because those same crotchet chords recur as broken quaver chords throughout the first part of 'Glorification'.

If one looks at 'Danse sacrale', it will be obvious how difficult, if not well-nigh impossible it is to maintain in practice the one prescribed tempo (♩/♩ = 126) throughout the entire scene. Structurally (and thematically), however, it becomes equally obvious that there are two sections, "a" and "c", that must maintain the same tempo straight through their reprise and/or variant. How close one comes to the "ideal" interlocking tempo-proportions becomes clear if we transpose the timings into metronomic equivalents for five of the recordings of Table I:

	Monteux I	Craft	Zander	RL-I	RL-II
a']	126	131.5	137	148	142.5
b]	138.5	143	138	134.5	133
a"]	131.5	126	142.5	137	137
[c']	121.6	132	132	121.6	121.6
[a''']	112.5	180	225	225	180 [!]
[c"]	137	131	137	115	120
[a'''']	140	130	151	145.4	145.4

Setting aside the widely discrepant short a''' section (which, in absolute time values, only Stravinsky consistently plays at 126!), we find some remarkably converging consistencies in the inter-related "a" and "c" sections. Monteux I has been included here because his first documented tempo for a''' provides Ben Zander with the irrefutable proof of authenticity for the extraordinarily fast tempo which that same final section of 'Danse sacrale' seems to be given on the Pleyela rolls by the composer. Zander overlooks the later, more skillful

Monteux recordings, which tend to level off this section towards a tempo of 132. Basically, one cannot deplore the apparent ineptitudes (even unpreparedness) of Monteux' first recording orchestra (their 'Glorification' is also catastrophic), then string up his 140 tempo for a"" as the ideal to be achieved and finally overkill it with a breakneck tempo of 151! At least Lawson's tempi, if defensible from the rolls' markings, seem to converge more coherently from the start of 'Danse sacrée'.⁽⁷⁾

And finally, a few reflections about *Petrushka*. It is fortunately not beset with such complicated tempi problems. However, the same advantages and problems of its Pleyela version crop up intermittently, no more but no less, during the entire work, much as in the Rite. And Stravinsky resorted to the same type of note/flourishes, octave doublings and triplings, octave springing melodic accents (more frequent and apparent in *Petrushka*) in order to enhance the underlying 4-hand version. The studio splicing between the different scenes does not seem to have been thought out well enough in this "stageless" performance. They are certainly not as intricately interwoven as in the Rite, but, without the drum roll (or its keyboard equivalent) to create some appropriate link, other appropriate uses of pauses should not have been left at random. Much of the uninterrupted harmonic tapestry that serves as backdrop during scenes 1 & 4 could have been ever so discreetly outlined rhythmically, even if no first beat accents nor "bar lines" appear between the rolls' perforations. But, on the whole, Lawson animates this score with the same vigor, momentum and direction as he does the Rite.

Of course, Music Masters Classics prudently refrained from adding "I" to "Pianola Works", no doubt waiting to see how this first venture would withstand the test of the marketplace. But since they are already involved in recording "Stravinsky, the Composer's" complete works with Robert Craft as their mentor and conductor (6 volumes issued to date), one can only hope they would also firmly pursue the recording of Stravinsky's other "pianola/pleyela" works.⁽⁸⁾ *Pulcinella*, the *Chant du Rossignol*, the *Noces* and other song rolls ("without words") as well as the piano works all deserve to be made available, as contrasting and alternative renditions to their customary versions. Basically, of course, the sooner reliable copies of all these Pleyela rolls can be generated, the greater the possibility of enhancing their performances, musically and musicologically, and of enriching our perception and enjoyment of these works as such. Good luck, Rex!

Louis Cyr
Montreal, July 1995

Notes:

1. Two 2-hand versions of the Rite exist in print, by Sam Raphling (Iyra Musica) and Vladimir Leyetchkiss (Schirmer). The first was recorded on LP only (1980, Atamriam – RCA). The LP recording of yet another, unpublished version (by Dag Achatz) has been dubbed onto CD (Achatz-BIS). Just recently an unpublished version for organ (also for 2 hands and 2

pedalling feet . . .) has appeared on CD in Germany (Haas – Fermate). Add to this a Swiss CD (Linea) of a Rite for 2 pianists and 2 percussionists, and one wonders what other keyboard related ventures lie ahead for this truly fertile seminal work!

2. Recorded in 1992 by the Amsterdam Piano Quartet on Channel Classics CD 4992 (the earlier LP recording was on the Donemus label: CVS 1986-3). The shortened form used in the following for the Rite's scene titles (in French) are taken from Table I below.
3. Michael Tilson Thomas, Daniel Barenboim and Vladimir Ashkenazy are the only conductors of the Rite presently known to this writer for having recorded the orchestral version while also having performed the keyboard version publicly. Thomas has recorded both on separate labels (Angel-EMI in 1967, DGG in 1972); Ashkenazy's orchestral version will be issued shortly, unfortunately separately from his keyboard version already available (Decca, 1993). It is probably unrealistic to hope for such a combination again on the same CD. Nevertheless, one thing stands out in the ears of this writer: having first mastered the Rite at the keyboard gives Thomas a marked advantage over other conductors, as his orchestral rendition amply demonstrates (DGG CD 435 073-2).
4. Some of these problems seem non-existent, however, when one hears a performance of the Aeolian rolls of the Rite. It just might be that the Pleyela technique of perforating even trills, tremolos and recurring ostinato motifs (rhythmical or melodic) was deficient at certain tempi. Other "themodizing" problems might be inherent to the pianola medium in general. Perhaps Lawson might want to comment on this in the future (or has already done so), in reference to the solutions he might eventually work out for contemporary performance practice of such rolls.
5. On the other side of the ledger: not many conductors seem to bother sustaining such expected "bell-ringing" effects. While playing the 4-note motif in pizzicati quavers, the celli are to be doubled by the echoing flageolet/harmonics of 4 solo celli and double-bass.
6. The other recordings listed are the following:
 Pierre Monteux:
 (1929): Orch. Symph. de Paris, Pearl GEMM CD 9329
 (1945): San Francisco Symph. Orch., RCA DM-1052 (4-78 rpm)
 (1951): Boston Symph. Orch., RCA CD 09026 61892-2
 (1957): Boston Symph. Orch. (live), Music & Arts CD 312
 Igor Stravinsky:
 (1929): Orchestre Straram (Paris), Pearl GEMM CD 9334
 (1940): Phil. Symph. Orch. of New York, Golden Legacy CD GLRS 107
 (1960): Columbia Symph. Orch., CBS CD MX 42433
 Robert Craft: Orchestra of St. Luke's, Music Masters Classics CD 67078-2
7. This writer wonders if the thumping bass thirds of the "a" sections of *Danse Sacrale* should not be emphasized more, or at least brought up to the same dynamic level as the chords they alternate with, which they serve to inter-connect and for which they provide the rhythmical backbone. Perhaps this is technically impossible in the present perforated state of the Pleyela rolls.
8. Granted: not only did Craft himself until 1978 never express the least enthusiasm for, much less interest in, this whole facet of Stravinsky's activities of the 1920's, but twice in the same book ("*Stravinsky in Pictures and Documents*", co-authored with Vera Stravinsky, Simon and Schuster, New York, 1978) he states most condescendingly and disparagingly about the pianola ("composing for the contraption"): "Needless to say, whatever the technical interest in these arrangements [pianola transcriptions], all of them together are not worth the briefest original composition." But then, very few of us had ever heard a single Stravinsky Aeolian/Pleyela roll. Perhaps in the meantime Craft has had a change of heart and would gracefully lend his support to continue making these rolls available as a unique bonus to his own excellent series.

“Other Minds 2”

A festival in memory of John Cage

Rex Lawson

In late March and early April of this year, a group of twelve composers gathered together in and around San Francisco for three days of contemporary music concerts in memory of John Cage. Strictly speaking, the twelve composers were actually eleven composers plus one pianolist, and the three days' public music-making was preceded by a further four in collective and glorious isolation at the Djerassi Residency Program overlooking the Pacific.

As the instigator of the birth-control pill, Carl Djerassi has amassed a considerable wealth, and rather than let his extensive Pacific estate belong only to a few lucky cattle, he has constructed one or two small residence buildings with the avowed intention of allowing creative artists the time and opportunity to pursue specific projects. The trivia of life – food, accommodation – are provided with both discretion and some considerable style, and the working composer, choreographer, dramatist, sculptor and plain old artist are therefore freed from worldly cares, and able to concentrate on whatever inspiration may afford.

The lush greenery of the hills, with spring in the air and under foot, run slowly down to the distant shades of blue where the sky meets the ocean. The thousand-year-old redwoods are the American equivalent of Westminster Abbey and can be readily visited, talked to and hugged at any hour of the day or night. The mountain streams are more realistic than even the finest anaesthetic water effects in the local dentist's surgery. It is in short a heaven on earth, at least it remains so for four days, and in early 1995 it played host to an engaging variety of independently minded composers.

The invitation to the proceedings came from Charles Amirkhanian, an American composer and musical “animateur” unique in contemporary music. Amirkhanian and friends brought Conlon Nancarrow to the notice of the wider world, and he is also the executor of George Antheil's estate and was formerly musical director of KPFA, the leading public radio network in California. Some of those whom he invited came from the pages of Baker's Dictionary and the USA – Lou Harrison, Terry Riley, Ingram Marshall, some from abroad – Calliope Tsoupaki and Tan Dun, and there was even Ashot Zograbyan from the war-torn ravages of Yerevan, Armenia, who, it transpired, manages to support his entire family on the equivalent of two dollars a month.

The influence of Asia and its musics was everywhere apparent, and indeed Lou Harrison gently pointed out at one stage of the proceedings that the term

“Europe” is only a synonym for north-west Asia. He did have a twinkle in his eye as he said this, and it was unclear how he would apply a similar process of mind to the area of North America, although it is clear that the few indigenous inhabitants of that continent who have survived the genocide can trace their ancestry back to the outer reaches of Mongolia.

The week’s work, in which this writer joined as the aforementioned pianolist, began with twelve individual and illustrated talks by the musicians about their lives and works. To one who was discouraged by the mathematical fanaticism of contemporary music at university in the early seventies, it was a revelation to realise that emotion has once again taken hold of the world’s composition, and with a quite remarkable strength. Of course, twelve individuals are far from a significant representation of the state of music in all its forms, but the eleven composers in particular may be said to be both influential and at the forefront of new music.

In their turn the pianola and its music were explained and demonstrated, in very considerable detail, and any residual embarrassment on the part of the performer at not having his own compositions to play was instantly extinguished by the evident fascination from all concerned. The memory in San Francisco of the Pianola Institute’s patron, Conlon Nancarrow, was very strong, since he had been at the first “Other Minds” Festival the year before. But, as with Conlon on his first visit to England, the assembled musicians were not aware that the foot-operated instrument could be played and controlled in a musical way.

It has long been clear from presenting pianola concerts of many varieties that audiences prefer human beings to be involved on the concert platform, and that it takes a considerable effort to create a musical atmosphere with a reproducing piano. What was apparent in San Francisco was that composers share this common need for the humanity of music, and indeed deliberately write for it, by incorporating the need for some form of improvisation or interpretation into their works. Even those whose compositions are created mainly on tape (or these days in computers) leave a space for human performers in the midst of all the electronics. Many comments were made on the evident involvement of a pianolist in the minute details of a musical interpretation.

The four days of heavenly repose were followed by four more in San Francisco and Berkeley in the midst of a breathtaking whirl of radio transmissions, rehearsals and evening concerts. As always, a pianola presents more difficulties than most instruments, especially when it is 6,000 miles away from home, and the services of Michael Boyd, who travelled with the writer, were greatly appreciated. The Center for the Arts Theater at Yerba Buena Gardens is an auditorium ideally suited to the performance of contemporary music, with a size between those of the Purcell Room and the Queen

Elizabeth Hall in London, and audiences of some 800 or so enthusiasts were generally warmly appreciative.

It is very difficult to predict the results of such a remarkable experience. In the long term, it is probable that a range of new music will be written, not least because the sharing of breakfasts leads to a certain camaraderie, and the sight of Terry Riley pedalling Jelly Roll Morton (with a huge grin on his face) will remain in many people's minds for years to come.

Muhal Richard Abrams, a black New Yorker from the jazz tradition, had sent a package containing ten blank cassette tapes that was waiting for this pianolist on his return to London, with instructions to record as much pianola music as possible over the succeeding months. These instructions included all types of music on roll, but it was noticeable that the black community were not previously aware of the inheritance they have in this respect. J. Lawrence Cook seems to be largely unknown, and there is considerable scope for bringing his music before a wider public.

Ashot Zograbyan hoped for pianola concerts in Yerevan, though the practical problems would be immense, and Mari Kimura, a Canadian/Japanese violinist, found that performing Conlon Nancarrow's Toccata with a live pianolist could have advantages over a tape recording. In general the whole week was an opportunity to make new friendships, from which music will undoubtedly flow. One rather more immediate prospect is Calliope Tsoupaki who, although Greek, is married to a Dutchman and living in Amsterdam, and so is in the midst of the European pianola tradition.

In the last twelve months, festivals in Aldeburgh, Barcelona, Donaueschingen, Huddersfield and now San Francisco have featured the pianola and its music, and there is every indication that it is beginning to undergo a considerable revival. This is on the whole not as a curiosity, but increasingly as just another concert instrument. We live in hope.

Contributors

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DENIS HALL has for many years been an enthusiast of historic performance recordings both on piano roll and disc and in making them accessible to present-day music lovers. He has involved himself in the restoration and preparation of reproducing pianos for concerts and recordings and in the transfer of 78 rpm recordings to master tape for LP and CD reissue.

REX LAWSON is a concert pianist who has been involved in research and music-making with these instruments since 1971. He has travelled with his pianola to the USA, Canada and many European countries, transporting it by plane, ship, car and even in 1986 by gondola in Venice. He has made a special study of music written for the pianola, by the eighty or so composers who have been interested in its possibilities during the course of this century. In 1989 he made his Carnegie Hall debut as soloist in George Antheil's *Ballet Mecanique*.

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