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The Journal of the Pianola Institute

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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:

Hugo Cole, 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

The Pianola Institute is very happy to announce that Conlon Nancarrow has agreed to become its patron.

After several decades of painstaking work in the relative tranquility of Mexico City, Conlon has now been accorded his rightful place as one of the greatest and most influential composers of our times. György Ligeti has enthusiastically acknowledged him as a master, and in recent years his many Studies for Player-Piano have appeared on LP and CD, as well as being increasingly heard in concert halls around the world. In 1982 he was the recipient of a five year fellowship from the MacArthur Foundation, in recognition of his outstanding contribution to music.

In addition to all this, he is a man of considerable quiet charm, and one of the pleasures of his musical visits to Europe is that some of us who are London-based get to meet him and his wife. Yoko, from time to time.

We are all grateful for the honour that he has done us and look forward to both a formal and an informal association with him for many years to come.

Subscribers to the Pianola Journal will find a long interview with Conlon Nancarrow in the 1990 issue. It is interesting to note Conlon's recent comment that the interviewer, Natalie Wheen of the BBC, had talked with him so sympathetically that he regards the interview as the best that he has ever given.

While Conlon Nancarrow's music is influencing younger composers in many ways, it would seem that few are being drawn into writing for the player piano, so we commend our favourite instrument to any who may be reading. No other musical instrument combines the pre-programming of such complex strings of notes with absolute clarity of graphics and, in the case of the foot-operated pianola, a supremely subtle and instantaneous control of phrasing and dynamics at the moment of performance. Well nigh a hundred composers wrote music for player-piano in the first thirty years of this century, but more are needed as the pianola approaches its centenary.

Our Institute has some considerable way to travel before it reaches even its tenth anniversary, but this is now our fourth annual journal, and we hope that we have begun to demonstrate some staying power. There are many human energies allied to the player piano, some however more for personal development than for the progress of the instrument itself. It would be a useful aim for the Institute over the next decade to make the musical world generally aware of the player piano's true potential.

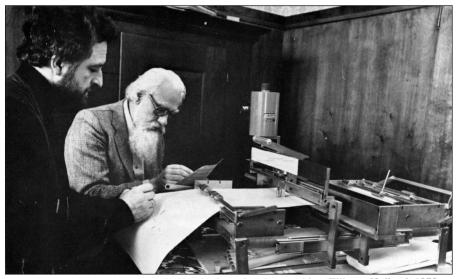
The player piano is simply an instrument. If a foot-operated pianola sounds less musical than a pianist, then it is not being played properly. If a reproducing piano produces a jerky rhythm or a coarse dynamic response, then it has not been adjusted correctly. This is a very simple principle and applies equally to public and private functions, to live and recorded performances. Of course there are differences between a pianola and a piano, as there are between a reproducing piano and a gramophone, but they are differences of style, and not of musicality.

We wish you good reading and hope you find our pages interesting.

# On the Roll

#### **Rex Lawson**

I have chosen a general title in the hope that this article will be the first of a series on roll-connected topics, and also in memory of the late Dutch pianolist, Lucius Voorhorst, who appeared many years ago with the composer, Jan van Dijk, in the Dutch press under the headline 'Aan de rol'. This has an added significance for Dutchmen and for me, and can be politely translated into English as 'on the razzle', an activity undertaken frequently, though not exclusively, by European pianola players when they meet.



Lucius Voorhorst and Jan Van Dijk at their perforating machine, Tilburg, Holland, 1978.

Next July Denis Hall and I shall be giving concerts in Chicago on the occasion of the 1992 AMICA convention, and I hope to encourage a discussion session there on the copying of old music rolls, especially since sixty and seventy year old paper does not seem to last too well in the USA. In our current age of microprocessors and digital sound, it seems very strange to me that all one-to-one roll copying is carried out in an analogue way, all the more so because original piano rolls are one of the earliest forms of digital recording.

I am also concerned about the apparent lack of understanding, in academic circles, of the ways in which reproducing pianos reproduce their dynamics, and of the many different non-recording processes that roll companies used under the guise of a roll label stating 'Played by John Doe'. So first a glance at the historical background.

Methods of Roll Manufacture - Stencil Transcription

If we are to believe John McTammany, in his Technical History of the Player

published in New York in 1915 (and reprinted in recent years by the Vestal Press), then the commercial production of music rolls dates back to 8 October 1877. On this date, it appears that a certain Orrin Ingalls, of Cambridgeport, Mass., entered into an agreement with McTammany to supply perforated music for the latter's automatic organs. A copy of the original agreement is printed in McTammany's book, from which it can be seen that the wholesale price was 'twelve and one half cents for each sheet or composition made by the said Ingalls'. No indication is given as to the methods of manufacture, but they cannot have been too different from those employed throughout the last two decades of the nineteenth century by the other automatic music manufacturers in the USA. These involved the use of sprocketed master rolls, known as stencils, which by virtue of toothed drive wheels, could always be advanced and read with exact accuracy.



An early advertisement for the Pianola from The Illustrated London News, January 1900.

Such stencil rolls could easily be marked out by musicians in a form of transcription process from the original sheet music. Early advertisements for the Pianola, whose rolls were made in the same way, make a feature of this mechanical method with the slogan 'We supply the Technic, you supply the Expression'. I am not aware of any stencils surviving from the nineteenth or very early twentieth century; in Britain the Aeolian Company scrapped an enormous number of such rolls in the early 1930s, and no doubt a similar process occurred in the USA when Aeolian moved from Meriden to East Rochester. There are stencils, of course, at QRS and Keystone and, I suppose, at Mastertouch as well, but it is my impression that these do not date from much before 1920.

Until the advent of electrical recording in the 1920s, the gramophone had many disadvantages compared with the player piano. Admittedly it was a good deal

smaller and lighter, but placed next to a cabinet Pianola in front of a Chickering grand piano, it must have sounded like a child's toy. The six or seven years that intervened between the invention of the Welte Mignon and Hupfeld Dea, and the launch of the Duo-Art and Stoddard Ampico are surely significant in this regard. No doubt Aeolian and the American Piano Company were caught napping by the Germans, but they cannot have been under much commercial pressure from the domestic phonograph industry if it took them such a long time to develop rival reproducing piano systems.

# Stencil-Cutting Pianos

The progression (or retrogression if you are a confirmed pianolist!) from transcriptional to recorded music rolls was therefore gradual in most parts of the world. There were intermediate stages along the way, notably the marking or cutting pianos which allowed an operator to create a stencil over the course of a few hours. Such an instrument was in use until very recently at QRS in Buffalo, and photographs survive of similar devices at the Perforated Music Company and Aeolian Company in and around London.

In the case of the QRS piano, notes could be held down by hand or locked by means of latches behind the keys. A foot pedal caused a linked stencil-cutting machine to punch once and advance. I am sure it is no secret that virtually all QRS rolls advertised as 'Played by J. Lawrence Cook' were in fact created in this way. On a small roll label it would be impossible to describe the process in more detail, and in any case Lawrence Cook was able to use the system so expertly that he might be reckoned to have 'played' it, albeit in his own way.

But similar instruments were in use all over the piano roll industry, and I can see no reason to suppose that rolls 'played' by, for example, Scott Joplin or George Gershwin were in fact the result of actual recordings, with the clear exception of one or two of Gershwin's Duo-Arts. In the teens and twenties the marking up of music roll stencils was no doubt a very useful way of helping impecunious composers to pay the rent. More research needs to be carried out in this area; one way forward would be the counting of note lengths. I can vouchsafe that the British edition of Gershwin's 'Kickin' the Clouds Away' contains twelve perforations to the beat throughout the roll. No human being can possibly play with such a degree of regularity, so even if Gershwin had recorded an original master, then such a performance would have to have been laboriously 'regularised' by hand. Surely it is more likely that Gershwin, in company with a good number of other young musicians, joined in the widespread activity of musical stencil-marking.

In recent months in Britain, a young concert pianist has begun to play some of Gershwin's player-piano arrangements, presumably taken from the edition supervised by Artis Wodehouse and has claimed that these represent the way that Gershwin actually played his works, in contrast with the rather simpler versions that

found their way into print. It is undeniably an attractive idea for such roll versions to be played by hand, but I hope the above will have caused at least some doubt to be placed on the idea that Gershwin simply recorded all of them in real time.

In the case of Joplin, counting perforations on the original rolls may also be a useful clue. I have heard the rather cynical (though probably true) theory put forward that 'Played by Scott Joplin' could easily mean 'As played by Scott Joplin', especially in the cut and thrust of the popular music roll industry prior to 1920. The musicological importance of exact accuracy was hardly appreciated in those days.

# Recording Pianos

Recording pianos seem to be held in some veneration, though I fail to understand exactly why this should be, unless by virtue of the historical artists who sat at their venerable keyboards. From the Welte recording pianos of 1904 and later, they have all worked by means of electrical contacts under the keys, elaborated latterly by Ampico, the Yamaha Disklavier and, for all I know, the Bösendorfer SE, by subsidiary connections in the area where the hammers hit the strings.



Casella and Respighi recording *The Fountains of Rome* and *The Pines of Rome* for the Welte Mignon recording piano, New York, 1925.

Welte were not the first to use such a device, although they were the first to make the recordings audible. Marking devices were demonstrated in London in the late nineteenth century, in at least one case to Queen Victoria, though they were at that stage seen as an aid to transcribing compositions or improvisations. There are various theories about the recording mechanisms that Welte used. Did they record dynamics automatically? What is the purpose of the two small holes that can be seen in the extension to the Welte recording cabinet in later recording session photographs? But in the final analysis none of these technical details matter. The

recording of such dynamics is a minor problem; it is far more difficult to convert this data into the complex marginal coding needed by the actual pianos.

Indeed, I am personally convinced that it made little difference to the expert roll editors whether dynamics were recorded automatically or, as in the great majority of cases, simply noted down on the score. In both cases, the finished roll dynamics have far more to do with editing skill than with initial accuracy. Of the major reproducing roll systems, Duo-Art seems to me to have been the only one to punch out an 'original' roll in real time, by means of a vibrating reed punch machine operating at around 4000 perforations per minute. The recording producers in New York and London, W. Cleary Woods and Reginald Reynolds, operated large dial knobs to add very rough dynamic coding to the original rolls as they were recorded, and then spent countless hours making minute corrections and improvements.

# Modern Recording Pianos versus their Predecessors

In truth the Marantz Pianocorder, the Bösendorfer SE and the Yamaha Disklavier are not part of my historical discussion, since none of them use music rolls. However, it will be useful to consider them for the purposes of comparison.

The Marantz, defunct in Britain since the Yamaha came on the scene, was basically a Duo-Art, as far as I can see, in that it played only eighty notes of the piano and took its repertoire mainly from a large collection of reproducing piano rolls (some of them Ampico). Its seven degrees of touch were matched by an accuracy in time of nine to the second, in both instances falling a very long way behind any reproducing piano.

I am not aware of the dynamic range of the Yamaha, but I guess it to be not dissimilar to the standard MIDI specification of 128 degrees of loudness. But like many other MIDI based instruments, the Disklavier can only play sixteen notes at any one time, though it does have the advantage of a real sustaining pedal, so that cascading runs of more then sixteen notes can be allowed to resound at will.

Wayne Stahnke's SE, which I first heard in a Steinway but which has now been taken over by Bösendorfer Pianos, has an accuracy in time of 800 to the second, and 1024 degrees of touch on each note independently. I believe these 1024 were not originally logarithmic in progression, so that the dynamic changes from level to level were more pronounced at the quieter end of the range. I do not know if this dynamic scaling has since been modified.

By comparison, the original recording punches of the Duo-Art have an accuracy of 4000 per minute, or about seventy to the second, although this is usually coarsened in the commercially available rolls. With an average pull-through rate of 43 punches per 2 inches and an average roll speed of 85 (8½ feet per minute), a performance can be reproduced to a resolution of about 36 per second; enough to outperform the Pianocorder many times over, and to sound very respectable against the Disklavier, even after about 80 years of existence. Yamaha inspired an article in

the London Daily Mail last spring in which reproducing pianos were rubbished while the Disklavier was praised. The company does itself very little good by such negative and ill-informed advertising, especially when some of its disk recordings are taken from the selfsame piano rolls!

Dynamically the situation is much more complex. A couple of years ago MIT in Boston were planning to transfer Duo-Art rolls to their Bösendorfer SE by some process which would convert the Duo-Art dynamic codes quite literally into two sets of sixteen SE codes. What an appalling idea! Even the least technical of us will realise that computers work just a little faster than pneumatic pianos – in fact the difference in speed is akin to the differences between sound and light. And of course Duo-Arts vary as well; early American mechanisms work best with early American rolls, while later American expression boxes are quite different. And as we all know since Mrs. Thatcher's revolution gripped us by the throat, Britain is a law unto itself. Playing a British Duo-Art roll on a late American stack would be like asking a Cockney to give the broadcast commentary from the Yankee Stadium.

However, there are many opportunities for research projects on these topics, and in particular it would be instructive to develop computer models of the various styles of reproducing mechanism. In many ways the Duo-Art is the most complicated; since its pneumatic mechanisms respond rather less than instantaneously, the effect of each dynamic perforation is that of a miniature crescendo. It is quite meaningless to speak of 32 degrees of touch when the reality is of an almost infinite number of levels achieved by means of 32 degrees of crescendo. One only has to look at some of the rolls that Reginald Reynolds edited to see the single dot perforations that he added to power one or two on the accompaniment, spaced perhaps an inch apart from each other at positions where they can have no instantaneous effect on any individual note. Clearly they were a quick way of very slightly increasing the overall accompaniment level.

A good example of this technique can be seen at the start of Roll 1 of the Stravinsky *Firebird* set. This series of Duo-Art rolls was created largely from the non-recorded Pleyela masters made in Paris by Jacques Larmanjat from Stravinsky's manuscript. Consequently there were no dynamic codes on the original masters, in contrast to the normal Duo-Art originals which had the rough and ready coding derived from the dials at the side of the recording pianos. Thus one can see the editor's work particularly clearly, including the way in which dynamics were added with a single dot punch.

# Roll Copying - The Present Situation

There are a surprising number of roll-manufacturing enterprises in Australia, Europe and the USA. QRS Music Rolls in Buffalo is the largest and, thanks to its staff, a particularly friendly outfit.

The QRS catalogue is based on a large number of thick paper stencils owned by

the firm since the days of Max Kortlander, added to in former times by Lawrence Cook, and now largely by Rudi Martin (Rudolph in the case of his classical rolls). Around ten years ago QRS hired the services of a computer specialist and converted a large number of its paper stencils to floppy disks in a system based on the Apple II computer. Since the conversion was from sprocketed stencils, there was no problem in feeding the data into the computer with complete accuracy.

Keystone Music Rolls of Bethlehem, Pennsylvania, also uses stencil rolls for the production of many of its releases. This occurs because it has many of the original Ampico masters as well as some from the 1960s series of popular rolls produced for the Aeolian Company. In addition, Mastertouch Rolls of Sydney, Australia, would appear to use stencils, to judge from the exactness of the perforations on its issued rolls.

Many other smaller roll producers now use various computer systems, and this usually means that there are no problems of synchronization in the production of new music rolls. Apart from QRS in Buffalo, I have myself only visited European roll producers, Fred Bernouw in Holland, Malcolm Robinson in northern England, and Mike Boyd, also in England, who has recently started with the ex-Aeolian perforating machines that belonged for many years to Artona Music Rolls.

I hesitate to mention other US producers, since I am bound to leave someone out inadvertently, and in any case this article is more about methods than the overall range of roll manufacturers. But I am aware of about six individuals or companies who are involved in this area – and would be delighted to receive details of their activities for inclusion in a future Pianola Journal.

# Problems of Synchronisation

Whereas stencil rolls have sprocket holes at each edge, so that they can be read and advanced in an exact manner, production rolls have no such means of synchronization. This has meant over the years that all one-to-one roll copies have been to some degree inaccurate, since they depend on some form of unsynchronized reading. In extreme cases this results in an effect not unlike the conversion process from US to European TV standards. In the USA there are 525 lines in a TV picture, whereas in Europe there are 625. Complex computer systems have been devised to convert from one system to the other, but they can all cause at best a slight fuzziness, and at worst a great deal of jerkiness in any vertical movement.

These inaccuracies of synchronization are sometimes hidden by computer programs that put new chaining into long notes on the roll, and it may be that for many practical purposes such rolls are quite adequate. Of course, one must always be careful that the paper thickness of reproducing piano rolls is the same as the original. Since the roll is drawn through by the take-up spool, there is a constant and barely perceptible increase in roll speed, and this acceleration must be kept the same as on the original roll.

But there are many disadvantages of not reproducing an exact dot-for-dot copy of an original roll, and I shall deal with them in turn. I should say that the amount of energy expended on the copying of rolls is quite remarkable; I for one am only too happy that many enthusiasts are working in the area. The suggestions that follow are pointers to the ways in which we might develop these activities, rather than criticisms of what happens at present, which is by any standards impressive.

#### Metronomic Rolls

Rolls for pianolists to play were made with an extreme degree of care so that the music would be reasonably easy to read. The Aeolian Company in Britain (to whom the US Aeolian Co sent many of its orders for classical metronomic rolls after about 1920) used to distinguish between theme and accompaniment notes by slotting the start of the former and solidly chaining the latter. In some cases non-themed notes were also slotted in this way when they formed an important part of the musical structure.

Another feature of metronomic rolls is that they were just that, metronomic. When playing a pianola seriously it is very important that the basic roll should not be in any way irregular. One needs a strict rhythm from which to divert according to personal taste. Denis Hall and I have on occasion played two pianola music from inaccurately copied music rolls, and I can testify from bitter experience that they render the pianolist's task extremely tiresome. The slight hesitation that becomes part of a romantic performance in a copied reproducing piano roll, is a constant obstacle to smoothness of playing on a pianola.

For these reasons alone, it is important that metronomic rolls should be copied dot-for-dot, although there are archival considerations as well that I shall deal with later on.

# Reproducing Rolls

Clearly most reproducing piano owners are only too happy to get their hands on any reasonable modern copies of Ampicos, Duo-Arts and Weltes. But they could be better. Some of us derive a great deal of pleasure from reading the notes and coding on rolls to see what individual editors got up to. Marguerite Volavy (known to the Ampico staff as 'Madame' because she looked like the owner of a brothel) does the most wickedly witty things with her own recordings, and a lot of the detail of her work is lost on copy rolls.

Reginald Reynolds' Duo-Art coding is of paramount importance if one is to understand how British Duo-Art pianos worked in practice. In a similar way, some of Frank Milne's arrangements are wonderfully subtle, especially when one considers that he made many of them on the kitchen table, so to speak. Without originals it is much more difficult to see the care with which these two, and many others, worked.

I have been lucky enough to visit player piano owners in many countries and I have heard many fine instruments, although perhaps only one or two outstanding ones. In every case, though, the best pianos perform particularly well with original rolls, and not quite as well with copies. In other words, the differences, however minute they may appear to be, are audible.

# Archival Considerations

At the bottom line, there is a wealth of information on original piano rolls, and it is senseless not to preserve it. In fifty years' time, when the originals are not in such a good state, shall we be forced into copying the copies? And in that case, will the copied detail deteriorate even further? And why, in an age when historic sound recordings are being converted from analogue to digital, are piano rolls being allowed to lapse from digital back into analogue? Maybe not everyone needs to copy rolls in a digitally accurate way; there will always be a steady market for first-class analogue copies, but surely at least one co-operative venture ought to be undertaken to preserve detail of this aspect of human culture.

On past form, such monoliths as the Library of Congress and the British Library are unlikely to be interested. A new building is nearing completion in London for the British Library at the same time as a lack of funds is forcing the Library to plan the selling off of "less important books and music". And even public archives of piano rolls seem to be far more willing to expend energy on acquiring collections than to do much with them once they are safely out of the public gaze. Where are the research degree projects, the roll copying programmes, the regular concerts and broadcasts based on the collections at Maryland, the Phonothèque Nationale in Paris or the British Piano Museum?

# Digital Solutions

I hope this article will stimulate others to make suggestions for practical solutions. It may be that a discussion group next July in Chicago will be the ideal starting point for an international and co-operative roll project. But I would like to start the ball rolling with one or two positive ideas of my own.

The one device that would preserve any and every piano roll in its entirety would be a very high resolution colour graphics program for, say, the PC system of micro computers. Such a program would need to preserve and display not only perforations but also all the printed information on both the roll and the leader (and indeed on the reverse of the roll in some cases). In many ways this would resemble a video recording of a roll, but one that could be scrolled at will, and used to produce new copies if necessary.

If one or two organisations such as MIT could run research projects of some duration to develop computer models of the various reproducing piano systems, then it would be possible to replay such computerised rolls directly through MIDI. I guess

that a resolution of at least 2000 pixels across the width of a roll is necessary for reasonable accuracy, because one needs to be able to see and synchronize to the serrations down the edges of slotted notes.

A good aim for an initial project might be the production of a number of data compact discs containing the entire series of AudioGraphic rolls, which would allow organisations and individuals around the world to study and enjoy this unique creation in the history of recorded music. All they would need would be a PC with a hard disk, CD player and attached MIDI instrument, which could be anything from a humble electronic keyboard to a Bösendorfer Imperial SE.

All the W. C. Woods Duo-Art originals at Maryland might be preserved and copied in a similar way, which would instantly make them available to researchers and archives around the world. And the Ampico master stencils at Keystone could be saved from what I believe is a deteriorating state and used to produce exact new Ampicos for generations to come. Such a venture would need financing, of course, but given a number of interested parties, this burden could easily be spread, partly by public research institutions undertaking some of the work as further degree projects, and partly no doubt by enthusiasts co-operating freely with each other.

As a general rule, I believe future roll copying projects would be far better and perhaps more easily achieved by the use of video digitizing programs, although the detail needed for exact synchronization with the serrations in slotted notes is somewhat beyond the average cheap digitizer. I suppose this could be alleviated by scanning a roll in not only horizontal but also vertical slices, but this presents its own additional problems of synchronization.

#### Coda

There are enough roll collectors around the world who enjoy sharing their collections to a sufficient degree that co-operative projects such as the above stand some chance of being achieved. In 1997 it will be the centenary of the Pianola, inasmuch as W. S. Votey's instrument of that name was first marketed by the Aeolian Company one hundred years prior to that date. 1997 would be an ideal occasion for an international celebration of the player piano, with concerts, broadcasts and exhibitions around the world. A central element of such a celebratory year would be the successful culmination of a roll preservation project, and I should like to suggest that plans be laid during 1992, and in particular at the AMICA Convention in Chicago.

So many of us have derived such constant pleasure from player and reproducing pianos that it would be sad indeed if this unique heritage were very slowly allowed to deteriorate. Original rolls are inevitably subject to atmospheric or acidic decay, and some means needs to be found of preventing the gradual loss of this facet of human musical activity.

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# 'Ein Traum durch die Dämmerung'

# **Ernest Newman**

This article was first published in The Piano-Player Review, July 1913.

Even at the time I had a suspicion that it was all a dream. It seemed too good to be true.

I remember being at a concert at which the pianist was putting himself to a tremendous amount of trouble to play the Tausig arrangement of Bach's D minor Toccata and Fugue, and not succeeding in playing it a quarter as well as the pianoplayer could do. I was wondering to myself at the strange blindness of some musicians to the march of events under their very noses. There are some pieces that no pianist can ever hope to perform as well as the piano-player: there are others that no piano-player at present imaginable can hope to perform as well as a good human pianist; yet it never seems to occur to public performers that they ought to keep to the latter and avoid the former. I suppose I must have been a bit bored by the performance, for I made no effort to resist the sleepy feeling that was stealing over me; and in another minute or so I was in a world in which the best performance of music has no power to charm, and the worst no power to hurt.

Suddenly I found myself in another and very different concert room – an enormous place, full of people, and with excellent music, excellently played, proceeding from an invisible orchestra and invisible singers. The orchestral tone was singularly pure, and it frequently attained both a pianissimo and a fortissimo that I had never been fortunate enough to hear in my working life: while the dynamic nuances were managed with incredible skill. I listened with increasing amazement to the end. Then I went out and made my way to the back of the hall, to what looked like the entrance for the orchestral players. I was in hopes that I should meet some of them coming out, have a chat with them on the subject of this new and wonderful kind of concert, and discover how it was done. Only two people came out, however; they stopped outside the door for a few moments' conversation, then shook hands, and parted. I followed one of them, apologised for accosting him, explained my difficulty, and begged him to enlighten me. He courteously suggested that we should walk on together, and he would tell me all I wanted to know.

He laughed at my expression of surprise at a concert without performers, at all events without visible performers.

'I suppose,' he said, 'that you come from a country where the old order of things obtains – the order we read about in our antiquarian books. No man under the age of forty in this country has ever seen what you, and I suppose your fellow countrymen, call a concert performer. They have been abolished here, or perhaps I ought to say got rid of, by an evolutionary process. It had to be so, in the very nature of things: the day had to come when merely hand-made music had to go down before the better

machine-made music, as the arrow had to go down before the gun, and the wooden ship before the ironclad. The process, of course, was a gradual one. It began long ago with the pianists. These foolish fellows had not the sense to see that if they wanted to maintain their position they would have to confine themselves to playing things that the piano-player – a rudimentary instrument that was just beginning to attract attention in those days - could not possibly do.' (I pricked up my ears at this, for I still had some recollection of what had been passing through my mind at the first concert.) 'They insisted, for example, on trying to dazzle their audience with things like the Bach-Tausig D minor Toccata and Fugue.' (I began to suspect that my new friend was pulling my leg; I glanced at him sharply, but he went on in complete unconsciousness of what was passing through my mind.) 'What pianist who has only two human hands to rely upon could hope to rival in that work the joyous and sustained vigour that was so ridiculously easy even to the piano-player of that date? (We have one of these primitive instruments, by-the-way, in our National Museum. It is really not a bad piece of work for its time.) What human fingers could sustain the shake in the fifty-eighth and following bars of the fugue with the demoniacal energy of the mechanical instrument? Well, the pianists tried this sort of thing once or twice too often. When they tried, for instance, to bluff their audiences by playing very rapidly, the piano-player simply did everything that they could do at two or three times the speed. The public began to notice the difference, and to make unflattering comparisons. Then the makers of these instruments, seeing that they had the pianists easily beaten in this field, turned their attention to improving the devices for giving the player absolute control of his instrument. After about a hundred years of experiment, an instrument was evolved which, so its makers claimed, could play any kind of music not merely as well as, but better than the best pianist could play it with his hands. Naturally a number of people – mostly those who had never owned or handled a piano-player – laughed at this notion. Then the makers put them to a practical test. They gave a big concert, at which the finest pianists then living played in competition with the Perfectist. (This was the name – obviously an abbreviation of The Perfect Pianist – that they had given to their wonderful instrument, which, I suppose, really was wonderful for its day. I need hardly say that it is obsolete now.) The performers were all invisible to the audience, who were asked afterwards to fill up voting papers saying which performances were by the human being and which by the machine. It turned out that ninety per cent of the audience mistook the latter for the former; and it was suspected that the other ten per cent only plumped for the human pianist because they argued, in their own curious way, that the performances that seemed to them most perfect must of necessity be those of the human being. The victory of the makers was complete. The old belief in the superiority of the hand pianist, however, died hard. Even to-day you will find a few old fossils who affect to believe in him, though most of them have never seen a specimen.

'The next stage in this evolutionary process was the concentration, for special

purposes, of several piano-players in one. It had long been noticed by concert-goers in the old human-pianist days that the upper part of the pianoforte had nothing like the resonance of the lower - that if a man hit the bass keys very hard with his left hand he had to hit the treble keys equally hard with his right in order to make the melody heard, and the upper tones consequently became metallic and 'thumpy'. Some genius, away back in the dark days, hit on the device of having three, four or more pianists to play the same concerto. They did not play all at the same time: their copies were orchestrated for them, in a sense. It was found, for instance, that a much purer and rounder fortissimo melodic tone was produced by six pianists playing a treble melody with ordinary finger pressure than by one pianist using his full strength. In this way the normal fortissimo thud was avoided. So in very loud passages one pianist simply played the bass part with all his force, while the other five gave out the melody in a smooth singing tone that was multiplied to the needed loudness by the extra number of instruments. This plan was scientifically sound enough, but it had the dis-advantage of being expensive. The public still made a fuss of pianists in those days, and concert committees therefore had to pay them large fees. It seems curious that it should have been so, but the fact can be proved from historical documents. Well, the makers set themselves to overcome the difficulty by incorporating half-a-dozen piano-players in one, with the apparatus so arranged that the tone could be turned on with any degree of total or sectional power at the will of the operator. In a very little time the superiority of this instrument for concerto playing, and, indeed, for piano playing in general in large buildings, became so evident to all but the incurably prejudiced and old-fashioned that it was in universal demand for concert purposes, and the individual human pianist began to find his occupation going.'

'But,' I said, 'I also heard singers and an orchestra at the concert. Were those also mechanical?'

'Yes,' he replied, 'mechanical, of course, in the best sense, not in the contemptuous sense in which, I believe, the word used to be applied to musical performances. After the gramophone – another primitive instrument of which we have some account in our libraries – it was a comparatively easy matter to invent a machine that could do everything the old-style prima donna used to do, and more. At first the manufacturers wisely avoided attempting to make the machine sing words. They confined themselves to the production of vowel sounds, as the prima donna did. A few purists, who wanted to make themselves disagreeable, raised an outcry in the press: they insisted that the words were as necessary in vocal music as the tone. The makers made these people look very foolish by an ingenious device. They invited a number of the noisiest of them to a conference, and having got them safely in a locked room, submitted them to a compulsory examination with a view to discovering how much they really knew or understood of the words of the music they most admired and heard most often. It turned out that ninety-five per cent of

them knew no more of the words of one of the most popular prima donna arias, 'Caro nome,' than simply, 'Caro nome': one per cent of them could get as far as 'che il mio cor,' and only a half of one per cent knew that this was followed by 'festi primo palpitar.' In another test piece, 'Una voce,' by an old composer named Rossini, it was found that only two per cent of the purists knew that the rest of the line was 'poco fa', and none of them had the faintest idea as to what came after that. Nor could a single one of them give the examiners a rational account of what these and other arias were all about. The results of the enquiry were published, and the stupid opposition was drowned in ridicule.

'The next thing was to give a competitive demonstration of human singers and mechanical singers, like the one the piano-player manufacturers had arranged. The poor humans were, of course, beaten off the field. They had neither the power, nor the range, nor the accuracy, nor the perfect intonation of the machine. By gearing the mechanism up high, as it were, the aria could be made to sound as if it were being sung at an almost impossible height. I need not enlarge on this: you can see for yourself how inevitably and hopelessly beaten the prime donne were. Then, after a hundred years or so of experiment, the secret of producing perfect consonants was discovered, and it became possible to produce as faultless Lieder or operatic singing on the machine as it was to produce faultless piano-playing.

'So, to cut a long story short, it was with orchestral instruments. The mechanically-played violin and flute and so forth were easily made; then the problem was to subject them to thorough artistic control. This problem was solved at last, however, as it had been solved in the case of the piano. Then the orchestra was concentrated and simplified. A resonator attached to each instrument increased or diminished the tone of it *ad libitum*. One violin could in this way be made to do the work of five, or ten, or fifty. The next step was to unite the governing principles of the mechanism of all the instruments in one apparatus. I shall have pleasure in showing you this one day, for I am the manipulator of it at the concert-hall we have just left, and indeed, a member of the International Syndicate that runs the concerts. The apparatus resembles the stops of the old-time organ. The music is cut for the orchestra in just the same way as for the piano-player. All I have to do is to supply the more delicate of the nuances. I think I may take it, Sir, that you were pleased with the results this evening?'

I admitted that I was.

'Yes,' he went on, 'it has been a great evolution, and the makers had sometimes to exercise considerable ingenuity in order to overcome the prejudice of the public against mechanical music. The greatest step, perhaps, was the invention of the Predisposers, followed by that of the Suggestors.'

'What are these?' I asked.

'Oh,' he said, 'we don't use Predisposers at all now, and the Suggestors very little: they were only of assistance in the days when prejudice had to be overcome by

a side rather than a frontal attack. Acute observers had noticed that a particular pianist or violinist's popularity was due not so much to anything unique in his playing as to something unique in his personality, or his appearance, or his circumstances, or his history. With one man it was his hair, with another his eyes, with another his divorces, and so on. There were certain people called press agents, whose business it was to create this atmosphere about their clients – an atmosphere that predisposed the public to see rather more in these ladies and gentlemen than there actually was. So the makers of these playing and singing instruments at first had to invent human players for them – of course all the performances were given in the dark – and engage a number of people to predispose the public to believe about these quite fictitious performers everything that it was desirable that they should believe. These persons came to be known in the profession as Predisposers. They acted very well for a time. Then one manufacturer, more ingenious than the rest, said to himself, 'What really acts upon the public and makes it predisposed to see or hear what we want them to see or hear must be an invisible, impalpable mental force of some sort, communicated telepathically by the brain of the Predisposer to the brain of the Predisposed. Now why cannot we isolate this fluid, concentrate it, store it, and put it into operation just when and where we want to?' So he set his scientists experimenting, and in a few years they succeeded in isolating this force – which, indeed, had long been known to our stupid ancestors under the name of the force of suggestion, though they were ignorant of its efficacy and of how to apply it – and a supply of it was laid on in the concert-room, where it is administered to the audience in small or large doses, without their being in the least aware of it, by a single operator who studies their faces from behind the curtain, and regulates the current according to the necessity for stimulating their enthusiasm. We call him the Suggestor, and mostly make use of him on the occasion of a performance of a new work. It is a profession calling for considerable knowledge of human nature and a gift for thought-reading – to say nothing of the mere management of the machine. We had a curious accident here a little while ago. The Suggestor, I grieve to say, partook too freely of alcoholic refreshment before the concert; and in a moment of abstraction he reversed the current. We nearly had a riot in the hall: many people came and demanded their money back. We calmed them down, however, by turning on an extra current of suggestion in the right direction.

'Well,' said my companion, 'here we are at the station. My train goes in a couple of minutes, so I am afraid I must leave you. I hope I have made it all tolerably clear to you?'

'You have,' I said, 'and I am greatly indebted to you. Just one question before you go. Did not all these changes impoverish the pianists and the rest of them? What became of them all?'

'Well,' he said, 'there was inevitably a little misery at first, but a paternal Government did all it could to alleviate it. The pianists and the vocalists were the

worst off. For a time the Government gave the more able-bodied of them employment in making last ditches.'

'Last ditches?' I said.

'Yes, last ditches for politicians to die in. It turned out, however, that the voluntary mortality among politicians fell short of the estimate, so the pianists and the others were glad to be drafted into a new profession – the teaching of people to appreciate and understand music. They taught the Art of Listening, and a jolly good thing some of them make out of it. It is curious that none of them ever thought of it before on their own account. Well, I really must run. Good night'. And he was off.

I woke up to find the poor devil on the platform making a feeble attempt to imitate the organ in the final bars of the fugue. It was lamentable, but the applause was terrific. Then I knew that the ancestors of the Predisposers and the Suggestors had been at work, and I took off my hat to these great men – the real artists of the musical world of to-day.

#### 18

# The Player Piano on Record – a Discography

#### **Denis Hall**

# Duo-Art

The Duo-Art reproducing piano achieved enormous popularity in the USA and in addition had a wide circulation in Europe. Given that its performance was the equal of its rivals, it had a trump card to play – its agreement with Steinway pianos, who built instruments with specially enlarged cases, in both grand and upright designs, to accept the player mechanism.

It is hardly surprising that a goodly number of records of Duo-Art rolls have been essayed over the years, but the system is not easy to make work really well, and it is therefore perhaps inevitable that there have been more failures than successes in transferring the magic of the reproducing piano to this new medium. As before, the author has only recommended those discs which he has heard and can vouch for.



Advertisement for the Duo-Art Reproducing Piano in L'Illustration, 15 January 1927.

The Duo-Art reproducing action in its original form dates from around 1913 and was produced in Aeolian's factory in America. After the first World War, a slightly modified version was developed in England, and was generally installed in pianos of European origin, the majority of which were manufactured in Aeolian's own factory at Hayes, Middlesex. In the early 1920s, the American action was also altered. While all three variants use the same basic principles, they do perform slightly differently. Duo-Art rolls were recorded both in America and England and were edited to play best on the type of player action in production at the time and location

of the recording. This is the reason for the apparent haphazard recommendation of some but not all discs in the same series of recordings.

The piano which features most frequently in recordings of Duo-Art rolls is a Steinway model B grand belonging to Harold L. Powell in California. It was used for the Everest recordings and also the Klavier series. Its condition has certainly varied over the years, but at its best and when it is playing rolls compatible with the particular action installed, it sounds very fine and gives a good representation of what the Duo-Art can achieve.

The Everest master tapes have been issued on a number of occasions on different labels. I have not listed all the alternatives, but the notes below will indicate to the enthustiast some of the alternatives.

- The Everest First Series was issued by Decca on their Ace of Diamonds label.
   The pressings were better than the Everest discs, but the performances just as disappointing.
- 2. Saga issued three titles,
  - (a) Landowsks Saga 5388/Everest X915
  - (b) Hofmann Saga 5392/Everest X903
  - (c) Friedman Saga 5394/Everest X919
- 3. Ember (Pye) also issued three titles,
  - (a) Gershwin Ember GVC27/Everest X914
  - (b) Myra Hess Ember GVC28/Everest X917
  - (c) Prokofiev Ember GVC40/Everest X907
- 4. Murray Hill issued a four-disc box of the Paderewski titles on S4742. It includes all the titles issued on both the First and Second Series Everest discs.
- 5. The Toshiba EMI series of 7 LPs was also issued by CBS Sony, both sets having been published in Japan. The CBS Sony numbers are 25AC241 25AC247. I regret I have not been able to obtain full details of all the issues.

Record Label Catalogue No. Carrier	Artist	Composer	Title	Date Published	Recommended
Aeolian M0447 Mono 78	Grainger	Grieg	To Spring	c1927	*
Distinguished Recordings Inc HF101 Mono LP	Paderewski	Beethoven Chopin Liszt Paderewski Chopin	Sonata Op. 27/2 Valse Op. 42 <i>Hungarian Rhapsody</i> No.2 Minuet Op. 14/1 Polonaise Op. 40/1		
DR103 Mono LP	Paderewski	Liszt Schubert/Liszt Wagner/Liszt Mendelssohn Liszt Chopin Paderewski Schubert/Liszt	La Campanella Soirées de Vienne Isolde's Love-Death Spinning Song Hungarian Rhapsody No. 10 Valse Brillante Op. 34/1 Caprice (Genre Scarlatti) Op. 14/3 Hark, Hark the Lark Etude Op. 25/9		
Archive of Piano Music	sic				
Everest X901 Stereo LP	Paderewski	Paderewski Paderewski Paderewski Paderewski Paderewski Liszt Liszt	Minuet Op. 14/1 Caprice (Genre Scarlatti) Op. 14/3 Melodie Op. 8/3 (Chants du Voyageur) Légende Op. 16/1 Nocturne in B flat Op. 16/4 Hungarian Rhapsody No. 2 Hungarian Rhapsody No. 10	1967	
X902 Stereo LP	Paderewski	Chopin Chopin Chopin	Valse Brillante Op. 34/1 Mazurka Op. 17/4 Valse Op. 42		

Scherzo No. 3, Op. 39 Polonaise Op. 40/1 Mazurka Op. 24/4 Ballade No. 3, Op. 47 Ballade No. 1, Op. 23 Étude Op. 25/9	Sonata Op. 2/3 Sonata Op. 27/2 Rondo a Capriccio Op. 129 'Turkish March' (Ruins of Athens) Op. 113 – transcription by Anton Rubinstein	Sonata No. 2, Op. 35 Scherzo No. 3, Op. 39 Scherzo No. 2, Op. 31 Scherzo No. 1, Op. 20 Berceuse, Op. 57	Valse Impromptu Étincelles Op. 36/6 'Aufschwung' Op. 12/2 (Fantasiestücke) Barcarolle No. 2 Pastorale and Capriccio Melody in F, Op. 3/1 Rondo Capriccioso Op. 14 Spring Song, Op. 62/6 Caprice Espagnole, Op. 37 Prelude Op. 3/2	'Feux Follets' (Études d'Execution Transcendante No. 5)	Preludes Op. 28/23 and 24 Preludes Op. 28/7 and 8 Preludes Op. 28/3 Preludes Op. 28/3
Chopin Chopin Chopin Chopin Chopin	Beethoven Beethoven Beethoven	Chopin Chopin Chopin Chopin Chopin	Liszt Moszkowski Schumann Rubinstein Scarlatti Rubinstein Mendelssohn Mendelssohn Moszkowski Rachmaninov	Liszt	Chopin Chopin Chopin Chopin
	Hofmann	Hofmann	Hofmann	Busoni	
	X903 Stereo LP	X904 Stereo LP	X905 Stereo LP	906X	Stereo LP

		Liszt Liszt Liszt Bach/Busoni	Paganini Études No. 5 ( <i>La Chasse</i> ) Paganini Études No. 3 ( <i>La Campanella</i> ) Polonaise No. 2 Chaconne (Partita No. 2)
X907 Stereo LP	Prokofiev	Prokofiev Prokofiev Prokofiev Prokofiev Prokofiev Prokofiev Prokofiev Prokofiev Prokofiev Moussorgsky Glazounov Miaskovsky Scriabin Rimsky-Korsakov	Prelude Op. 11  Prelude Op. 12/7  Tales of the Old Grandmother Op. 31/3  Scherzo Op. 12/10  Gavotte Op. 12/1  Marche Op. 12/1  Sarcasms Op. 17/1 and 2  Rigaudon Op. 12/3  Intermezzo (Love for Three Oranges)  Bydlo and Ballet (Pictures at an Exhibition) Gavotte Op. 49/3  Grillen (Whims) Op. 25/1 and 6  Preludes Op. 45/5 and Op. 51/3  Scheherazade, Fantasia (Arrangement from the Symphonic Suite)
806X			
Stereo LP	Cortot	Saint-Saëns Faurë Albeniz Liszt Chopin Chopin Schubert	Étude en Forme de Valse Berceuse (Dolly Suire) Op. 56/1 'Under the Palms' (Chants d'Espagnole) Op. 232/1 Hungarian Rhapsody No. 11 Etude Op. 25/11 Andante Spianato and Grande Polonaise Op. 22 Litany for All Souls Day Impromptu Op. 142/3
X909 Stereo LP	Granados	Granados Granados Granados Granados Granados	Danza Espanola Op. 37/10 Danza Espanola Op. 37/2 Danza Espanola Op. 37/5 Danza Espanola Op. 37/7 Danza Espanola Op. 37/1

Improvisation Rêverie (Improvisation) Prelude from <i>Maria del Carmen</i> 'El Pelele' (Goyescas) Quejas o' lo Maja y el Ruisenor (Goyescas)		o. 22 tru Op. 66 1 p. 62		nfante defunte ches (Miroirs) au de Couperin) 1 de la nuit) (troirs)	Country Gardens (British Folk Music Settings No. 22) Shepherd's Hey (British Folk Music Settings No. 4) Reel (Four Irish Dances) Colonial Song Leprechaun's Dance (Four Irish Dances) Molly on the Shore (British Folk Music Settings No. 19) Sussex Mummers Christmas Carol (British Folk Music Settings No. 2) Spoon River (American Folk Music Settings No. 1) Irish Tune from County Derry	1972 *
Improvisation Rêverie (Improvisation) Prelude from Maria del Carmen 'El Pelele' (Goyescas) Quejas o' lo Maja y el Ruisenor	Sonata Op. 13 Sonata Op. 57	Concerto No. 2 Op. 22 Fantaisie Impromptu Op. 66 Polonaise Op. 26/1 Serenade Rondo Brillante Op. 62		Pavane pour une infante defunte La Vallée des Cloches (Miroirs) Toccata (Le tombeau de Couperin) Le Gibet (Gaspard de la nuit) Oiseaux Tristes (Miroirs)	Country Gardens (British Folk Mu Settings No. 22) Shepherd's Hey (British Folk Musi Reel (Four Irish Dances) Colonial Song Leprechaun's Dance (Four Irish D Molly on the Shore (British Folk Music Settings No. 19) Sussex Mummers Christmas Carol (British Folk Music Settings No. Spoon River (American Folk Music Irish Tune from County Derry	Rhapsody in Blue
Granados Granados Granados Granados	Beethoven Beethoven	Saint-Saëns Chopin Chopin Schubert/Liszt Weber		Ravel Ravel Ravel Ravel	Grainger Grainger Stanford Grainger Grainger Grainger Grainger	Gershwin
	Bauer	Bauer		Ravel	X913 Grainger Stereo LP Archive of Piano Music – Series Two	Gershwin
	X910 Stereo LP	X911 Stereo LP	X912	Stereo LP	X913 Stereo LP Archive of Piano	X914

Stereo LP		Shildkret Gold Kem Whiting	Make Believe Grieving for You Land Where the Good Songs Go Some Sunday Morning
X915 Stereo LP	Landowska	Mozart Lanner/Landowska Beethoven Beethoven	Sonata No. 17 K576 ** Valses Viennoises Sonata Op. 26 Andante Favori Op. 35
X916 Stereo LP	Hofmann	Liszt Liszt	Tarantella (Venezia e Napoli) ** Hungarian Rhapsody No. 12
	Paderewski	Liszt Schubert/Liszt Schubert/Liszt	La Campanella Soirées de Vienne Hark, Hark, the Lark
XX917 Stereo LP	Hess	Bach Scarlatti Beethoven Rachmaninov Paradies Bach Brahms Brahms Cobbussy Szymanowski	Whitsuntide Choral Prelude Sonata L14 Sonata Op. 79 Prelude Op. 3/2 Toccata in A major Toccata in G major Intermezzo Op. 119/3 Rhapsody Op. 79/4 La cathédrale engloutie (Preludes Book 1/10) Étude Op. 4/3
X918 Stereo LP	Saint-Saëns	Saint-Saëns Saint-Saëns Saint-Saëns Saint-Saëns Saint-Saëns Chopin	Improvisation (Samson et Delilah) Mazurka Op. 66 Valse Mignonne Mazurka in G minor Op. 21 Valse Nonchalante Impromptu No. 2 Op. 36
	Hofmann	Hofmann Dvorsky Hofmann	Nocturne (Complaint) (Mignonettes) * The Sanctuary Kaleidoscope Op. 40/4

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	ge) ss No. 11) thing to the birds ing on the waves		1970	
Étude Op. 10/8 Valse (Posthumous) Melodie Op. 8/1 Romance Elf s Dance Op. 3 Novellette Op. 99/9 Spinning Song Op. 67/4 Intermezzo in Octaves Op. 44/4	On Lake Wallenstadt (Années de Pélèrinage) Les jeux d'eaux a la Villa d'Este Hungarian Rhapsody No. 2 Hungarian Rhapsody No. 10 La Campanella Harmonies du Soir (Transcendental Etudes No. 11) Legende No. 1, St. Francis of Assisi preaching to the birds Legende No. 2, St. Francis of Paula walking on the waves	Spinning Song Op. 67/4 Impromptu Op. 142/3 Noctume Op. 48/1 Sonata Op. 27/2 Noctume Op. 37/2 Impromptu Op. 142/2	Concerto in A minor Op. 16 Ballade Op. 24 Wedding Day at Troldhaugen Op. 65/6 Erotikon (Lyric Pieces) To Spring (Lyric Pieces)	Marche Militaire Op. 51/1 Romeo et Juliette (Fantasy Overture) Valse, Suite for Two Pianos Op. 15 Till Eulenspiegel's Merry Pranks Op. 28 Symphonic Dance
Chopin Chopin Gabrilowitsch Faure Sapellnikoff Schumann Mendelssohn Leschetizky	Lisa Lisa Lisa Lisa Lisa Lisa Lisa Lisa	Mendelssohn Schubert Chopin Beethoven Chopin Schubert	Grieg Grieg Grieg Grieg	Schubert Tchaikovsky Arensky Strauss Scott
	Friedheim	Paderewski Bauer Paderewski	Artist Series Grainger	Bauer/Gabrilowitsch Grainger/Leopold Bauer/Gabrilowitsch Grainger/Leopold Scott/Grainger
	X925 Stereo LP	X926 Stereo LP	Klavier Legendary Artist Series KS101 Stereo LP	KS102 Stereo LP

March of the Little Lead Soldiers Op. 28	Sonata No. 1 Op. 11 Sonata No. 3 Op. 22	Étude Op. 10/3 Étude Op. 10/5 Étude Op. 25/8 Étude Op. 25/9 Étude Op. 28/12 Prélude Op. 28/15 Impromptu No. 3 Op. 51 Noctume Op. 55/2 The Maiden's Wish Op. 74/1	Études Symphonique Op. 13 Romance Op. 29/2 Polonaise No. 2 <i>Hungarian Rhapsody</i> No. 12	Sonata Op. 109 Scherzo from Sonata Op. 106 Adagio from Concerto in F minor Étude Op. 8/12 Feuillet d'Album (Pièce Pittoresque No. 6) Au bord d'une source Idylle	Sonata Op. 28 Toccata and Fugue in D minor Der Erlkoenig Des Abends Op. 12/1 Warum? Op. 12/3 Magic Fire Music (Valkyrie)	Sonata Op. 58 Fantasie Op. 49 Scherzo No. 3 Op. 39
Pierne	Schumann Schumann	Chopin Chopin Chopin Chopin Chopin Chopin Chopin	Schumann Schumann Liszt	Beethoven Beethoven Bach Scriabin Chabrier Liszt Chabrier	Beethoven Bach/Tausig Schubert/Liszt Schumann Schumann Wagner/Brassin	Chopin Chopin Chopin
Hess/Bauer	Bauer Grainger	Cortot	Grainger	Cortot	Friedman	Bauer
	KS105 Stereo LP	KS106 Stereo LP	KS109 Stereo LP	KS110 Stereo LP	KS112 Stereo LP	KS113 Stereo LP

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Polonaise Op. 26/1	Valse Phantastique Forest Elves Op. 70/5 Poème Op. 32/1 Melodie Rondo Perpetual Motion Op. 24	Romance Op. 44/1 The Nightingale	Minuet from Symphony No. 100 Paganini Etude No. 4 (Vivo) 'The Banjo' (Fantasie Grotesque)	Viennese Waltzes Nos. 1 and 2 Five Waltzes Op. 51 Elle Danse Op. 10/5 Minuetto Vecchio Op. 76/6 From Estampes Op. 22, (a) Serenade de Pierrot (b) Le Marquis et La Marquise	Romance Op. 5 Invitation to the Dance Op. 65 Paganini Étude No. 3, La Campanella	Carnaval Op. 9 Jeux d'Eau Prelude à l'après midi d'un faune La fille aux cheveux de lin (Preludes Book 1/8)	Polonaise Op. 53  Noctume Op. 55/1  Valse Op. 34/1  Polonaise Op. 40/1  Noctume Op. 27/2  Valse Op. 64/2  Valse Op. 42
Chopin	Woods Schytte Scriabin Gluck Weber	Rubinstein Aliabieff	Haydn Liszt Gottschalk	Gaertner/Friedman Friedman Friedman Friedman	Tchaikovsky Weber Liszt/Busoni/Friedman	Schumann Ravel Debussy Debussy	Chopin Chopin Chopin Chopin Chopin Chopin
	Hofmann	Friedman	Gabrilowitsch Friedheim	Friedman		Robert Schmitz	Hofmann
	KS114 Stereo LP			KS115 Stereo LP		KS117 Stereo LP	KS118 Stereo LP

Stereo LP	Friedman	Chopin Chopin Chopin Chopin Liszt Gaertner/Friedman	Ballade No. 4, Op. 52 Impromptu No. 1, Op. 29 Valse Op. 64/1 Grande Valse Brillante Op. 18 <i>Hungarian Rhapsody</i> No. 14 Viennese Waltzes Nos. 3 and 4
KS121 Stereo LP	Hofman	Rubinstein Rubinstein Schuett Stemberg Moszkowski Rachmaninov Schumann/Tausig	Valse Caprice Barcarolle No. 2 Valse Bluette Op. 25 Étude de Concert No. 3, Op. 103 Guitarre Op. 45/2 Prélude Op. 23/5 El Contrabandista
	Grainger	Chopin Scott Debussy Brahms/Grainger	Étude in A flat No. 2 (Posthumous)  Lotus Land Op. 47/1  Toccata (Pour le Piano)  Lullaby Op. 49/4
	Bauer	Schubert Bizet/Buonamici Durand	Menuetto from Second Fantasie Chanson d'Avril Valse in E flat Op. 83
Stereo LP	Gershwin	Gershwin Gershwin Gershwin Gershwin Gershwin Kern Kern Kern Kern	Sweet and Low-Down Kickin' the Clouds Away I Was So Young Tee-Oddle-Um-Bum-Bo Drifting Along With the Tide So Am I Left All Alone Blues Whip-Poor-Will Whose Baby Are You?
KS124 Stereo LP	Gershwin	Gershwin Gershwin Gershwin Berlin	Rhapsody in Blue Swanee That Certain Feeling For Your Country and My Country

Make Believe Some Sunday Morning Land Where the Good Songs Go Grieving for You Ain't You Coming Back to Dixie	Toccata in C Op. 11  March Op. 12/1  Rigaudon Op. 12/3  Prelude in C Op. 12/7  Scherzo Op. 12/10  Tales of the Old Grandmother Op. 31/3  Sarcasms Op. 17/1 and 2  Gavotte Op. 12/1  Scherzo (Love for Three Oranges)  Prelude in G minor Op. 23/5  Gavotte in D Op. 49/3  Grillen Op. 25/1 and 6  Prélude Op. 45/3  Winged Poem Op. 51/3  'Ballet of Chickens in their Shells'  (Pictures at an Exhibition)  Scheherezade (Fantasia from Symphonic Suite)	The Firebird	Polonaise Op. 40/1 Ballade No. 1., Op. 23 Mazurka Op. 24/4 Ballade No. 3, Op. 47 Valse Brillante Op. 34/1 Noctume Op. 37/2 Hark, Hark, the Lark Impromptu Op. 142/2 Reflets dans l'eau (Images) Spinning Song Op. 67/4
Shildkret Whiting Kern Gold Whiting	Prokofiev Rachmaninov Glazunov Miaskovsky Scriabin Scriabin Mussorksky	Stravinsky	Chopin Chopin Chopin Chopin Chopin Chopin Schubert/Liszt Schubert Debussy Mendelssohn
	Prokofiev	Stravinsky	Paderewski

KS129 Stereo LP	Paderewski	Beethoven Schubert/Liszt Liszt Liszt Chopin Wagner/Liszt	Sonata Op. 27/2 Soirées de Vienne Hungarian Rhapsody No. 2 Hungarian Rhapsody No. 10 Scherzo No. 3, Op. 39 Isolde's Love Death
KS130 Stereo LP	Bauer	Beethoven Brahms Brahms Brahms Brahms Brahms Brahms Brahms Bach Haydn Schubert/Liszt Boccherini Liszt Paganini/Liszt	Andante, Cantabile and Variations (String Quartet Op. 18/5) Intermezzo Op. 11/7/1 Capriccio Op. 76/5 Hungarian Dance No. 5 Hungarian Dance No. 6 Hungarian Dance No. 8 Chorale from Cantata No. 147 Gypsy Rondo Serenade Minuet in A Eclogue (Years of Pilgrimage) Étude No. 2
KS132 Stereo LP	Lerner/Shavits Damrosch, P & W Lambert/Reisenberg Grainger/Leopold	Liszt Ravel Litolff Delius Schubert	** Concert Pathetique  ** Ma Mère I'Oye Scherzo (Concerto Symphonique Op. 102)  ** North Country Sketches ** a. Autumn – The wind soughs in the trees ** b. Winter Landscape ** c. Dance ** d. The March of Spring Marche Héroique Op. 40/3
KS133 Stereo LP	Gershwin	Gershwin Gershwin Gershwin Gershwin Gershwin	Kickin' the Clouds Away Swanee Sweet and Low Down So am I Drifting Along with the Tide I'll Build a Stairway to Paradise

				1987
Do It Again Yankee Doodle Blues I Was So Young That Certain Feeling Rhapsody in Blue (Andante)	Danza Espanola No. 1, 'Lenta' Danza Espanola No. 2, 'Arabe' Danza Espanola No. 5, 'Andaluza' Danza Espanola No. 10 Goyescas, 'El Pelele' Goyescas, 'The Lady and the Nightingale' Improvisation Prelude (Maria del Carmen) Reverie (Improvisation)	Préludes Op. 28/1-24	'Le Gibet' (Gaspard de la Nuir) 'Oiseaux Tristes' (Miroirs No. 2) 'La vallée des cloches' (Miroirs No. 5) Pavane pour une infante defunte Toccata (Le tombeau de Couperin No. 6)	Rhapsody in Blue Swanee That Certain Feeling Tee-Oodle-Um-Bum-Bo Kickin' the Clouds Away Sweet and Low Down So Am I Drifting Along With the Tide I Was So Young, You Were So Beautiful Left All Alone Blues Whip-Poor-Will Whose Baby Are You?
Gershwin Gershwin Gershwin Gershwin	Granados Granados Granados Granados Granados Granados Granados	Chopin	Ravel Ravel Ravel Ravel	Gershwin Gershwin Gershwin Gershwin Gershwin Gershwin Gershwin Gershwin
	Granados	Busoni	Ravel	Gershwin
	KD135 Stereo LP	KD136 Stereo LP	KD137 Stereo LP	KCD11001 Stereo CD

	1989	1989	1960	1973
Rock-A-Bye Lullaby For Your Country and My Country Land Where The Good Songs Go Some Sunday Morning Ain't You Coming Back to Dixie?	Polonaise Op. 40/1 Ballade No. 1 Op 23 Mazurka Op. 24/4 Ballade No. 3, Op. 47 Valse Brillant Op. 34/1 Noctume Op. 37/2 Scherzo No. 3 Op. 39 Impromptu Op. 142/2	Sonata Op. 27/2 Soirée de Vienne Hark, Hark, the Lark Hungarian Rhapsody No. 2 Hungarian Rhapsody No. 10 'Reflets dans I'eau' (Images No. 1) Spinning Song Op. 67/4 Isolde's Love Death	Rhapsody in Blue That Certain Feeling Left All Alone Again Blues Grieving For You I'm a Lonesome Little Raindrop Just Snap Your Fingers at Care	Waltz Op. 34/1 Kamennoi Ostrow Op. 10/22 'Davidsbundler March' (Carnival Op. 9) Impromptu Op. 142/2 Waltz (Suite Op. 15) Naila Waltz
Donaldson Berlin Kern Whiting	Chopin Chopin Chopin Chopin Chopin Chopin Chopin	Beethoven Schubert/Liszt Schubert/Liszt Liszt Debussy Mendelssohn Wagner/Liszt	Gershwin Gershwin Kem Gold Roth Silvers	Chopin Rubinstein Schumann Schubert Arensky Delibes/Dohnanyi
	Paderewski	Paderewski	Gershwin	Paderewski Bauer Scharwenka Cortot Bauer/Gabrilowitsch Backhaus
	KCD11014 Stereo CD	KCD11018 Stereo CD	EMB3315 Mono LP	JOYS248 Stereo LP

Polish Dance Op. 3/1  Eugene Onegin, Concert Paraphrase Waltz Op. 64/1  'Leprechaun's Dance' (Four Irish Dances Op. 79/3) Scherzo (Concerto Symphonique Op. 102)	Prelude Op. 3/2 Turkish March Op. 113 Poème Op. 32/1 Valse Op. 42 Polonaise Op. 53 Valse Caprice Melodie Op. 3/1 Spring Song Op. 62/6 Rondo Capriccioso Op. 14	Sonata Op. 27/2 Spinning Song Op. 67/4 Minuet Op. 14/1 Caprice Op. 14/3 La Campanella Grande Valse Op. 34/1 Valse Op. 42 Étude Op. 25/9 Polonaise Op. 40/1 Hark, Hark, the Lark	Concerto in F minor (Adagio) Impromptu Op. 142/3 Litany for All Souls Andante Spianato and Grande Polonaise Op. 22 Études Op. 25/9 and Op. 10/5 Prélude Op. 28/15 Étude en forme de valse Op. 52/6
Scharwenka Tchaikovsky/Pabst Chopin Stanford Litolff	Rachmaninov Beethoven/Rubinstein Scriabin Chopin Chopin Rubinstein Rubinstein Mendelssohn Mendelssohn	Beethoven Mendelssohn Paderewski Paderewski Liszt Chopin Chopin Chopin Chopin	Bach/Cortot Schubert Schubert/Cortot Chopin Chopin Chopin Saint-Saëns
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Hungarian Rhapsody No. 2 Mazurka Op. 17/4 Mazurka Op. 24/4 Valse Op. 42 Valse Brillante Op. 34/1

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Polonaise Op. 40/1 Nocturne Op. 37/2 Étude Op. 25/9

# Paderewski Paderewski Paderewski

Caprice Op. 14/3 Nocturne Op. 16/4 Minuet Op. 14/1 Spinning Song

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Godowsky Pachmann Lamond Busoni Friedheim Hambourg Ganz

Bauer Gabrilowitsch

Horowitz

GR1878 Stereo LP

Backhaus Rubinstein Iturbi Friedman

GR1879 Stereo LP	Landowska Ney Novaes Novaes Leginska Lerner Lerner Carreno	Mozart Schubert Chopin Chopin Moszkowski Schubert/Tausig Liszt Weber MacDowell	Sonata K576  Moment Musical Op. 94/2  Nocturne Op. 15/2  Études Op. 25/9 and Op. 10/5  Valse Op. 34/1  Marche Militaire 'Gnomenreigen' (Études de Concert No. 2)  Invitation to the Dance  Hexentanz Op. 17/2
GR 1880 Stereo LP	Gershwin Saint-Saëns Prokofiev Grainger		
Larrikin Records			
LRF034 Stereo LP	Grainger	Grieg Grieg	'Jutish Medley' (Danish Folk Music Settings No. 8) Norwegian Folk Songs Op. 66:- Cattle Call No. 1 Love Song No. 2 In Ola Valley No. 14 Wedding Song No. 10 Gjerdine's Cradle Song No. 19
			Peasant Dance No. 16 Wrant in Thought I wander No. 18
		Guion	Cowboy's and Old Fiddler's Breakdown:- Sheep and Goat Walkin' to the Pasture Turkov in the Strow
		Grainger	(Reitieb Folly Come Control No. 6)
		Grainger	(Drinsa) on Song Senings (V. 9)  'One More Day, My John'  'Can Gharry, Carrings (N. 1)
	Grainger/Leopold Grainger	Delius Stanford	See Snamy Seeings 1805. 1) Brigg Fair – An English Rhapsody Irish Dances:- 'Reel' No. 4 'Leprechaun's Dance' No. 3

	1978	1980	1982	9861
'March Jig – "Maguire's Kick"' No. 1	Piano Concerto in A minor Op. 16 (with Sydney Symphony Orchestra/Hopkins)	Piano Concerto No. 1, Op. 23 (with Melbourne Symphony Orchestra/Hopkins) Paraphrase on Tchaikovsky's Flower Waltz	Country Gardens Sussex Mummer's Christmas Carol One More Day, My John Molly on the Shore Zanzibar Boat Song Children's March Two Musical Relics of my Mother:- 'Hermund the Evil' 'As Sally Sat a Weeping' Walking Tune Lullaby (from A Tribute to Foster) Mock Morris 'Gay but Wistful' (from In a Nutshell) 'Gumsuckers March' (from In a Nutshell) Colonial Song Eastern Intermezzo Jutish Medley Shepherd's Hey	A Reivers Neck Verse (vocal: Robert Gard, OBE, tenor)  Pupazzetti Op. 27 1. Marcetta 2. Berceuse
	Grieg	Tchaikovsky Grainger	Grainger	Grainger Casella
	Grainger	Grainger	Grainger Grainger/Hough Grainger Grainger Grainger/Hough Grainger	Casella
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3. Serenata 4. Nottumo 5. Polca	The Land Where the Good Songs Go Make Believe So am I	Tee-Oodle-Um-Bum-Bo Rhapsody in Blue	Oh, Gee! Oh, Joy! Fascinating Rhythm Oh 1 adv he Good	A Russian Lullaby	now Deep is the Ocean Lady of the Evening	What Does it Matter	A Pretty Girl is Like a Melody	Play That Song of India Again		Sonata Op. 111 'Cuius Animam' (from Stabat Mater) Gnomenreigen (Concert Étude No. 2) Un Sospiro (Concert Étude No. 3) Frühlingsstimmen Overture, Der Freischutz Symphony No. 5 Op. 64, 2nd Movement	Hungarian Rhapsody No. 12 'Benediction de Dieu dans la solitude' (from Harmonies noètiques et religieuses)	Choral Prelude in E minor Fantasia Op. 15, Wanderer, (slow movement) 'Goolenki' (Cradle Song) Legende No. 1, 'St. François d'Assisi, la predication aux
	Kem Shilkret Gershwin	Gershwin Gershwin	Gershwin Gershwin Gershwin	Berlin	Berlin Berlin	Berlin	Berlin	Whiteman		Beethoven Rossini/Liszt Liszt Liszt Strauss/Grunfeld Weber/Lamond Tchaikovsky	Liszt Liszt/Siloti	Bach/Szanto Schubert Liadoff/Siloti Liszt
	Gershwin/Erlebach Gershwin Gershwin	Gershwin Gershwin	Ohman Rich Rich	Mering	Farquhar/Earl	Ohman	Milne	Erlebach/Milne	the Golden Era	Lamond	Siloti	Friedheim
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Legende No. 2, 'St. François de Paule marchant sur le flots' 'Les jeux d'eaux a la ville d'Este' (3 ème année, <i>Italie</i> No. 4) Grande Étude de Paganini No. 1, (Tremolo) Grande Étude de Paganini No. 3, (La Campanella) 'Harmonies du Soir' ( <i>Etudes d'execution transcendante</i> No. 11) 'The Banjo' ( <i>Fantasie Grotesque</i> )	Polonaise Op. 44 Ballade No. 3, Op. 47 Danse Suggestion Diabolique Op. 4/4 Le Coa d' Or Selection	Noctume Op. 9/2 Ballade No. 1, Op. 23 Berceuse	Sonata K576 Valses Viennoises	Étude Op. 25/9  Étude Op. 10/5  Valse Op. 42  Polonaise Op. 40/1  Mazurka Op. 17/4  Scherzo No. 3, Op. 39  The Maiden's Wish Op. 74/1  Hark, Hark the Lark!  Impromptu Op. 142/2  'Prophet Bird' Op. 82/7 (from Waldszenen)  'Isoldes Liebstod' (from Tristan and Isolde)  Hungarian Rhapsody No. 10  Sonata Op. 27/2	The Nightingale Hungarian Rhapsody No. 14 Grande Étude de Paganini No. 3 (La Campanella) Reminiscences de Don Juan
Liszt Liszt Liszt Liszt Liszt Gottschalk	Chopin Chopin Debussy Prokofiev Rimskv-Korsakov	Chopin Chopin Henselt	Mozart Lanner/Landowska	Chopin Chopin Chopin Chopin Chopin Chopin Chopin/Liszt Schubert/Liszt Schubert Schumann Wagner/Liszt Liszt Liszt	Alabieff/Liszt Liszt/Friedman Liszt/Busoni/Friedman Mozart/Liszt
	Rubinstein	Godowsky	Landowska	Paderewski	Friedman
	90 F 08 CD Stereo CD			90 F 09 CD Stereo CD	90 F 10 CD Stereo CD

Am die Schönen Blau Donau Op. 314 Noctume Op. 37/1 Noctume Op. 62/1 Polonaise Op. 71/2 Der Erlkönig Serenade Op. 15/1	Serenade from <i>Don Giovanni</i> Piano Concerto No. 1, Op. 25 Variations on a Theme of Paganini Op. 35, Book 1/1, 3, 7, 12, 13, Book 2/3, 4, 5, 6, 7, 8, 9, 10, 11, 14	Widmung Op. 25/1 Standchen Op. 17/2 'Liebsleid' (from Old Viennese Dance Tunes No. 2) Caprice Bohemien Naila Waltz La danse d'Olaf	Étude en Forme de Valse Op. 52/6 Sonata Op. 106, 2nd Movement Hungarian Rhapsody No. 2 Hungarian Rhapsody No. 11 'An bord d'une source' (tère année Suisse No. 4)	Andante Spianato and Grande Polonaise Op. 22 Prélude Op. 28/15	Danse Macabre Op. 40 (trans Liszt) Liebotschaft	Freludes Op. 32/1 and 8  Carmen Variations Valse in F minor	Chaconne from Sonata in D minor for solo violin 'Feux Follets'. (Étude d'execution transcendante No. 5)	'La Chasse' (Grande Étude de Paganini No. 5) Polonaise No. 2 Preludes Op. 28
Strauss Chopin Chopin Chopin Schubert/Liszt Moszkowski	Mozart/Backhaus Mendelssohn Brahms	Schumann/Liszt Strauss/Backhaus Kreisler/Rachmaninov Smetana Delibes/Dohnanyi Pick-Mangiagalli	Saint-Saëns Beethoven Liszt Liszt	Chopin Chopin	Saint-Saëns Schubert/Liszt	Kacnmaninoff Bizet/Horowitz Horowitz	Bach/Busoni Liszt	Liszt Liszt/Busoni Chopin
	Backhaus		Cortot		Horowitz		Busoni	
	90 F 11 CD Stereo CD		90 F 12 CD Stereo CD				90 F 13 CD Stereo CD	

90 F 14 CD Stereo CD	Saint-Saëns Ravel Granados	Saint-Saëns Saint-Saëns Saint-Saëns Chopin Ravel Ravel Granados Granados	Improvisation, (Samson et Dalilah) Valse Mignonne Op. 104 Mazurka No. 3, Op. 66 Impromptu No. 2, Op. 36 Le Gibet No. 2, 'Gaspard de la Nuit' 'La vallée des cloches' No. 5 – Miroirs Danza Espanola No. 2, 'Araba' Danza Espanola No. 5, 'Andaluza'
		Granados Granados Granados Granados Granados	Danza Espanola No. 7, 'Valenciana' Danza Espanola No. 10, 'Valenciana' 'El Pelele' (Goyescas) 'Quejas, o la Maja y el Ruisenor' (Goyescas) Rêverie (Improvisation) (Themes of Valenciana Jota, with the influence of the south Arab music)
90 F 15 CD	Prokofiev Casella	Prokofiev Prokofiev Prokofiev Prokofiev Prokofiev Rachmaninov Scriabin Scriabin Mussorgsky Mussorgsky R. Korsakov/Prokofiev Casella	Marche Op. 12/1 Intermezzo from The Love of Three Oranges Marche from The Love of Three Oranges Tales of the Old Grandmother Op. 31/3 Toccata Op. 11 Prelude Op. 23/5 Prelude Op. 45/3 Winged Poem Op. 51/3 Winged Poem Op. 51/3 'Bydlo' and 'Ballet des pousins dans leur Coques' from Pictures at an Exhibition 'Promenade', The Old Castle, from Pictures at an Exhibition Fantasia on themes from Scheherezade Barcarola Op. 15 Berceuse Triste Op. 14
	Enescu	Sarasate/Enescu Enescu	Zigeunerweisen Op. 20 Adagio Op. 3/3
Dolphin Recordings			1661
SBS M0001-2 Stereo CD	Paderewski Horowitz Ravel	Beethoven Bizet/Horowitz Ravel	Sonata Op. 27/2  Carmen Variations  'La vallée des cloches' (Miroirs No. 5)

Barcarolle Op. 60 Prelude Op. 23/5 Toccata (Pour le Piano) Improvisation, (Samson and Delilah) Spanish Dance No. 5 Hungarian Dance No. 12 Concerto for Piano & Orchestra (First Movement) So Am I	Rhapsody in Blue That Certain Feeling Swanee Kickin' the Clouds Away Limehouse Nights Drifting Along With the Tide Rockabye Lullaby Mammy Tee-Oodle-Um-Bum-Do I Was So Young, You Were So Beautiful All Alone Again Blues Whipowill Land Where Good Songs Go For Your Country and My Country	Preludes Op. 32/10 and Op. 32/8  Danse Macabre Carmen Variations Étude Op. 10/6 Valse in F minor Dumka Op. 59 Prelude Op. 23/5	The Firebird Sonata Concerto for Piano & Orchestra (First Movement)
Chopin Rachmaninov Debussy Saint-Saëns Granados Liszt Stravinsky Gershwin	Gershwin Gershwin Gershwin Gershwin Gershwin Gershwin Gershwin Gershwin Kern Kern Kern Kern Kern Kern Kern Gershwin	Rachmaninov Saint-Saëns/Liszt Bizet/Horowitz Chopin Horowitz Tchaikovsky Rachmaninov	Stravinsky Stravinsky Stravinsky
Rubinstein Prokofiev Grainger Saint-Saëns Granados Hofmann Stravinsky Gershwin	Gershwin	Horowitz Prokofiev	Stravinsky
	Stereo CD	SBS M0003-2 Stereo CD	SBS M0004-2 Stereo CD

# Review Article Nancarrow on CD

# **David Smith**

Vols 1 & 2 (combined) WER 6168/69-2 (sic)

CD1: Studies nos. 3a, 3b, 3c, 3d, 3e, 20, 44, 41a, 41a, 41b, 41c.

CD2: Studies nos. 5, 6, 14, 22, 26, 31, 35, 4, 32, 37, Tango?, 40a, 40b.

Vols 3 & 4 (combined) WER 60166/67-50

CD1: Studies nos. 1, 2a, 2b, 7, 8, 10, 15, 21, 23, 24, 25, 33, 43, 50.

CD2: Studies nos. 9, 11, 12, 13, 16, 17, 18, 19, 27, 28, 29, 34, 36, 46, 47.

Vol. 5 WER 60165-50

Studies nos. 42, 45a, 45b, 45c, 48a, 48b, 48c, 49a, 49b, 49c.

The 50 Studies by Conlon Nancarrow represent the most extensive and ambitious compositional research ever undertaken for the player-piano. The layout of these Studies rarely suggests an extension of human technique; indeed, Nancarrow's reason for turning to the player piano in the late 1940s was to explore those areas of complex rhythm and tempo (as well as sheer speed) which lie far beyond what is attainable by the human pianist. The result is an extraordinarily compelling, utterly individual and often berserk music. These five CDs, recorded on one of Nancarrow's own specially adapted instruments, are no doubt designed to be a definitive document of a body of work unique in twentieth century music.

The later Studies (including the ones on Vol. 5) have not been commercially recorded before. The rest have appeared on 1750 Arch Records or on CBS in the late 1970s and early 1980s. The CD recordings are more recent, having been made in January 1988. Definitive though they are, they offer a quite different view from the earlier disc recordings with which many readers will be familiar.

# The CDs

Nancarrow customarily uses two Marshall and Wendell upright pianos with Ampico reproducing piano mechanisms. The hammers on one are covered with leather and small metal tacks (Piano A) and on the other with metal strips (Piano B). The timbre of both is considerably spikier than that of a normal piano, although Piano A sounds less harsh and harpsichord-like than Piano B. Nancarrow prefers some rolls to be played on Piano B (it would be interesting to know which) but more often uses Piano A. Piano B was out of action at the time of the recordings and so all the Studies were recorded on Piano A. This in no way detracts from the 'definitive' nature of the project – indeed the composer was apparently happy that all the pieces for two pianos, bar one, be recorded with digital over-dubbing. The exception is Study no. 44 in which two differing piano timbres are an essential component of the

composition – a previously recorded analogue version therefore appears on Vol. 1. However, the absence of Piano B is perhaps not the complete explanation of why the tone-quality of the CD recordings is more rounded and less aggressive than the earlier disc recordings. A spikier sound may be more suitable for polyphonic perception, but this alone does not prepare the listener for the difference in effect which, in the case of Study no. 21 (the famous Canon X) for example, is astonishing. I, for one, find it easier to listen to considerably more Studies at one sitting than before.

A further comparative observation needs to be made about durations. Many of the Studies, though not all, are slower on the CDs., some by only a few seconds, others by rather more. Consider the following timings:

Study No.	Disc	CD
3c	2' 23" (Arch)	3' 02"
23	3' 54" (CBS)	4' 46"
24	3' 36" (CBS)	4' 23"
27	5' 27" (Arch)	6' 29"
28	2' 32" (Arch)	3' 22"
29	3' 06" (Arch)	3' 57"
35	6' 15" (Arch)	7' 36"

A durational increase of some 20-25% seems, on the face of it, pretty alarming, especially if the music is fast, as Nancarrow's usually is. Nevertheless the problem seems not to arise, possibly because the impression of *prestissimo* is not lost. In any case, I would doubt that many listeners will be disturbed by the apparent discrepancies above. Insofar as Study no. 10 is concerned (4' 07" on CBS, 3' 03" on CD) the difference is explained by a compositional revision which cut out the original slow blues opening.

Three Studies are missing from the collection, nos. 30, 38 and 39. No. 30 is for prepared player piano (see below) and apparently withdrawn. There is no explanation for the absence of 38 and 39. 39, for two identical-sounding player pianos was broadcast in 1980 as a result of a European Broadcasting Union commission.

# American pioneer

Nancarrow's work is related musically and ideologically to the so-called 'pioneer tradition' of early twentieth century American modernist composers – composers such as Charles Ives, Carl Ruggles, Edgard Varèse, Ruth Crawford (Seeger), Charles Seeger, Henry Brant, Harry Partch, Henry Cowell – possibly also Leo Ornstein and George Antheil. For the most part, it could hardly be said that the music of these

composers is stylistically similar. Nevertheless Nancarrow's particular interest in rhythm, tempo, multi-layered counterpoint, systematic pitch organization and even severe quirkiness within what is often a challenging musical language can be seen to have been anticipated by works such as Ives' Tone Roads no. 3 and Crawford's Prayers of Steel.

In the accompanying essays to the CDs, Amirkhanian and Tenney make little of this relationship; strange, since these gentlemen have done more than almost anybody to publicize this fascinating area of essentially un-European radical musical experimentation. It seems unlikely, though perhaps possible, that Nancarrow did not encounter this kind of music in the 1930s or 1940s, either through concerts or through Cowell's New Music (a quarterly which published modernist compositions including three by Nancarrow) or through his friendship with Elliott Carter. However, we know that he encountered Cowell's book New Musical Resources in about 1939 which was apparently both a revelation and a confirmation. Of significance is a passage on pp. 64-65.

'An argument against the development of . . . [cross-] rhythms might be their difficulty of performance. It is true that the average performer finds cross-rhythms hard to play accurately; but how much time does the average performer spend on practising them? . . . By experiment we have observed that such rhythms as 5 against 6 against 8 or 9 and other combinations of these rhythms together, can be quite accurately performed by the devotion of about 15 minutes a day for about six months. Some of the rhythms developed through the present acoustical investigation could not be played by any living performer; but these highly engrossing rhythmic complexes could easily be cut on a player-piano roll. This would give a reason for writing music specially for player-piano, such as music written for it at present does not seem to have, because almost any of it could be played instead by two pianists at the keyboard'.

Cowell never experimented with the instrument himself. By his own admission, he had far more ideas than he could ever hope to put into practice. On the other hand, Nancarrow had grown up in a home which possessed a player piano. The compositions which pre-date the Studies were rhythmically problematic for performers and it does not seem unreasonable to suppose that he turned to the player piano as much through choice as through necessity.

#### The Studies

James Tenney suggests that the Studies 'fall into several groups, within each of which there are certain common characteristics'. This is useful to a point although the later Studies are less easy to compartmentalize. Studies 13-19 (originally called 7 Canonic Studies) are rhythm canons of fixed proportions, as are nos. 24, 26 and 31-7. Earlier pieces (1-12) tend to be more intuitive, rather less complex and less abstract bearing in mind their often clear references to blues, boogie and Spanish

music. Later, an improvement in the composer's roll-punching machine encouraged controlled gradual tempo changes (e.g. nos 20-3, 25, 27-9) and several Studies in the 30s reveal more complicated tempo-ratios and greater multi-layering (e.g. no. 37). Five of the most recent Studies (39-41, 44, 48) involve two player pianos. The other late Studies generally exhibit an increase in clarity and economy rather than in complexity or density, although some of Tenney's descriptions might not suggest this. In some respects (e.g. melodically, harmonically and referentially) they seem to hark back to the earliest: a possible explanation is offered in the Soundpieces interview (1980) where Nancarrow speaks of working on a set of 'didactic' studies based on the harmonic and melodic structure of Study no. 2a.

Nancarrow's service to the cause of rhythm, tempo and polyphony has detracted from an assessment of melodic and harmonic characteristics. I would suggest that the influence of jazz and Spanish music goes far beyond the references (obvious or suspected) in the early and late Studies. To take a simple example – a melodic phrase consisting of, or including the progression E F# G# A Gf Ff E is a common mannerism in Nancarrow's music. It is of course a veritable cliché of Spanish music, as is made clear in Study no. 6, but it is also an important melodic component of no. 7 which is not regarded as a 'Spanish' study. Study no. 48 also suggests that another mannerism, that of a rapidly arpeggiated major chord in more than one octave originated with the flamenco guitar. It's worth mentioning that the player piano is the only instrument which could fully exploit this mannerism! There is an abundance of hidden melodic jazz references too.

The fact that Stravinsky is, along with Bach, Nancarrow's favourite composer is no surprise since there is ample evidence of this within the melodic material of nos. 10, 27 and 31 as well as the rapidly changing time-signatures of no. 23. If this suggests an enthusiasm for works like *The Rite of Spring* and *The Soldier's Tale*, the surprisingly economical Study no. 49c, with its progressions of major chords, suggests more than a passing familiarity with the last movement of Bartok's Sonata for Two Pianos and Percussion. The opening of no. 34 sounds almost fugal and makes one wonder whether his perennial fondness for canon actually emanates from Bach. In addition, no. 7 contains a baroque-like circle of fifths and there are passages near the end of 3c and 47 which sound like a berserk Brandenburg Concerto.

Some of the Studies (e.g. 45b) have surprisingly simple harmonic foundations built on tonic, subdominant and dominant chords suggestion a blues-related chord sequence. A harmonic stasis reminiscent of oriental music (another of the composer's enthusiasms) is rarer – no. 44 (Aleatory Canon) being the clearest example of this. It is not in any sense comparable to 'minimalist' music, but its sense of timelessness is encouraged by the apparent lack of changes in either tempo or textural activity. Lasting ten minutes, it is the longest Study apart from no. 37. Several of those lasting 6 or 7 minutes (e.g. 41a, 41b and 41c) seem to last considerably longer because of the sheer amount of concentrated activity within

them. No. 37 is perhaps one of the most extraordinary of all the Studies, being a canon, or series of canons, in 12 different tempi – a series of tempi analogous to the ratios of the pitches of a justly-intoned 12-note octave which is suggested on p.107 of Cowell's book *New Musical Resources*. The extended range of musical material in no. 37 is a recent trend – it is a memorable feature of nos. 33 and 36, and some of the later Studies, especially nos. 46 and 48, seem wilfully bizarre in this respect.

But irony, humour and a fascination for the faintly bizarre technical device are omnipresent characteristics, even down to the plethora of major chords (often in root position, too) within an otherwise complex language. Another simple example is the frequently-used abrupt ending, often with an implied perfect cadence. The sudden urge to do something compositionally quite different can appear both ironic and bizarre, witness Study no. 26 *Canon 1/1* which consists of nothing but regular semibreves. Incidentally, the extra resonance on the CD recording is helped by the otherwise rarely-used sustaining pedal.

There are perhaps several other 'unique' pieces – no. 21 (Canon X) for example which features simultaneous acceleration and deceleration, and the staccato-less no. 20 with its fixation on different durations of single pitches (did Nacarrow ever imagine this on prepared player piano?). Not to be forgotten is no. 12 which is the only Study truly to evoke the atmosphere of another medium, that of the flamenco singer and guitarist. In the end, perhaps the most rewarding of the Studies displayed the strongest elements of contradiction – those, which, like no. 48, combine the improvisational flamboyance of the jazz player or flamenco guitarist with strict and complex, but perceivable, musical forms.

## Other instruments

Although Nancarrow has admitted that he would probably have experimented with electronic music had the technology been available, he has also pointed out that the player piano offers more precise temporal control. The ideal would be the temporal quality of a piano roll together with the range of sounds of electronic music. He certainly experimented with cutting rolls for a cumbersome player-percussion instrument with which, according to Gordon Mumma, he composed a piece of *musique concrète* on magnetic tape. This instrument was abandoned in the early 1950s.

A few years later Nancarrow possessed a player-grand which he 'prepared' in the manner of John Cage. The prepared piano is, in effect, a one-man percussion orchestra and Nancarrow had been much impressed by an early performance (c. 1948) of Cage's *Sonatas and Interludes*. The mechanism of this piano proved unreliable as well as difficult to get at and so this instrument too was abandoned during the 1950s. Study no. 30 was written for prepared player piano and is unrealizable on the normal instrument. Studies nos. 28 and 29 were also commenced with this instrument in mind. The beginning of no. 29 seems more imaginable on

prepared piano than does that of 28, but they lose nothing on the normal instrument. Clearly they would not have sounded anything like Cage.

# Piano or player piano?

Some years ago the pianist Yvar Mikhashoff requested at least 150 composers to write him a tango of not more than three minutes' length. His 'Tango Marathon' at the Almeida Festival of 1985 consisted of about 60 of which probably the most eagerly awaited was that of Nancarrow, since it was to be his first piece written for human performer since the 1940s. The player piano recording is identical with this piece (Tango?), although the circumstances of its composition are not revealed in the notes. Presumably the composer feels that either mode of performance is valid.

The recording is dry and spiky, contrasting with the resonant and rounded tone of the concert grand, even when played ultra-staccato. That the contrapuntal lines are so much clearer in the piano roll version is by no means a criticism of Mikhashoff's playing (which is admirable), but more an indication that the tone-quality chosen by the composer for his Ampicos is more suitable for perception of polyrhythmic lines. The rhythmic feel of the versions is quite different, too, which one would expect. My own preference is for the player piano version.

Surprisingly, perhaps, Mikhashoff's version of Study no. 3d works well. The original music, a slow blues, is predominantly laid out in terms of right hand and left hand. Here, a laid-back human rhythm and soft-centred resonance is an advantage and there is a clear relationship with an earlier piano 'Blues' (written for human).

It should be remembered that Nancarrow does not <u>avoid</u> writing something that a live pianist could perform. Study no. 26 ( $Canon\ 1/I$ ) 'could be played with organ, orchestra, or any way'.

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# The Classical Reproducing Piano Roll, A Catalogue-Index Compiled by Larry Sitsky, Greenwood Press, Inc., Westport, 1990

# **Denis Hall**

This two-volume catalogue of music rolls of classical music made for all the systems of reproducing pianos between 1905 and the mid 1930s is a magnificent achievement, and something which scholars of the history of piano playing and player piano buffs have been awaiting for a very long time. The sheer size of the catalogue will amaze and delight the uninitiated – the composer listing runs to 589 pages and the artist listing to a further 775 pages. What is remarkable is that such a major legacy has been allowed almost to disappear without trace, whereas the treasures of the gramophone are comparatively well known, and verge on being over-exposed in the flood of historical CD reissues of the last two or three years.

Despite the fact that the piano roll is often dismissed by the music loving public as a means of accurately recreating a performance, the extent of the recorded piano roll legacy supports the contention that many of the great and serious artists of that period accepted and in fact often preferred the medium to the stressful atmosphere of the gramophone recording studio. In the studio a 'perfect' performance had to be produced for four minutes or so with no opportunity to edit or correct minor mishaps in the way possible and as is common-place today with tape recording. The piano roll recording on the other hand could be edited at the request of the artist to produce the performances he ideally wanted to achieve. The piano roll recording also scored in being able to take in complete movements of large scale works, encouraging the recording of some of the most notable works from a pianist's repertoire, things notably absent from the gramophone catalogues almost until the advent of the long-playing record around 1950.

Volume 1 contains a lengthy introduction which gives a brief history of each of the systems whose rolls are included in the catalogue, together with points of particular musical interest about the rolls published, and a list of the major pianists who recorded (the systems were not compatible, so that to hear Rachmaninov you needed an Ampico piano, whereas Paderewski recorded for the Duo-Art and, much earlier, for the Welte Mignon). Each section concludes with a few 'Problems', mainly highlighting misprints which Sitsky has come across in the catalogues he has consulted. He makes no attempt to discuss technical matters, which I consider to be absolutely correct for a publication such as this.

Sitsky has undertaken to include the 'big four' (Welte Mignon, Duo-Art, Ampico and Hupfeld – the latter rather less well known although equally important) as well as the numerous smaller systems, some of which are little more than obscure names even to the enthusiast, and has carried out a formidable amount of research to produce such complete listings. It is fascinating to be able to get the complete picture of an artist's roll-recording career. Who would have realised that Teresa

Carreno, one of the really great pianists of her time and who made no disc recordings, produced some 83 rolls which include five complete Beethoven Sonatas and the Schumann *Fantasia*, Op. 17, as well as his Études Symphoniques, Op. 13, which she actually recorded twice, once for Hupfeld and the other for Philipps? And what would one not give to hear Godowsky play his complete *Triakontameron* which he recorded only for the Artrio-Angelus? The list is endless.

Inevitably there are errors, but of very minor proportions. The two which it seems worth commenting on are both of the same type. At the outset, Sitsky defines his terms of reference for a roll to be listed as being of the 'reproducing' type, i.e., that which encodes in addition to the note perforations additional perforations to actuate the expression mechanism of the particular player action so that a complete performance will be played back with the correct note durations and dynamics and pedalling without the intervention or assistance of a human player-pianist. In spite of this he lists all those Hupfeld Animated classical rolls which were hand played, but by no means all of which were reproducing rolls, i.e., he does not differentiate between those with and without dynamic perforations. When he comes to Pleyela rolls, he admits he has not been able to glean much information, but he wrongly assumes that all Pleyela rolls were reproducing, whereas most were merely handplayed, and some (for example those attributed to Stravinsky) not even that. Pleyel did produce an Auto-Pleyela, but this was an expression piano, an instrument with only very basic interpretative powers. These lapses apart, any statements made are those of a person thoroughly steeped in the subject, who has formed his opinions over many years of study and familiarizing himself with his subject through roll catalogues and being able to listen to many performances through the good offices of Denis Condon, a fellow Australian who has a collection of reproducing pianos and rolls the equal of any.

It is to be hoped that the availability of this magnificent catalogue will encourage musicians and musicologists alike to start to take the reproducing piano more seriously. 'Time is the Last Frontier in Music' A concert of music by Conlon Nancarrow, Centre Culturel de Boulogne-Billancourt, Paris, 21 October 1991.

#### Denis Hall

## **PROGRAMME**

Prélude, pour piano
Étude n° 1, pour piano automatique
Étude n° 3a, pour piano automatique
Sonatina, pour piano
Étude n° 21 (Canon X), pour piano automatique
Quatuor à cordes n° 1
Étude n° 25, pour piano automatique
Étude n° 27, pour piano automatique
Toccata, pour violon et piano automatique
George Antheil:
Ballet mécanique, pour piano automatique (1re partie)
Étude n° 37, pour piano automatique
Étude n° 10, pour piano automatique
Quatuor à cordes n° 3

## **Arditti String Quartet**

Irvine Arditti, violon, David Alberman, violon.
Garth Knox, alto, Rohan de Saram, violoncelle
Irvine Arditti, violon solo.
Michel Maurer, piano.

Conlon Nancarrow has been writing music for his specially prepared Ampico pianos since 1948 when his first *Studies for Player Piano* were conceived. The 'special preparation' consisted of attaching small strips of metal to the hammer faces to produce an extremely brilliant and percussive sound which lends clarity to what is on occasions very dense and rapid writing for the instrument, and makes absolutely sure to abolish any romantic notions the piano might aspire to! Nancarrow's music is not composed in terms of the traditional piano, and his choice of the Ampico was dictated by the fact that at the time of his first compositions, it was the only medium available which could cope with his demands of complicated rhythmic patterns and extreme precision in replay which are an integral part of his music. Having become familiar with this medium, he has remained loyal to it, although had he started

composing in recent times, he might well have singled out one of the electronic instruments which proliferate today.

Nancarrow worked for years at his home in Mexico City composing for himself with little likelihood of public performances of his music. He was not prepared to allow his hand-cut 'one-off' rolls to be copied, and his pianos remained in his studio. The only opportunity to hear the music over the years has been by means of recordings made on his two pianos. An early American Columbia LP and later a series of four discs on the 1750 Arch Records label have had a limited circulation and have been avidly sought by enthusiasts for this music. More recently a series of five CDs on the Wergo label have been issued, the first four duplicating the material on the 1750 Arch Records but newly recorded, and the fifth containing new material.

Until recent years, Nancarrow has not been in a position to travel, but he had made one or two trips to Europe to be present on occasions when recordings of his pianos have been played and to discuss his music. The recent concert in Paris (which was the first of three) is a notable step forward in allowing the Studies for Player Piano to be heard 'live' – that is, on a fine and again 'specially-prepared' Ampico Bosendorfer grand made available by Dr Jurgen Hocker, and brought to Paris for the occasion. The rolls were excellently reproduced and as they played, an image of the music rolls was projected on to a screen to enable the audience to watch the patterns of perforations at the same time.

In addition to the music for player piano, we had the rare opportunity to hear some of Nancarrow's other music for 'live' players. The Arditti String Quartet is his favoured interpreter for this medium – in fact he goes further and claims it is the only quartet who can play the music. The first and third quartets were performed quite brilliantly with some particularly magical moments in the slow movement of the third quartet. Michel Maurer played his Prelude and Sonatina for piano solo, works which ranged from his 'blues' style to the most technically demanding.

Conlon Nancarrow had made the journey to Paris to attend the three concerts and was given a splendid ovation at the end of this first concert of the series. It was very good to see him receiving recognition at last for the magnificent and very original music he has been composing for such a long time in isolation.



Conlon Nancarrow at his roll perforating machine.

#### Contributors

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 reissue. In recent years he has turned his attention increasingly to the pianola.

REX LAWSON is a concert pianolist 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 Mécanique*.

ERNEST NEWMAN was born at Liverpool in 1868 and died at Tadworth, Surrey, in 1959, aged ninety. He was music critic successively of the Manchester Guardian, Birmingham Post, Observer and Sunday Times as well as being connected with other journals. He is specially noted for his research and books on Wagner. In the earlier years of the century, he was an enthusiast of the player piano and wrote a book *The Piano-Player* in which he makes a well argued apology for the instrument without being blind to some of its limitations.

DAVID SMITH, born in 1949, has for several years been a lecturer in music at Leicester Polytechnic. He is well-known as a contemporary composer and has performed around the world with the Gavin Bryars ensemble. He is especially interested in music of the American 'pioneer' tradition.

