

Contemporary Music in Flanders Ⅶ
Flemish Tape Music since 1950

historical overview, discussion of selected works, and inventory

Edited by Mark Delaere,
Rebecca Diependaele,
and Veronique Verspeurt

© 2010 MATRIX - New Music Centre
www.matrix-new-music.be

edition: Mark Delaere, Rebecca Diependaele and Veronique Verspeurt
production: Rebecca Diependaele and Veronique Verspeurt
translation: Anne Hodgkinson and Elke Van der Velde
lay-out: Compagnie Maandacht
print: Acco (Leuven, Belgium)

Compilation cd
© & © MATRIX 2010/01

D/2010/10.184/1
ISBN 97890-77717-05-9

CONTENT

PREFACE	6
MATRIX	9
A. HISTORICAL OVERVIEW	
Tape Music in Flanders (1950-2010) by Maarten Quanten	11
B. DISCUSSION OF SELECTED WORKS	
ADRIAENSSENS Paul: Tricycle (2009) by Klaas Coulebier	23
BEYLS Peter: SEA/AIR (1975), The Headless Horseman (1979), The Life and Times of Oscar (1986) by Yves Knockaert	26
DE LAET Joris: Cordes & Corps (2009) by Kristof Boucquet	28
DE MEESTER Louis: Incantations (1958) by Rebecca Diependaele	30
GOETHALS Lucien: Contrapuntos (1966) by Herman Sabbe	32
GOEYVAERTS Karel: No. 4 "with dead tones" (1952) and other electronic music by Mark Delaere	34
LAUWERS Kristof: 145+ (2007) by Jan Christiaens	37
VERSTOCKT Serge: Interfractions (1984) by Daan Janssens	39
VEULEMANS Dirk: Artikulationsorgane (2007) by Maarten Beirens	41
C. INVENTORY	
Alphabetical Inventory of Flemish Tape Music since 1950	44
Chronological Inventory of Flemish Tape Music since 1950	66
LIST OF PUBLISHERS AND RECORD COMPANIES	86
TRACK LIST CD	91

This is the sixth volume in a series documenting contemporary music since 1950 from Flanders. The first volume on Flemish string quartets was published in 2004, the second on piano music in 2005, the third on symphonic music in 2006, the fourth on ensemble music in 2007, and the fifth on music theatre in 2008. Future volumes will cover chamber music and vocal music.

With this series, MATRIX is meeting the criteria of its core activity: the documentation of contemporary music in general and Flemish contemporary music in particular (for more on MATRIX, go to www.matrix-new-music.be). To this end, MATRIX has built up an extensive collection of scores, CDs, books and periodicals. This collection is the starting point for educational activities such as, for instance, courses on new music, concert introductions or workshops for music teachers and conductors. The collection also forms the basis for this publication, which aims to make an inventory of all electronic music ('tape music') for concert purposes produced in Flanders since 1950.

The inventory is preceded by a major essay in which the most important stylistic characteristics of the tape music repertoire in Flanders since 1950 are considered. This is followed by short articles on several representative works.

We should like to emphasise the fact that the selection of works for discussion is not based on a judgement of their merits. The chosen tape compositions are naturally compositions of high artistic quality, but this may be said of many other Flemish electronic music works. The aim of the discussions of the works is rather to illustrate the stylistic diversity of this repertoire and to allow composers from different generations to be considered.

For budgetary reasons, a decision has been made not to provide a Dutch version of this text in print, but the Dutch texts and the inventory will be available and downloadable on the MATRIX website.

We are very grateful to the composers for their additions and corrections to the inventory of works. Maarten Quanten, researcher at the department of electronic instruments of the Brussels Museum of Musical Instruments (MIM), provided us with a wonderful essay.

We also thank the authors of the short discussions of the works for taking part on a voluntary basis. A word of thanks goes out to the Flanders Music Centre (Muziekcentrum Vlaanderen) for buying and distributing a number of copies of this book. A warm word of thank to all those who contributed to the production of a CD with representative electronic music works. Documentation in word and sound is, after all, that much stronger. In order to promote Flemish contemporary music, the book and CD will be distributed free of charge to libraries, studio's, concert organisers, music festivals and other interested parties both in Flanders and abroad.

*MARK DELAERE
REBECCA DIEPENDAELE
VERONIQUE VERSPEURT*

MATRIX: new music documentation centre

Over a few short years, MATRIX, with its library of more than 20,000 scores and 10,000 recordings, has grown to become an important collection of music composed since 1950. Music from Flanders forms the core of this collection, but placing this Flemish repertoire in an international context is equally important. Thus a search for Boulez' Structures in the online catalogue easily leads to a survey of all the works written in Flanders and elsewhere for the same scoring (two pianos).

The collection is the point of departure for two other areas of activity: musical heritage and educational activities. For the former MATRIX has undertaken a collaboration with ComAV. Conscious of the fact that today's composition can be tomorrow's threatened heritage, a pro-active heritage policy has been adopted, involving both conservation, drawing up an inventory and projects that open up the collection to a wider audience.

The Flanders Music Centre, an organization with a governmental mandate to promote all Flemish music (from jazz, pop and classical to folk music), draws on the resources of MATRIX for its documentation of contemporary classical Flemish music.

In 2004, MATRIX initiated its Contemporary Music in Flanders publication series, in which Flemish music since 1950 is being exhaustively inventoried by genre. The (bilingual) website comprises some 155 information files on contemporary Flemish composers providing extensive analyses of a selection of their works. The educational activities are geared to music-school teachers, children, young people, band and choir conductors and the wider audience, all of whom are offered a chance to increase their awareness of contemporary (Flemish) music through workshops, productions, lectures and concert introductions.

The establishing of MATRIX vzw, a non-profit organization, has been made possible by Cera, an organization that supports social and cultural projects in their start-up phase. MATRIX also enjoys the support of K.U.Leuven, the Flemish Government, the City of Leuven, and the Province of Flemish Brabant.

Address

Minderbroedersstraat 48, B-3000 Leuven

Tel.: +32 (0)16 33 20 43

Fax.: +32 (0)16 33 20 40

info@matrix-new-music.be

www.matrix-new-music.be

A. Historical Overview

TAPE MUSIC IN FLANDERS (1950-2010)

Electronic sounds

In technical terms, a loudspeaker is often called a transducer, a “converter”. And indeed, it transforms fluctuating electric power into vibrating air; the exact opposite of what a microphone does. Each sound coming out of a loudspeaker first existed in the form of electricity. Of course, very different physical laws apply to electric power than those applying to vibrating air. Electronic sound for instance can be preserved onto a carrier. In addition, there are far more electronic transformation possibilities than acoustic timbre modifications and finally, electricity can travel around the world at enormous speed before changing into moving air particles again.

The idea of resounding electricity and the straightforward translation of sound information from one form of sound to the other had an enormous impact on the conception of music in the twentieth century. From the first decades onwards, engineers started to develop instruments, operating on circuits which generated synthetic sounds, for instance the theremin, the ondes martenot and the trautionium. The internal structure of an (acoustic) sound had already been analysed in physics. New technology made it possible to imitate it using electricity. The new audio technology was very appealing to musicians as well. Already in the 1940s French composers Pierre Schaeffer (1910-1995) and Pierre Henry (1927) started to experiment with recording, transformation and spatialisation devices in the famous Club d'Essai in Paris. The “Musique Concrète” was born. Everyday sounds were transformed and edited into fully-fledged compositions, recorded on vinyl. At concerts of these deejays avant la lettre, music only came out of loudspeakers and musicians handled audio devices.

The development of data storage on PVC tapes marked a new revolution in audio technology. From that moment on, editing sounds was as quick and easy as film editing. In the 1950s the new medium slowly but surely took over recording and radio studios, which would become the base of operations for a great deal of mostly avant-garde composers.

Flemish tape music?

Classifications and demarcations are generally artificial. However, for a series such as Contemporary Music in Flanders it is necessary to approach and categorise Flemish art music of the past sixty years in a systematic way. In this respect, the instrumentation of compositions seems to offer a useful solution. The electronic medium in its different forms of appearance, however, occupies a fairly problematic position. This sixth volume is meant to discuss electronic art music. But what is electronic music? Music composed for electronic instruments? With live musicians? And what about the electric guitar, is it an electronic instrument? Or does the term refer to music in which all sounds are recorded on tape and audio devices take over from musicians in concert halls? What with combinations of musicians, tape and live electronics? Or with tape, manipulated by the composer or a musician during a concert? Do we consider a collection of acoustic, concrete sounds, recorded on

tape to be electronic music, even when they are originally acoustic? Questions arise quicker than answers. Art – and especially the art of the past decades – is not easily pigeonholed. Nevertheless, such forced demarcations may give us an insight into the nature of this relatively young medium and the ideas of the composers that dealt with it.

Eventually this volume was christened “Flemish Tape Music since 1950”. In a broader sense, it refers to music that is captured on a carrier – whether it is a compact disc, an analogue or digital audio tape or a hard disc – and is composed to be launched into the concert hall entirely through speakers (transducers).

Despite the fact that commercial synthesisers were already available on the market in the 1940s, many composers preferred to use tape. From the beginning, the medium raised a lot of questions. What was the status of the concert hall, without the musicians who had almost become fused with it? It is clear that a very important aspect of experiencing a concert was lost without the age-old connection between public and performer. The machine came across as impersonal and the performance no longer seemed unique. Why did composers not appeal to musicians with electronic instruments to perform the composition?

This was due to the musical expectations of the protagonists of avant-garde music in the 1950s and 1960s. Especially in the context of multiple serialism it implied complete control over the smallest sound particles. The artificial sinus tone was almost like a philosopher's stone to young Flemish composer Karel Goeyvaerts (1923 – 1993), who was one of the first to try and gain complete control over his sound material. The practical execution of his radical aesthetic ideas was almost impossible with acoustic instruments and human performers. Electronic instruments – Goeyvaerts knew the ondes martenot very well from his student days in Paris – could not bring solace either. The accurateness and manoeuvrability needed could not be acquired by humans or machines in real time. In order to realise Goeyvaerts' complex musical structures, time had to be frozen and manipulated. The supple tape in PVC offered a solution. The fleeting, momentary musical stream became a tangible object, which could be cut up and edited – time became space. Using several tape recorders, sounds could be stacked as well as accelerated or slowed down. Devices such as filters or ring modulators suddenly allowed to create the most exotic sound transformations. Working with minuscule, cut out sound particles allowed for sudden interval nuances, combinations and sound complexes that had been inconceivable ten years before. The new medium opened many doors, but the richness of musical output was inextricably linked with an extremely complicated and labour-intensive creating process in the electronic studio, which was not at all easily accessible to every composer.

In the past sixty years the choice to compose for tape was mostly motivated by the complexity of the musical structure a composer had in mind. Goeyvaerts' ideas can serve as an example. As audio and computer technology further developed during the second half of the twentieth century, practically all conceivable sounds and structures could be realised. It was the fixed carrier which made this possible, as what was heard in the concert hall was hardly ever performable by a musician.

This is probably one of the most essential characteristics of the music dealt with in this volume of Contemporary Music in Flanders. It only exists as a consequence of a spatialised, materialised and plastically manipulated time. From this point of view, such tape compositions may well be more closely related to the repertoire of musical automatons – think of the work of Flemish composer and instrument builder Godfried-Willem Raes (1952) for instance – than to compositions created for live performances with electronic instruments, which mostly belonged to popular music in the beginning. Indeed, a tape contains electric information which puts a loudspeaker membrane into motion. Such a code or programme can basically operate any device. It is no wonder that the connection between computer music, computer aided composition and tape music was very obvious during the past decades. A few composers of early electronic music were therefore quickly flirting with early digital applications. In Flanders the connection between electronic composition on the one hand and algorithmic composition on the other can be found in the work of many composers. The idea of a partly automated compositional process is of course present in multiple serialism. Especially the extreme, mathematical musical concepts of Herman Van San can be seen as early, visionary examples of this line of thought. In a next generation, the work of Godfried-Willem Raes and Serge Verstockt (1957) in particular is situated at the crossroads of electronic music and algorithmic, automated composition. The relation between algorithmic composing and the broader framework of electronic music and creative applications of technology is especially present in the work of some of Raes' students.

In the 1960s voltage control became one of the most important principles in modern electronic music studios. Where settings had had to be adjusted by hand before, they could now be saved as a "programme" – for instance onto punch cards, through early sequencer technology or even on tape. More and more complex sound structures could be realised automatically, which fastened the editing process significantly. Computer technology finally crossed almost every technical boundary and made electronic music accessible to a large number of composers, who no longer needed a well equipped and expensive studio. As a consequence, people started to experiment with live interaction with electronics, which no longer implied the rigidity it had before. For instance, sounds produced by musicians could be processed by computer algorithms. The idea of live processing became central in concerts which integrated rich and complex electronic sounds with human performers. The focus moved from sound design to the interaction of man and machine on stage. Slowly but surely, the mediating interface took up a central position in the contact of the avant-garde with the new electronic tools. The limited manoeuvrability of early electronic instruments had pushed composers in the direction of tape. Meanwhile, this tape had in itself become too rigid in the eyes of many. Interaction became the new magic word. In addition, the relation between public and performance was subject to change. In this respect, there are clear connections between 'traditional' tape music on the one hand and sound sculptures, multimedia pieces or interactive concert environments on the other.

Such works are not considered in this publication, although boundaries are not very clear-cut. Lucien Goethals' (1931-2006) *Contrapuntos* for instance, which is dealt with further on in this volume, exists in the form of a classic tape composition. At the same time, however, it was conceived as an early installation, which allowed a certain form of interaction with the (walking) audience through the use of contemporary high-tech tools such as light sensors.

In principle, Contemporary Music in Flanders only focuses on "art music". Popular genres, which are generally associated with commercial purposes – "U-Musik" as the Germans would call it – are not considered here. With regard to electronic music and tape music in particular, this division is not always easy to maintain. Most bridges between "popular" and "serious" music may just as well be spanned by these media. Think of experimental techno, glitch (i.e. the use of accidental output of electronics or software) and the record label of Achim Szepanski, which was not named after Mille Plateaux by Gilles Deleuze (1925-1995) and Félix Guattari (1930-1992) for nothing. Many years before, Lou Reed (1942) had made his often reviled and praised Metal Machine Music (1975) and The Beatles released the tape composition *Revolution #9*, which was part of the commercially distributed *White Album* (1968), just like the song *Ob-La-Di, Ob-La-Da*. In Flanders, the electronic music scene of today numbers several young composers such as Esther Venrooy (1974) and Maarten Buyl (1982) and concert organisers such as Happy New Festival (Kortrijk), which cannot be put solely into the category of art music. And then there is the underground scene...

The fifties: Flemish pioneers in the desert

During the first decades after World War II, the Flemish music scene was not very progressive, as we learn from biographical notes of some Flemish composers who were studying at the time. Music conservatories considered the music of Claude Debussy (1862-1918) as highly modernist and the work of Arnold Schönberg (1874-1951) and Béla Bartók (1881-1945) as blasphemous. In a lecture at the beginning of the 21st century for instance, Lucien Goethals mentions how his harmony teachers spoke about Igor Stravinsky's (1882-1971) "*Massacre du Printemps*" with disdain. Similar stories were found in Karel Goeyvaerts' autobiography. Goeyvaerts therefore moved to Paris to study with Olivier Messiaen (1908-1992). He took analysis and composition classes, learned to play the *ondes martenot* and became acquainted with the activities of the *Club d'Essai* from a distance. In the summer of 1951 his *Sonata* for two pianos caused a great furore on the *Internationale Ferienkurse* in Darmstadt and launched him straight into the epicentre of the international avant-garde. Around 1952 his extreme vision of multiple serialism led him to the electronic medium, which promised him complete control over the timbre and could eliminate the imperfections caused by musicians. To Goeyvaerts, the artificial sinus tone was the base of sounds, which he could control completely by means of new technologies. In December 1952 he composed his *Number 4* with dead tones, the first completely electronic serial work.

However, it could not yet be realised in Belgium at the time. In the same month Goeyvaerts' friend and colleague Karlheinz Stockhausen (1928-2007) realised his first concrete tape composition in Paris, where he worked under the direction of Pierre Schaeffer. With the encouragement of Goeyvaerts, Stockhausen experimented with completely electronic sound synthesis after his return to Cologne. In the summer of 1953 this resulted in his renowned *Studie I*. In the meantime, the pioneer studio of the Nordwestdeutscher Rundfunk (NWDR) had been founded in Cologne, under the influence of mostly Herbert Eimert (1897-1972) and Werner Meyer-Eppler (1913-1960), and it was soon presided over by Stockhausen. This is where Goeyvaerts created his *Number 5 with pure tones* (1953) and his *Number 7 for converging and diverging sound levels* (1955), the first one with help of Stockhausen, the second one with assistance of Gottfried Michael Koenig (1926). It was Koenig who, together with Herman Van San, tried to realise the latter's extremely complex *Geometric Patterns* (1957) from *Opus Electronicum Mathematicum* (1956-1972). However, even in Cologne this turned out to be impossible.

While Karel Goeyvaerts was internationally active, some composers in Flanders felt the itch to break out of the ruling conservatism of the local music scene. In this respect, the Nationaal Instituut voor de Radio (NIR) is very interesting. From 1953 onwards two producers, Louis De Meester (1904-1987) and David Van de Woestijne (1915-1979), even dedicated a radio show to Parisian concrete music. Both of them were also composers and started to experiment with concrete sounds on tape, albeit in their leisure time. In 1957 De Meester received the prestigious Italiaprijs for his burlesque radio cantata *De Grote Verzoeking van Sint-Antonius* (The Great Temptation of Saint-Anthony), in which tape played a significant role. This international appreciation officially put composing with tape into the foreground of the Belgian music scene. De Meester's composition *Incantations* (1958) was performed on the Brussels World Exhibition amongst work of Karlheinz Stockhausen and John Cage; this during the International Days of Experimental Music, organised by the NIR. Slowly but surely, the road was paved for the foundation of a new electronic studio.

The Flemish electronic music scene after 1960

The international electronic music scene soon called for a simplification of the creative process by automatization, for custom made interfaces and of course for equipment which had even more possibilities. The oscillators and filters which in the earlier studios had to be adjusted by hand, could now be operated by means of voltage control. Automating such devices could in turn be done by means of punch cards or a type of piano rolls. In the United States the famous RCA Mark I (1951/52) and Mark II synthesizer (1957) already operated on such forms of automatization or early sequencer technology. With that last one, Milton Babbitt (1916) realised his *Composition for synthesizer* in 1961.

In Europe as well, people started to experiment with such simplified processes in the late 1950s. From the 1960s onwards, the collaboration between physicists, engineers and musicians became the norm in several leading institutes. The utopian dream of a sound of which even the smallest dimensions could be sculpted was completely intertwined with the development of new technology.

Therefore, the second generation of electronic studios, founded during the 1960s after the example of the NWDR/WDR in Cologne and the Radio Audizione Italiana (RAI) in Milan, were often linked to research entities. In the Netherlands for instance a studio was founded in 1960 in cooperation with the University of Utrecht. Because of this collaboration technologies cut down to size could be developed with support of scientists such as Stan Tempelaars (1938). In addition, the computer centre of the university placed new computer technology at the disposal of composers.

In the twilight of the Brussels World Exhibition in 1958, people at the NIR felt the need to found a public electronic studio. Corneel Mertens, programme director of the Flemish radio, was aware that Flanders could no longer stay behind on the international avant-garde. Together with professor and engineer Hubert Vuylsteke, head of the laboratory for electricity and telephony in Ghent, Mertens planned to build a studio, anchored in a collaboration with the University of Ghent and the NIR. A plan which finally became reality in 1963. Vuylsteke presided over the Institute for Psychoacoustics and Electronic Music (IPEM), while radio producers and composers Louis De Meester and Lucien Goethals – the latter having taken a few classes from the pioneer in electronic music, Gottfried Michael Koenig – observed the artistic supervision. In 1965, IPEM was linked to the Seminar for Musicology of the University in Ghent, lead by Prof. dr. Jan L. Broeckx (1920-2006).

In those early years IPEM was clearly characterised by a very close collaboration with composers and technicians. As early as 1962, a first primitive, "mechanical" sequencer was developed. And in the years to follow it would be replaced by new and improved voltage control generators, built by house technicians. Even though the IPEM studio was not built until a decade after the important pioneer studios, the institute could quickly compete on the highest European level, as far as technique was concerned. The strong interaction of technological and artistic development is most clear in the work of Lucien Goethals (for instance *Studie VII*), who even wrote publications on this topic with the help of professor and engineer Walter Landrieu. In this context we should not forget Goethals' *Contrapuntos*, an early example of a sound sculpture, in which movement sensors triggered by a walking audience activate tape recorders. Herman Van San, a regular guest at IPEM until his death in 1975, probably was one of the most radical musical thinkers of his time. Because of the extensive complexity of his musical concepts, they could generally be realised neither by humans nor machines. Not until years after Van San's death did Flemish composer and computer wizard Peter Swinnen (1965) succeed in realising some of those radical concepts, by using the newest digital technologies.

From its early days onwards IPEM attracted great international interest. Helmut Lachenmann (1935) among others realised his first and only tape composition, *Scenario*, at IPEM in 1965. The institute also maintained good relations with other studios and research entities. From 1972 onwards, for instance, IPEM published the magazine *Interface* (later: *Journal of New Music Research*), in collaboration with the Dutch Institute for Sonology, lead by Koenig.

Both institutes may have felt closely connected by the similar link between technical and artistic research. The sequencers developed at IPEM and the variable function generator Stan Tempelaars en Jo Scherpenisse built in Utrecht around the same time, bear witness to that connection. After all, the new technology of voltage control was fundamentally linked with the serial principles – different parametric dimensions triggering each other – found in both Koenig's and Konrad Boehmer's (1941) (Utrecht) and Goethals' work.

In the 1950s and 1960s, the pioneer studios in Paris and Cologne sometimes evoked the image of aesthetic bastions in which the stringent artistic tone was set by artistic leaders and composers Schaeffer (Musique Concrète) and Stockhausen (multiple serialism). IPEM wished to take up a much more neutral position in the music-aesthetic debate of the time. This was already reflected in the very different musical personalities of artistic leaders De Meester and Goethals. The institute opened the door to international composers with all sorts of aesthetics. It may not be surprising, however, that the new electronic medium attracted mainly young progressive composers.



Lucien Goethals at work with the Synthi 100 © IPEM

In the context of IPEM a group of Belgian composers, musicians and musicologists quickly formed, who all invested in the distribution of (live) electronic music. This group organised concerts and scientific activities under the name of Spectra, indicating its broad focus.

From the 1970s and especially during the 1980s, more and more useful audio technology was commercialised. As the electronic devices and computers became cheaper and smaller, any composer could basically start building his own home studio. Midway the 1980s IPEM bought one of the famous EMS Synthi 100's and stopped developing new technologies in the context of electronic music. In the meanwhile mastodons such as the IRCAM of Pierre Boulez (1925) had become active in the field of sound design, interfaces and computer aided composition. In 1986 the BRT (Belgian Radio and Television, successor of the NIR) cut all ties with IPEM, as listening ratings gained importance over artistic experiment. IPEM itself evolved further away from electronic music towards psychoacoustics. Today IPEM is lead by Professor dr. Marc Leman and is a first class research centre in the field of psychoacoustics. The Synthi 100 is only used on occasion by composers looking for analogue sounds, produced by this legendary machine. Otherwise only the elaborate collection of sound tapes, some old devices and a few filing cabinets of De Meester, Goethals, Van San and Sabbe bear witness to the artistic past of the institute. Parts of the historic studio installation are currently being reconstructed at the Brussels Museum of Music Instruments (MIM).

...

During the school year of 1968-1969 Louis De Meester taught theatre and film music at the Royal Conservatory in Ghent. Two years later, Lucien Goethals was appointed instructor in music analysis. It is clear that they introduced their students to electronic music and the instruments available at IPEM. One of those students was Godfried-Willem Raes, who at the age of sixteen founded the Logos-group; this was in 1968. As was customary at IPEM, "experimenter" and engineer Raes built his own electronic devices, from generator banks to full-fledged synthesizers, the Synthelogs. Yet his attitude towards electronic applications in music was not unambiguous. Raes considered electronic sounds to be "caricatures" of acoustic sounds and often criticised the mystifying impact of complex technology on the public. Raes therefore only realised a few tape compositions. Nevertheless, he should not be forgotten within the context of Flemish electronic music.

Raes has now become a teacher at the Royal Conservatory of Music in Ghent himself. The use of electronics – and by extension the computer in its different aspects – in a musical context has become a very important part of his course in experimental music and of his composition classes. In consequence, some of his students, like Kristof Lauwers (1978), Sebastian Bradt (1979), Yvan Vander Sanden (1972), Joachim Brackx (1975) and Kris De Baerdemacker (1972) are included in the list attached

to this publication. As was mentioned before, Raes' self-built music automatons or robots are in a way closely connected to the tape. These machines can also "play" a series of informations fixed onto a carrier. In this case, the result is not a vibration sequence of a loudspeaker membrane, but a chain of accurately described actions, which set the acoustic instruments into motion. Think of the studies for player piano by Raes' student Kris De Baerdemacker, for instance. Since the 1990s, Raes has mostly worked on interfaces (Invisible Instrument, Holosound,...) which allow musicians and dancers to communicate with the robots during the performance.

•••

Antwerp composer Joris De Laet (1947) did not share Godfried-Willem Raes' scepticism about electronic sounds at all, when he founded the Studio for Experimental Music (SEM) in a castle in Wilrijk in 1973. Courses, lectures and concerts were organised and the SEM-ensemble specialised in a repertoire which combined acoustic and electronic sounds. Characteristic for SEM was the very open attitude towards everyone who was interested in or wanted to immerse themselves in the world of electronic sounds. This way of working was very different from the closed circle of specialists, which is the image the early pioneer studios call up. After a while SEM even published a magazine, had a loans desk for tapes and made broadcasts on experimental music on Antwerp Radio Centraal. For the production of electronic music, De Laet's own studio equipment was used, which he still places at the disposal of interested composers – either in the form of the original hardware or as a self developed software reproduction. It was there, for instance, that young composer Serge Verstockt became acquainted with electronic equipment, before he immersed himself further in the new medium at the Dutch Institute for Sonology and became one of the most important interpreters of live electronic music with his ensemble Champ d' Action. This Antwerp collective of composers, performers and sound technicians is still one of Flanders' best when it comes to the use of the electronic medium, just like the Brussels Ictus Ensemble.

In 1987 SEM moved from Wilrijk to Kontich. There, in a newly built, half-round shed a new studio was founded, called AVhangART, an acronym deduced from Audio Visual ART (pronounced as avant-garde). From that moment on SEM mostly concentrated on multidisciplinary artistic projects. The combination of electronic music and video was central, but there were collaborations with plastic artists as well.

In the beginning of the 1980s the Royal Conservatory of Antwerp started working together with SEM. The school integrated the very clear and essentialist (SEM-) course in electronic music techniques of De Laet into the curriculum and De Laet himself became a teacher. The context of SEM proved to be extremely advantageous to the production of tape music during the past three decades. Composers related to SEM, such as De Laet and his former students Paul Adriaenssens (1952) and

Dirk Veulemans (1956), are still composing for tape today, whereas others have often shifted their focus to the use of live electronics and experimenting with new interfaces.

Where IPEM had been a pioneer in the development of the classic electronic studio, SEM clearly was a child of the last quarter of the twentieth century. This was the period par excellence in which boundaries between artistic disciplines and between art music and more popular genres were blurred.

The young generation

In the beginnings of electronic music, radio studios and laboratories were the primary places of action. Slowly but surely, however, things started happening in the homes of composers as well. As more and more material was commercialised, some composers started to build configurations on their own, taking into account their own specific needs. After a while, software kits incorporated all possibilities classic studios had offered and many more. Programmes such as MSP (IRCAM) and Pure Data create a virtual environment and provide composers with an infinite range of configuration possibilities of sound shaping tools. In addition, such software can be used both for creating "tapes" and for applications in live electronics, spatialising, integrating graphics,... Young Flemish composers with a special liking for technology like Maarten Buyl, Stefan Prins (1979), Esther Venrooy, Laura Maes, Kristof Lauwers and Yvan Vander Sanden work in an artistic field in which the technical control over synthetic and concrete sounds knows hardly any boundaries. Their artistic-technological questions are therefore different from those of pioneers Goeyvaerts, De Meester and Goethals. They explore the relationships between sound and other forms of art, between artist, work and public, communication between man and machine and the often problematic boundaries between both "systems" and the virtual environment in which they compose or make music.

•••

Music and technological development have almost always gone hand in hand, from the first instruments, cut out of animal bones, over the 19th century pneumatic organs of Cavallé-Coll, the sine generator, and activating a battery of percussion instruments using brain waves to artificial intelligent systems which compose on their own. Some still think of technology as a strange intruder who spoils the purity of art music and maybe even the status of the composer. Nevertheless, most composers remain fundamentally curious human beings, stimulated by new ideas and concepts to address sounds in an ever growing symbiosis between man and machine.

[MAARTEN QUANTEN]

PAUL ADRIAENSSENS (1952)

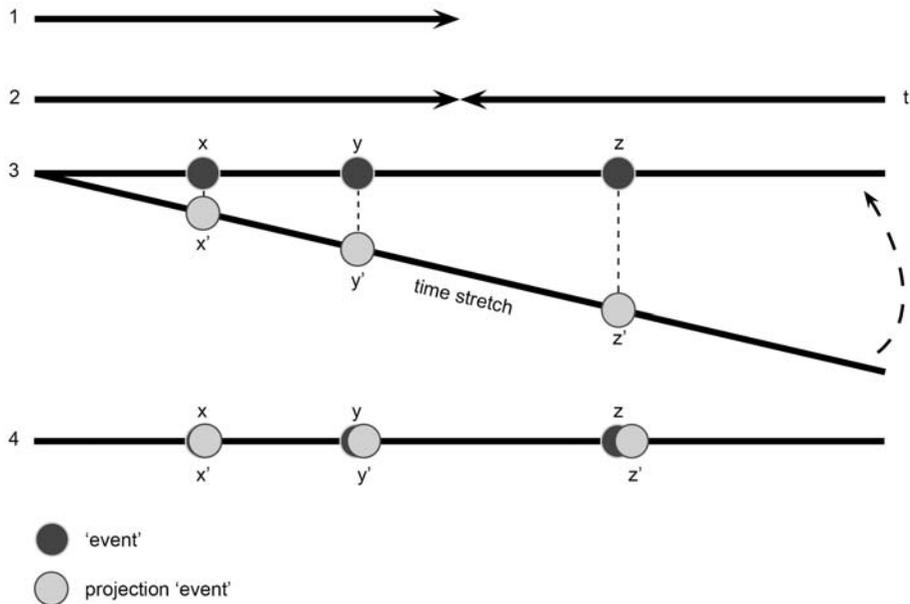
Tricycle (2009)

Paul Adriaenssens was born in 1952, the year of Karel Goeyvaerts' Number 4 with dead tones and Karlheinz Stockhausen's Konkrete Etüde for tape. He received no musical training, but his birth year already seemed to predict that Adriaenssens would devote his life to making electronic music. The fact that starting in 1975 he worked at the Studio for Experimental Music (SEM), where he met Joris De Laet, Karel Goeyvaerts and other composers, probably defined the direction he would take with his music. Adriaenssens' musical fundamentals have never really changed. Although his newer works sound rather different compared to older creations, some basic ideas have remained practically unaltered. Being a legatee of serialism, constructing an organizational system and inventing new rules of play are always the first important steps for him when making a new composition. However, another important element is the free approach of such a mathematically inspired scheme. There is no automatic running through a process, based on certain defined rules. It is the composer's role and task to make intuitive choices based on his or her own preferences and taste. It is important not to mistake intuition for emotionality or naive musical expression. The structure is a point of departure; the composer remains the creator.

B. Discussion of Selected Works

If the music of Paul Adriaenssens is in some way socially committed, it is mainly as a reaction to the information overload in contemporary media (such as the flashing images of a few seconds that have become common practice in our television culture). According to Adriaenssens, this, combined with the (pseudo)-emotional and populist discourse imposed on the people, leads to a scarcity of content and is a symptom of today's consumer society. As a reaction to this, his music usually passes by rather slowly and gradually. Systematics, coherence, and a certain feel for complexity offer a counterweight to the ephemeral and the superficial.

In Tricycle, composed for the Festival International de Musique Electroacoustique de Bourges, the point of departure is a strictly organized time scheme within which the composer works intuitively with sounds (events) and creates internal relations on the basis of parameters. The composition consists of three parts (#1: 0'-2', #2: 2'-3'43", #3: 3'43"-6'). The drawing below illustrates the principles used for the temporal organization of the first part. In a first phase, an actual duration is defined. A mirrored form of this piece of time is then put right after this segment. The total duration of the first part is indicated as 't' in the drawing. In a third phase some musical events (symbolized by x, y, z) are positioned on the resulting time axis. Then the original duration is extended and the original events are projected onto the longer time axis (x'; y', z'). In a last phase both time axes are put together again, resulting in a phase shift between the different events and their projections.

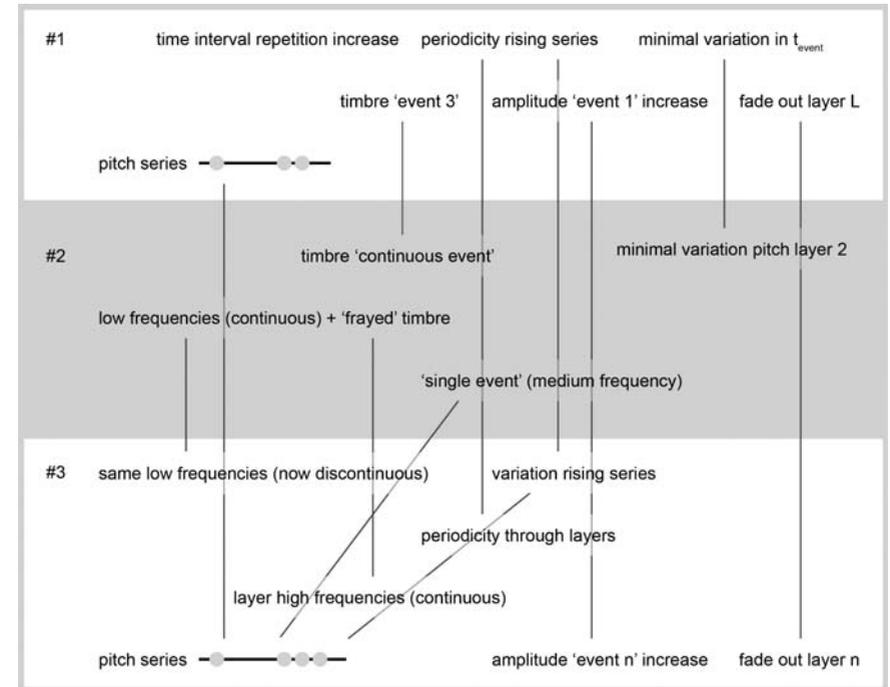


In the next step of the composition process some events are seeded with parametric qualities of other events. An overview of the tangle of internal relations that originates in this way shows some clear examples, which are audible as well.

“Minimal variation in t_{event} ” means that the event is repeated, but each time with a small deviation from its last occurrence. This comes down to a kind of pseudo-repetition. In the second part, this idea of minimal variation is translated to the pitch of a sustained high tone dominating this entire section. The pitch seems constant, but is nevertheless constantly moving in microtones.

The second part begins with an uninterrupted sound with low frequencies and a ‘frayed’ timbre. In the third part the same low frequencies return, but now with interruptions. The characteristic timbre influences yet another event, namely a layer of continuous high frequencies.

One of the strongest examples is the pitch series that comes at the end. This series refers to a similar series at the beginning of the piece (one of the few “articulated” events), but is at the same time influenced by a ‘single event’ in part two and by a rising series in part three. This rising series is in its turn related to a rising series at the beginning of the composition.



As a result of all these connections, the relations between events can no longer be represented by a classic tree structure, but rather show rhizomatic features. In this sense, Adriaenssens refers to a recent development in genetics. Apparently, not only are genetic markers passed on within species, but there is also some kind of horizontal influence between different animal species and even between plants and animals. In the same way, all sorts of parameters can influence each other, resulting in a complex and rich composition that remains coherent at all times. In this way, Paul Adriaenssens – although exclusively active in the domain of electronic music – lives up to one of the most general and centuries-old premises of Western art music: the creation of organic and coherent musical structures.

[KLAAS COULEMBIER]

PETER BEYLS (1950)

**SEA/AIR (1975), The Headless Horseman (1979),
The Life and Times of Oscar (1986)**

Peter Beyls studied electronic engineering and music at the Royal Music Conservatory in Brussels and computer science at the University of Ghent. During the 1970s he was an assistant at the IPEM studio in Ghent, where he made many electro-acoustic pieces for tape. He worked with Karel Goeyvaerts and Lucien Goethals there and learned a great deal from both. At that time, Beyls was not only interested in composing tape music, but he also developed a lot of new tools in collaboration with other musicians. With Michel Waisvisz, he designed and built a series of prototypes of the cracklebox synthesiser at STEIM, the studio for electro-instrumental music in Amsterdam, and he explored the Buchla synth at Fylkingen. Buchla (Berkeley, California) stands for "designers of unusual electro-acoustic instrumentation for electronic music". In some compositions, such as SEA/AIR (1975), Beyls combined live performers (soprano voice) with slides and live audio processing using the custom-built hybrid signal processor. The score of that piece grew out of experiments on the DEC PDP-15 computer at the Hybrid Computation Centre of Ghent University. In the 1980s, Beyls felt the urgent need to combine electronic music with computer possibilities. He developed Oscar, named after the "Oscillator Artist", a computer programme that was at the same time a simulation of a live musician. Oscar was conceived for interaction with live performers. Beyls called Oscar "social and egocentric" at the same time, because the computer programme was not only reacting to the input of sound by a "live" musician, but also and in the first place, acting with an individual musical "mind", showing unattended and surprising "human" and musical behaviour. The reactions of the computer were meant as interpretations of the received abstract signals, which brought about a kind of abstract conversation. Besides the works in progress Oscar and The Life and Times of Oscar (1986), one of the realisations with Oscar was The Headless Horseman (1979), performed by Oscar and Peter Beyls himself. This example makes clear that Beyls strongly believed and still believes in the possibilities of artificial intelligence, in self-organising systems and in the application of knowledge-based systems in the arts.

In the 1980s, Beyls was also becoming more and more interested in computer strategies and slowly left the music field to become a computer graphic art maker. In 1982 he developed PICPAC, an image processing package for the Hewlett-Packard HP 9000 series of computers. He joined the Artificial Intelligence Lab AI-lab at the VUB (Vrije Universiteit Brussel) in 1986. This laboratory developed a graphic expert system using Symbolics Lisp machines, resulting in real-time interactive pieces, which Beyls then implemented in his own way.

Beyls currently teaches aesthetics of new media at the St Lukas Hogeschool, Brussels, teaches theory of new media at University College Ghent and coordinates research at the Interaction Lab of KASK, Faculty of Fine Arts, University College Ghent. Beyls also pursues research in real-time evolutionary computing at the Interdisciplinary Centre for Computer Music Research (ICCMR) of the University of Plymouth, UK.

For his music, Peter Beyls always uses an approach that combines on the one hand the development of new systems, "machines", programmes and technical tools, and on the other hand the presence, influence of and interaction with the human being. At the same time all his music contains a high level of abstraction. It is so-called absolute music without any allusion to earthly "realities", without any need of "sound pictures" or imitations of "concrete" surrounding sound or noises.

Of course there are some "early" exceptions, such as Rothko (1977), inspired by the abstract colour field paintings, leading to more and more abstraction in sound. His approach is always focused on the confrontation between the "perfect machine" and the "imperfect playing" of the human performer/programmer, and on the never-ending challenge between man and machine.

[YVES KNOCKAERT]

JORIS DE LAET (1947)

Cordes & Corps

Algorithmic composition based on the emulation of strings (2009)

In theoretical treatises written during late Antiquity and the Middle Ages (such as by Gaudentius and Pseudo-Odo of Cluny), the monochord often functions as a tool to determine the ratios of the musical intervals. According to this theory, which a persistent legend claims to be the discovery of Pythagoras, the length of the string represented the mutual relationships between sounds and numerical proportions, and - by extrapolation - also revealed the most frequent proportions within nature and its constituent bodies. In recent physics, a modern version of this thought reappears in the so-called "superstring theory". This theory portrays the smallest subatomic particles of physical reality as vibrating "strings", in an attempt to reconcile general relativity and quantum mechanics. In the electronic work *Cordes & Corps* (2009), Joris de Laet likewise creates his own characteristic universe starting from the "string" and its associated "bodies". As a composer, however, he is not so much interested in defining the abstract proportions of strings as in exploring the audible results of these specific objects.

As indicated by the subtitle of the work ("Algorithmic composition based on the emulation of strings"), the sound of the string functions as a criterion to demarcate a distinctive sound domain within the (in principle) infinite possibilities of electronic sound production and processing. In *Cordes & Corps*, all sounds have an audible or at least deducible relationship with the sound spectrum of the vibrating string. This origin is unequivocally suggested by the opening of the work, in which the recognizable sounds of a piano and the suggestion of a plucked (harp) string symbolize a connection between the electronic sounds and the traditional instrumental music for strings. Nevertheless, *Cordes & Corps* is not based on recorded, but on synthetic sounds, permitting a direct control of all parameters of sound. A string simulator forms the basis of the sonority of this work and allows the composer to connect with the physical as well as purely fictitious sound worlds.

The string in all its dimensions thus offers only a point of departure for the most diverse electronic transformations of this specific sounding object. The point of departure itself is present in the work in the appearance of simulated piano sounds, grouped in clusters ("corps") and isolated string sounds ("cordes"). This layer is subjected to a basic algorithm regulating the pitch and duration of the sounds: a cluster of four random notes generates a fifth isolated string sound as the average of the previous four. These consecutive and simultaneous clusters and string sounds form a structural network or temporal grid, as bodies and points defining a specific space. The transitions within this space are filled with more radical electronic transformations of this material, by means of which earlier generated sounds are further elaborated as abstract sound material.

This material is no longer adequately identifiable as clusters or pitches, but can only be described in terms of "sound objects". Moreover, this textural layer is not static but in continuous motion: through the successive appearance of uninterrupted new sound transformations, a strong sensation of spatiality is created. Their great diversity notwithstanding, the sound objects of this level can still be related to the world of strings by way of suggestive references to vibrating objects and their resulting tensions.

The intertwining of both textural layers generates a constantly shifting sound pattern, the unity of which is nevertheless guaranteed by the preservation of the genetic characteristics of the initial sound material (the interaction between clusters and string sounds). In this way, the complex and multi-layered texture of *Cordes & Corps* offers an impressive idea of the great sonorous diversity that can occur even within a clearly demarcated sound spectrum, by means of the manifold electronic transformations of an original sound material.

[KRISTOF BOUCQUET]

LOUIS DE MEESTER (1904-1987)

Incantations (1958, second version 1962)

Louis De Meester is no doubt a pioneer of tape music in Flanders. During the early 1950s, he worked as a producer at the National Radio Institute. There he had contacts with numerous, mainly French, composers with an international reputation, and he got acquainted with Pierre Schaeffer's *Musique Concrète*. From 1953 on, De Meester and his colleague David Van de Woestijne experimented with the rather modest electronic means that were available in the radio studios.

When De Meester was asked to compose a work that could compete for the 1957 Italia Prize, he immediately set as a condition that he could extensively use electronically manipulated sounds. Eventually, the burlesque radio opera *De Grote Verzoeking van Sint-Antonius* (The Great Temptation of Saint Anthony) was awarded the prize, which was a huge step forward for De Meester as a composer and for the appreciation of tape music in Flanders. This also meant that the National Radio Institute decided to provide its experimental composers with far more time and means to develop tape music. Just one year later, the National Radio Institute held an international festival for experimental music, linked to the World Exposition in Brussels. For this occasion, Louis De Meester wrote his tape composition *Incantations*, probably the most fascinating work in his entire oeuvre. In 1962, De Meester was sent by the radio institute to assume the artistic management of the newly founded Institute for Psycho-acoustics and Electronic Music (IPEM). He continued his work there until he retired in 1969.

Obviously tape music plays an important role in De Meester's oeuvre. His method of working has roots in the tradition of *Musique Concrète*, which means he mainly works with manipulations of pre-recorded sound material. He uses synthetic sounds far less often, and if he does so, De Meester chooses them for their specific sonority and tone colour, not for the possibilities of control and consistency that prompted composers like Stockhausen and Goeyvaerts to use those sounds.

Defining De Meester's aesthetic position in general, is not a simple task: his music is to be situated in the area of tension between tradition and modernity, between a concept of music that is largely determined by the French music from the first half of the 20th century, and a fundamental curiosity for the sound world of the *avant-garde* of the 1950s and 60s. De Meester approaches the electronic medium in a remarkable number of very different ways. The composer himself often describes electronic sound manipulation as an almost inexhaustible source of timbres, which he quite often integrates in a rather traditional musical context, as e.g. in the second version of *La Voix du Silence*. This 1954 composition is very familiar to the style and atmosphere of the music of Claude Debussy and the *Groupe des Six*, but when he thoroughly revised the piece in 1961, De Meester added a newly composed tape

part that fits remarkably well into the picture. Contrary to what was common in the circle of Pierre Schaeffer, De Meester also uses manipulated and electronic sounds for their evocative character. Some of the most beautiful examples can be found in the "sound scenery" he composed in 1962 to accompany five poems by Paul Van Ostaijen.

Incantations (1958), *Nocturne Malgache* (1965) and *Mimodrama* (1975) are De Meester's best-known compositions for tape only, in which he more thoroughly explores the characteristic properties of this medium.

Although *Incantations* is De Meester's first large-scale tape composition, it is with this work that he establishes the closest connection with the contemporary *avant-garde*. The work is based on a poem by the French author Isidore Isou (1925-2007), who claims to be the founder of *lettrism*, a poetic movement that attributes great importance to the phonetic, associative and musical value of (sometimes nonexistent) words. Moreover, Isou was a fervent advocate of a fusion of music and poetry. The title *Incantations* also refers to the ritual incantations that are typical of musical cultures such as the Berbers, which De Meester became acquainted with in the 1930s. His fascination for this musical tradition had earlier been a source of inspiration for the orchestral composition *Maghreb* (1946).

The basic material of *Incantations* consists of a recording of the poem by Isou, as well as other concrete and some synthetic sounds. The choice for the spoken text as point of departure is clearly related to the aesthetics of the poem itself. Louis De Meester explicitly uses the poem for its sonic qualities, not for its semantic meaning.

The techniques used to transform the basic material – the addition of echoes, speeding down the recording and filtering – are still rather limited. *Incantations* was initially composed for only two channels, but in 1962 De Meester revised the piece for four channels. In the brand new IPEM studio, he now had the necessary technical means to do so at his disposal. The formal construction of the piece is – as always – elaborated intuitively. De Meester only sketches the large form of the composition. The concrete details do not follow a pre-existing scheme, but are the result of an intuitive process, which is influenced during editing by the actual sound material and its manipulation.

[REBECCA DIEPENDAELE]

LUCIEN GOETHALS (1931-2006)

Contrapuntos (1966)

Mobile for tape(s): for 1 to 12 tape recorder(s)

The score provides instructions for the realization of 12 sound layers: four basic layers plus two transpositions of each. The basic material consists of strings of 28 elements each: noise bands (30, 100 and 300 Hz respectively), superpositions of sine waves and square waves, alternately, of 100 ms duration and 0 dB amplitude each. As a result of the short duration and rapid succession of these elements, no pitches and so no discrete melody emerge: the strings are perceived as global units, waves with a melodic trend: up, down or level. Frequencies are determined according to an equal-tempered 19-tone scale (which allows special harmonic colours) - transpositions according to the "usual" equal-tempered 12-tone scale. Each such "wave" is preceded by an impulse (from an electronic generator or of an instrumental origin such as a piano cluster or gong) which may be perceived as a stimulus triggering the wave. A further category of sonic material consists of continuous sounds with a long resonance at the close of each section of strings ("low", but like the impulses, of indeterminate pitch). Reverberation time durations from 1 to 4 seconds are evenly distributed among the 12 layers. Within each layer there is a constant alternation of short sound sequences (0.5 to 2") and long rests (up to 31.5"). Whether and when their superposition results in actual silence depends on the coincidence of the layers.

If the concept Contrapuntos is being realized as a fixed, prerecorded version, its "mobility" is reduced: all 12 layers should be started within 15".

In case of a "live" performance, however, in an open space, with visitors free to move around, and each of the 12 recorders connected to a separate photo-electric cell, the tapes starting automatically whenever a visitor walks by the corresponding electron-optical cell, the mobility is virtually total. The time lags between soundings are then quite unpredictable. It may then be considered a "sound environment". (It is important that the speakers be evenly spaced all around the performance hall).

Contrapuntos is a patent example of "open plurilinearity". Its inspiration may have been the polyphony of the Franco-Flemish masters of the early 16th century and their riddle canons, such as Josquin's Ex una Voce tres.

Symbolically, Contrapuntos may represent a journey through a labyrinth. In terms of aesthetics, it is a combination of rigour and spontaneity: serial construction allied to a "happening" spirit.

PART α BASIC STRUCTURE LAYER I (= structure layer 1)

- Order of the sound figures and concrete sounds.

fig.1 high impulse

fig.2 superposition of material layers $\begin{matrix} \rightarrow & \rightarrow & \rightarrow & \rightarrow \\ D7 & + & C5 & + & C3 & + & C2 \end{matrix}$

fig.3 low impulse

fig.4 superposition of material layer $\begin{matrix} \rightarrow & \rightarrow & \rightarrow \\ E7 & + & D5 & + & C4 \end{matrix}$

fig.5 " " " " $\begin{matrix} \rightarrow & \rightarrow \\ E2 & + & D1 \end{matrix}$

fig.6 " " " " $\begin{matrix} \rightarrow & \rightarrow \\ E6 & + & D3 \end{matrix}$

fig.7 " " " " $\begin{matrix} \leftarrow & \leftarrow & \rightarrow & \rightarrow \\ C7 & + & C6 & + & D4 & + & E1 \end{matrix}$

fig.8 " " " " $\begin{matrix} \leftarrow & \rightarrow & \rightarrow & \leftarrow \\ D6 & + & E4 & + & E3 & + & C1 \end{matrix}$

fig.9 high impulse

fig.10 superposition of material layers $\begin{matrix} \leftarrow & \rightarrow & \leftarrow & \leftarrow \\ D7 & + & E5 & + & D2 & + & D1 \end{matrix}$

fig.11 " " " " $\begin{matrix} \leftarrow & \leftarrow \\ E6 & + & C3 \end{matrix}$

fig.12 " " " " $\begin{matrix} \leftarrow & \rightarrow \\ E7 & + & E1 \end{matrix}$

fig.13 " " " " $\begin{matrix} \leftarrow & \leftarrow & \leftarrow \\ C5 & + & C4 & + & E2 \end{matrix}$

fig.14 low impulse

fig.15 concrete sound with very long resonance

Excerpt from the realisation score (p. 17)

The title refers to the contrapuntal techniques through which all layers are derived from the same basic material, and to the contrapuntal way these related materials are (albeit "movably") combined.

[HERMAN SABBE]

Realization score for electro-acoustical composition published by the Musicology Seminar of Ghent University, edited by Herman Sabbe in Documenta Musicae Novae IV, Ghent, 1974.

Realization of one version for stereo tape by the composer at IPEM Electronic Studio, Ghent University, 1967. Alternative versions: 4 channel tape, 12 tapes.

KAREL GOEYVAERTS (1923-1993)

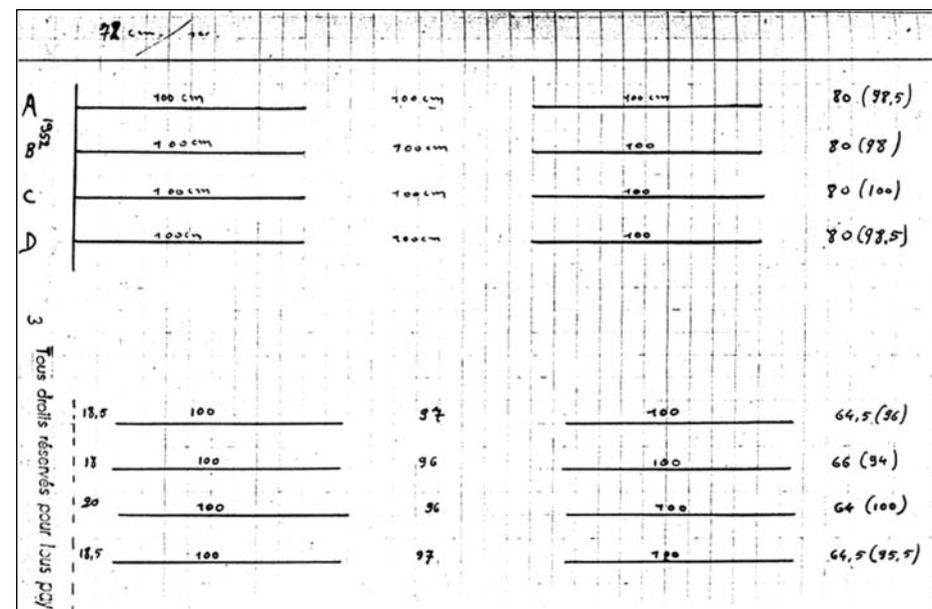
No. 4 "with dead tones" (1952) and other electronic music

Karel Goeyvaerts' composition No. 4, written in December 1952, is not only the first score of electronic music ever written in Flanders, it is, along with John Cage's Williams Mix, arguably the first electronic music score written altogether in the history of music. At that time, Goeyvaerts' aesthetic goal was to write "static music" as an image of motionless, pure, absolute being. This musico-metaphysical project ruled out the possibility of musical expression or even personal choices of the composer. According to Goeyvaerts (in 1951), music should be "a projection in time and space of a musical idea generating structure". This composition programme was realized by developing multiple serial procedures resulting from a combination of Webern's specific use of twelve-tone technique and Messiaen's emancipation of musical parameters other than pitch. Goeyvaerts was acquainted with the former through his detailed analysis of Webern scores such as the Piano Variations op. 27, and with the latter through his study period at the Paris Conservatory of Music in Messiaen's analysis class (1947-50). With his No. 1 Sonata for two pianos, written in the winter of 1950-51, and even more so in his No. 2 for thirteen instruments, written in August/September 1951, Goeyvaerts was one of the first European composers to write multiple serial music. Abstraction, constructivism and rationalism are key characteristics of Goeyvaerts' serial output from the 1950s, and they all contributed very much to the aesthetic idea of static music Goeyvaerts was obsessed with.

Having these compositions performed on musical instruments by musicians was becoming more and more of a thorn in Goeyvaerts' side. Uncontrollable, imprecise and above all "dynamic", a live performance by musicians thwarted the very concept of static music. This is also the reason for his vehement rejection of Musique Concrète: no static image of absolute being can be created with impure, uncontrollable musical material. By the winter of 1952, it had become perfectly clear to Goeyvaerts, unlike his fellow serial composers, that electronic music was the only "true" serial music. He was thrilled by the foundation of an electronic music studio at the NWDR in Cologne by Herbert Eimert, and disappointed by the unwillingness of the Belgian public broadcasting service to create a similar studio in Brussels. Goeyvaerts thus had to rely on Stockhausen's knowledge of and experience in the production and transformation of electronic sounds by machines. This was one of the central concerns in the extensive correspondence between the two composers at the time. In his obsession with the idea of static music, Goeyvaerts even insisted on using an "immobile tape recorder" for the production of his No. 4. In his letter of 12 November 1952 to Stockhausen, Goeyvaerts explains the basic concept of this tape composition to his friend: "Dear Karlheinz, I am at the point where I can say that I will soon start writing 'No. 4 with dead tones'. I only use homogeneous sounds with unchanging spectra, that have no internal relation whatsoever, just like dead bodies laying the one next to the other. Consequently, the only material is time.

The sounds could be rather complicated, but I leave it to the studio technician to decide how they will be. I only want them to be homogeneous and utterly different from each other, so that the illusion of relationship or mixing of the sounds can be avoided at all times." Thanks to the generous collaboration and permission of the Archive of the Stockhausen-Stiftung für Musik in Kürten, the complete letters to Stockhausen will be published in October 2010 in *Selbstlose Musik*, the collected writings of Goeyvaerts.

The score of No. 4 indeed defines a time structure only (see illustration). Four equally long sounds are repeated throughout the piece at the same pitch, with the same duration, timbre and loudness ("dead sounds", without any internal development). At the beginning of the piece the four sounds start and end simultaneously, but the silence intervals between the repetitions of the sounds gradually expand, thus resulting in a phase shifting process (Herman Sabbe: "minimal music avant-la-lettre") between the four sound layers. At the exact mid-point of the piece, the four sounds are heard consecutively, without overlap. From this moment onwards the process is reversed until the initial simultaneous presentation of the four sounds is reached once again at the very end of the piece. The resemblances to the score of Cage's Williams Mix are striking: in both cases the sound material is undefined, the score is a pure time structure, and musical time is represented by lines in space (lengths of tape slices), the exact measurement of which in centimetres or inches replaces the inadequate metrical-rhythmical notation of durational structures.



No. 4 "with dead tones" (1952): first page from the score.
© K. Goeyvaerts New Music research Centre - University of Leuven

No. 4 was not realized until 1980 at the IPEM studio in Ghent. The tape composition by Goeyvaerts included in Herbert Eimert's famous presentation of "The Seven Pieces" was his No. 5 "with pure tones" (1953). It was produced at the NWDR studio in Cologne with the assistance of Gottfried Michael Koenig, who would also try to realize Goeyvaerts' 1955 tape composition No. 7 ("with converging and diverging levels") some years later. From 1970 onwards, Goeyvaerts worked as the new music radio producer for the Belgian public broadcasting service. During the first five years of his appointment he was sent to the electronic music studio IPEM, a joint initiative of the broadcast service and the University of Ghent. It goes without saying that the availability of the studio caused a renewed interest in the production of electronic music, both with (mixed media) and without musical instruments (tape compositions). Goeyvaerts' catalogue of post-serial electronic music features works such as Piece for Piano and modified piano sounds (1964), Depending on (for five instrumental groups with tape ad libitum, 1971), Hé (together with Lucien Goethals and Herman Sabbe, 1971), Nachklänge aus dem Theater I-II (tape, 1972), Piano Quartet (with tape, 1972), Op acht paarden wedden ("betting on eight horses", tape, 1973), You'll never be alone anymore (bass clarinet and tape, 1975), Litany V (harpsichord and tape, 1982), and Music for a Royal Firework (tape, 1976-85).

[MARK DELAERE]

Reading suggestions

- Herman Sabbe, "A Paradigm of 'Absolute Music': Goeyvaerts No. 4 as Numerus sonorus", in *Revue belge de Musicologie/Belgisch Tijdschrift voor Muziekwetenschap* 59, 2005, 243-252.

- *Selbstlose Musik. Texte, Gespräche, Briefe und Werknotizen von Karel Goeyvaerts*, ed. Mark Delaere, Cologne: MusikTexte Verlag, 2010.

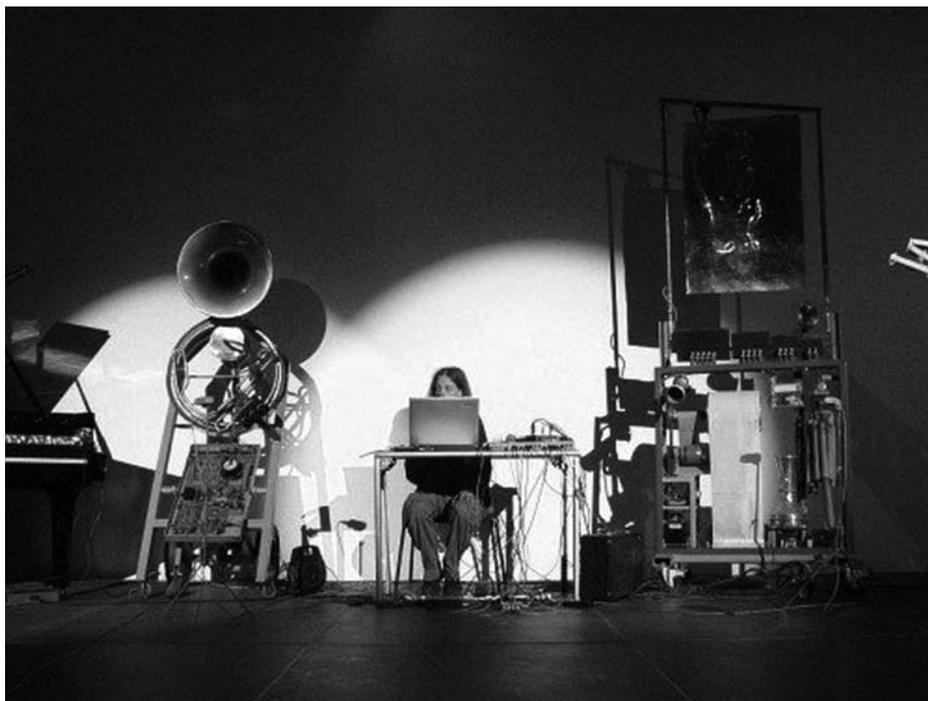
KRISTOF LAUWERS (1978)

145+ (2007)

Kristof Lauwers started his career in the late 1990s with some chamber compositions for traditional instruments. At the same time, he developed an interest in electro-acoustic music, especially in live electronics (e.g. Processing # 4, 1999). His main concern in this field is to develop "smart" live electronics that are programmed to react in a musically intelligent way to the acoustic input.

The electro-acoustic composition 145+ (2007) shows yet another aspect of Lauwers' compositional activities, viz. his interest in working with pre-recorded ordinary sounds. To date, Kitch 'N Glitch (in collaboration with Laura Maes, 2001, 40') – based on everyday kitchen sounds – is Lauwers' most elaborate composition in this field. Even if 145+ operates on a smaller scale – it takes some five minutes – it is no less exemplary of Lauwers' way of working. For this piece, composed for a community project by Logos, Lauwers has recorded some 60 minutes of typical everyday sounds in and around some houses in the neighbourhood. From this raw material, he picked the most pregnant and expressive sounds which were then arranged in Pure Data patches and further processed into the final composition. Echoing the aesthetic arguments of Musique Concrète pioneer Pierre Schaeffer, Lauwers underlines that working with ordinary existing sounds, recorded in a "natural" environment, is very rewarding. As a matter of fact, these sounds prove to be much richer and more intriguing than synthetic sounds. This is not to say, however, that 145+ could be characterized as a piece of Musique Concrète. Therefore, the possibilities of sound processing offered by modern software as Pure Data are too sophisticated to be seen as a direct lineage of the initial tools of Musique Concrète.

In 145+, Lauwers applies different types of sound processing, of which the following three are most common. In the beginning of the piece, he uses the sounds of marbles rebounding and of a bike bell. The recording of these sounds was cut into many pieces, which were then superimposed in just as much layers. By doing so, the original everyday sound is not only made hardly recognizable, in the process it also acquires an acousmatic quality which makes it susceptible to a real aesthetic experience. Micro-transposition – i.e. transposition of less than a quarter-tone – of the original sound is another frequently used technique of sound processing. The frictions caused by the very small differences in pitch have an entrancing effect. The most thorough intervention in the nature of the sound, however, consists of FFT frequency filtering, which means leaving out certain frequencies of the original frequency spectrum of a sound. This intervention not only makes these sounds unrecognizable, it also testifies to the fact that electronic composition tools have made the full DNA of a sound available for transformation by composers.



The structure of this piece was created rather intuitively. This can be seen to be a general characteristic of electronic music, especially since the advent of computer-aided composition. After all, the computer software enables composers to try out and test many different sound effects quite easily. Nevertheless, *Interfractions* displays a balanced overall structure, with two very similar sound fields – the rebounding sound and the bike bells in the beginning; the goat's bells and similar rebounding sounds at the end – enveloping the free middle section.

[JAN CHRISTIAENS]

SERGE VERSTOCKT (1957)

***Interfractions* (1984)**

Serge Verstockt developed his two-channel tape composition *Interfractions* in 1984 during his studies with Gottfried Michael Koenig at the Utrecht Institute of Sonology (The Netherlands). The sound material of this 14-minute composition mainly consists of sine wave tones which are sporadically accompanied by short fragments of concrete sounds.

Verstockt created the macrostructure of *Interfractions* by means of the Karplus-Plucked-String Algorithm, which was calculated by a computer. The results of these calculations were sent in real time to a number of oscillators, so that the resulting numbers determined the pitch of the generated sine wave tones, and the speed of the computer calculations determined the length of the sounds. The Karplus-Plucked-String Algorithm starts with a large number of randomly generated numbers, collected in a buffer. Only the minimum and maximum limiting values are fixed beforehand. The buffer is read cyclically. During each reading cycle two numbers are picked out randomly, and their mean is calculated. This mean value is subsequently put back into the buffer, whereupon two new numbers are picked out of the buffer and their mean is calculated, and so on. Logically, the rather chaotic number organization in the initial buffer gets more and more organized: since various number pairs are constantly replaced by their mean value, the values of the initial buffer start to move towards each other. This evolution from chaos to order is reflected in the musical macrostructure, in which a rather complex sound texture with a large tone range slowly turns into an increasingly more transparent sound structure with a smaller range.

The title of this composition, *Interfractions*, thus refers to the fact that the different fractions of the initial buffer start to move towards each other, as a result of which the chaotic beginning of the composition gets more and more organized.

As for the sound texture of the piece, the algorithmically generated sine wave sounds are mainly organized in two ways:

- As a drone: the sine wave tones are piled up horizontally as long notes.
- As a rhythmic structure: the sine-wave tones quickly follow each other, resulting in a pulse sound. This pulse is clearly noticeable for the first time around 4'20".

Besides this algorithmically generated sine wave layer, we also notice the presence of concrete sound fragments. Just like the sine waves, these concrete sounds were effected in real time, played by the composer himself on a clarinet without a mouthpiece. Although these concrete sounds are present from the very beginning, they only become clearly noticeable around 7'30". Thus, the concrete sounds are not electronically manipulated sound files which were subsequently assembled on the sine wave layer, but were realized, mixed and recorded on tape in "one take", simultaneously with the sine wave layer.

Therefore, the entire composition is the result of a process-like algorithmic working method. One “push on the button” generates a complex mass of numbers that are sent to a series of oscillators, after which the sounding result is enriched with an external element: intuitively played clarinet sounds.

Obviously, this method, in which elements of improvisation are added to an entirely algorithmically organized structure, strongly differs from the early serial technique, in which an electronic composition is written down on paper and later on realized in small parts, which are subsequently assembled according to a previously fixed scheme.

Although *Interfractions* can be seen as an early composition within the work of Serge Verstockt, several fundamental characteristics of his later work, such as a clear feeling for musical direction, a process-like structure and a constant search for innovative working methods, are already clearly present.

[DAAN JANSSENS]

DIRK VEULEMANS (1956) **Artikulationsorgane (2007)**

The musical output of Dirk Veulemans is dominated by electro-acoustic compositions. According to the composer, the use of computer technology in general and of algorithmic elements in particular constitutes a significant element in his compositions. More surprising, perhaps, is that many of these works actually openly establish a connection with acoustic sound (e.g. the speaking voices of people reading texts in *Spreken in Tongen* (2004)) and particularly with music. In *De piano is de wolf* (2004), recorded piano sounds are subjected to extensive electronic treatments. A more radical appropriation of musical sounds into the new electro-acoustic context can be found in *Artikulationsorgane* (2007). As in the five *Vocalises* (2004), *Artikulationsorgane* makes explicit reference to *Maulwerke* (1968-74) by the German composer Dieter Schnebel. Veulemans' compositions originated during the rehearsal process for performances of *Maulwerke* by the Ghent-based *Kunstarbeiders Gezelschap* (KaG). The *Vocalises* are electronic elaborations or transformations of bits and pieces recorded during those rehearsals.

More encompassing, perhaps, is *Artikulationsorgane*, which features a return to the material from *Maulwerke*, but this time with a much broader scope in the treatment, structure and manipulation of the basic material. Schnebel's composition is an intricate study of all the possible ways voices can be used, mainly involving an experimental approach: extending vocal technique and including many non-conventional sounds. It is this experimental approach of working with the range of possible sounds that our vocal system is able to produce, which is taken over by Veulemans.

At the basis of *Artikulationsorgane* lie a number of such allegedly “alternative” vocal sounds: breathing, panting, grunting, or guttural noises can easily be recognized. Dirk Veulemans – as one would expect with the electronic medium – focuses on the unusual, noise-like qualities of the sounds, manipulating, modifying and distorting them, so that a particular tension ensues between the vocal sounds with their almost primary bodily aspect on the one hand and their electronic transformations on the other hand. In separating these “analogue” noises from their physicality and placing them in the electronic context, he creates a fascinating continuum of noises, ranging from the intimate details of human sound production to the elaborate range of electronic sound, covering the entire field in between.

Artikulationsorgane is roughly divided into four segments. The first may serve as an introduction to the material of the piece, in a fast crescendo-diminuendo arc. It opens with breathing sounds, soon joined by guttural and growling noises, pitched against a counterpoint of high, sharp noises that are more electronic in their appearance. From 0'36" onwards, longer, sustained sounds are added, gradually dissolving into reverb effects.

At 1'29" the texture has been thinned out extremely and from this near-silence the music builds up again. Once more, breath-like sounds provide the starting point, but this time rather in a kind of panting, which soon expands into (lower) gurgling and (higher) screeching noises. At 1'58", sung tones are introduced, but heavily modified and always as a background to an increasingly present array of percussive sounds, that will dominate this segment from ca. 2'28" until the end at 3'43". The apotheosis of this section is the sudden introduction (at 3'24") of the voice of Dieter Schnebel himself (recorded during a Maulwerke-rehearsal with KaG). These short phrases in German not only constitute the most conventional use of the speaking voice to occur in Artikulationsorgane, but they also introduce an almost dramatic turning point in the composition, for suddenly, the composer whose work lies behind (and aspects of which can be – albeit vaguely – perceived throughout) this music, makes an appearance. The "wunderbare Klänge" Schnebel speaks of may be interpreted as this piece's motto: an attempt to explore the limits of physical/ vocal and electronic noise and forge a new, "amazing" synthesis between both.

After this sudden appearance of Schnebel's voice, the next section (like the previous one) opens in near-silence and gradually introduces yet another way of developing a juxtaposition of vocal (guttural at 4'36", panting at 5'10") and electronic sounds. The second stage of this section (starting at 6'22") features an element closely resembling a musical motif: 2 times 2 eighth notes over a descending fourth in a regular triple meter. A rhythmic "counterpoint" of nonsense syllables enters, followed (at ca. 7'00") by vowels. These relatively conventional uses of the voice are subjected to electronic treatment and gradually become more abstract, while fading out.

At 7'41" a short epilogue rounds off the piece, revolving around a few sung tones set in an "ambient" kind of texture, punctuated by birdlike high pitches. A brief increase of intensity occurs when these sounds transform into a pulsation, but this soon returns to the quiet mood, fading out into the sounds of human breathing, with which Artikulationsorgane began.

[MAARTEN BEIRENS]

C. Inventory

The alphabetical and chronological inventories display Flemish tape works composed between January 1950 and 2010, part of which can be consulted at the MATRIX archive (both scores/sketches and recordings). Availability of the materials can be checked in the online catalogue at www.matrix-new-music.be. This website also offers detailed discussions of the biography and works of most of these composers, as well as their contact information. When composers explicitly mentioned the availability of a (published) score or recording that is distributed by the author himself/herself, we mentioned 'composer' in the inventory. For their e-mail or addresses, MATRIX may be contacted at info@matrix-new-music.be

ALPHABETICAL INVENTORY OF FLEMISH TAPE MUSIC SINCE 1950

NAME	TITLE	SUBTITLE	MATERIAL	PARTS	DURATION	RECORDING	YEAR
Adriaenssens, Paul	A short walk with Karl F.		stereo, also for 5 synthesizers	1	5'00"		1979
Adriaenssens, Paul	Long ago there was something in me, but now that thing is gone		4 channel	1	8'00"		1979
Adriaenssens, Paul	My old radio goes beserk		stereo	1	9'00"		1980
Adriaenssens, Paul	Three easy ways to slice an egg		stereo	3	6'00"		1981
Adriaenssens, Paul	Pseudanisotropie		stereo	1	120'00"		1981
Adriaenssens, Paul	Strange Attractors		stereo, also synthesizer version	1	12'00"		1983
Adriaenssens, Paul	Adventures of the wandering pacemaker		stereo	1	8'00"		1983
Adriaenssens, Paul	Levels II		stereo, also for flute and 2 tapes	1	12'00"		1985
Adriaenssens, Paul	Sturzgeburt		4 channel	1	3'00"		1985
Adriaenssens, Paul	Current Affairs		stereo	1	8'30"		1988
Adriaenssens, Paul	In cirkels		stereo, audiovisual installation	1	16'00"		1989
Adriaenssens, Paul	Watertoren		4 channel, audiovisual installation	1	20'00"		1989
Adriaenssens, Paul	Friction		stereo	1	9'30"		1990
Adriaenssens, Paul	Camera obscura	concert version	4 channel	1	8'30"		1990
Adriaenssens, Paul	Kathedraal		12 channel, audiovisual composition	5	24'00"		1990
Adriaenssens, Paul	Camera obscura		4 channel, installation	1	90'00"		1990
Adriaenssens, Paul	Tunnel vision I	concert version	stereo	1	12'00"		1991
Adriaenssens, Paul	In cirkels			1	4'30"		1992
Adriaenssens, Paul	Centrifuga		stereo, audiovisual composition	1	7'30"		1992
Adriaenssens, Paul	Whatever comes next		stereo, audiovisual composition	1	12'00"		1992
Adriaenssens, Paul	4x4		stereo, audiovisual composition	4	16'00"		1993
Adriaenssens, Paul	Sleep tight, sweet reptile		stereo	1	12'00"		1998
Adriaenssens, Paul	"A"s for "Abstract"		8 channel, audiovisual composition	1	11'00"		1999-2000
Adriaenssens, Paul	Among the machines	electronic suite	stereo	6	30'00"		1999-2005
Adriaenssens, Paul	Si te ciega la sirena, escucha el faro	(for Lucien Goethals)	4 channel		1'00"		2001
Adriaenssens, Paul	Défi lunaire #1	Mare tranquillitatis	stereo	1	8'00"		2003
Adriaenssens, Paul	Beet root		stereo	1	18'00"		2005
Adriaenssens, Paul	Mizu no oto	after Basho	stereo	1	6'00"		2006
Adriaenssens, Paul	Ringtone for Ilse	(extended version)	stereo	1	2'30"		2007
Adriaenssens, Paul	3x3	after Melencolia	stereo	1	9'00"		2007
Adriaenssens, Paul	Melencolia	after Dürer	stereo	1	6'00"		2007
Adriaenssens, Paul	Throwing stones ru?		stereo	1	6'00"		2008
Adriaenssens, Paul	Tricycle	A study in phase shift, modified repetition/pseudorepetition, cyclic structure and parameter translation	stereo	1	6'00"		2009
Adriaenssens, Paul	Ataraxia		stereo	1	15'00"		2009
Adriaenssens, Paul & Joris De Laet & Dirk Veulemans	Meditatieve ruimte		4 channel, audiovisual composition	1	60'00"		1988
Adriaenssens, Paul & Paul Geladi & Gerd Dehu	Lint		mono	1	9'00"		1979
Aertgeerts	Drie labels		mono		9'50"		1967
Aertgeerts	Didactische montages		stereo				1976

NAME	TITLE	SUBTITLE
Arras, Thomas	A. B. C.	
Bekaert, Jacques	The day after	
Beyls, Peter	Studie I	
Beyls, Peter	Alea lacta est	
Beyls, Peter	Ruimtelijk I	
Beyls, Peter	Ruimtelijk II	
Beyls, Peter	Prints	
Beyls, Peter	Syrtis	
Beyls, Peter	Slow motion	
Beyls, Peter	Similis	
Beyls, Peter	It always takes a short time	
Beyls, Peter	SEA/AIR	
Beyls, Peter	evolution and human ecology tape	
Beyls, Peter	Rothko	
Beyls, Peter	The Headless Horseman	
Beyls, Peter	Asleep at the switch	
Beyls, Peter	Painted Words	
Beyls, Peter	Patterns	
Beyls, Peter	The Hollow Man	
Beyls, Peter	A quiet disturbance	
Beyls, Peter	The Life and Times of Oscar	
Beyls, Peter	Arena	
Beyls, Peter	Heartbeat	
Beyls, Peter	Louis	
Beyls, Peter	China Piece	
Beyls, Peter	Oscar	
Beyst, Etienne	Spasis	
Beyst, Etienne	Ekresis	
Beyst, Etienne	Aleph	
Beyst, Etienne	Aquirro	
Beyst, Etienne	Empedokles' dood	
Blondia, Rudy	Hybrid experiment for Bourges	
Bogaerts, Mark	Comp Sax	
Bogaerts, Mark	Comp Guitare	
Brackx, Joachim	NetMusic	
Brackx, Joachim	Shifting landscapes II	
Brackx, Joachim	Music for HNE 2001	
Brackx, Joachim	Music for Ontluiken	
Brackx, Joachim	Music for Klara in het Paleis	
Brackx, Joachim	Music for vers	
Brackx, Joachim	Music for little bits	
Brackx, Joachim	Music for 4 people 2 days	
Bradt, Sebastian	IN CARNEM CATULAE	
Bradt, Sebastian	MONDO	
Bradt, Sebastian	Rouge - Blanc - Dorée,... et un p'tit peu Noir...	

MATERIAL	PARTS	DURATION	RECORDING	YEAR
		8'33"	Composers' Voice CV 7903	1968
		7'08"		1969
stereo	2	24'00"	IPEM	1972
stereo	2		IPEM	1973
stereo	2	14'14"	IPEM	1973
stereo	2	24'00"	IPEM	1973
stereo	2	9'25"	IPEM	1974
stereo	2	21'20"	IPEM	1974
stereo		8'40"	IPEM	1974
4 channel	4	56'00"	IPEM	1974
				1975
				1975
				1976
stereo	2	18'00"	IPEM	1977
				1979
stereo	2		IPEM	1980
				1980
				1980
stereo		14'30"	IPEM	1984
				1986
				1986
				1987
				1989
				1991
				1996-2000
mono	1	16'20"		1965
mono	1	4'37"		1965
mono	1	14'00"		1967
stereo	1	17'00"		1974
mono	1	52'00"		1974
stereo	1	18'56"		1980
		12'04"		1988
		12'04"		1988
stereo		1'00"	composer	1997
stereo		15'00"	composer	1998
stereo		6'00"	composer	2001
stereo		30'00"	composer	2002
stereo		15'00"	composer	2002
stereo		1'00"	composer	2005
5 channel, also stereo version		12'00"	composer	2005
stereo		15'00"	composer	2006
stereo		5'17"	composer	1999-2000
stereo		4'30"	composer	2006
stereo		5'30"	composer	2006

NAME	TITLE	SUBTITLE
Bradt, Sebastian	Era Zero	
Bradt, Sebastian	.RUN.FOOL.+	
Brewaeyls, Luc	Metallofonie	
Bruyndonckx, Jan	Rails	
Bruyndonckx, Jan	Nocturne voor twee	
Bruyndonckx, Jan	Black magic	
Bruyndonckx, Jan	Variaties voor voetstappen en gitaar	
Bruyndonckx, Jan	Pater noster	
Bruyndonckx, Jan	Verloren paradijs	
Bruyndonckx, Jan	7 poèmes de Paul de Vree	(fonetische bewerking)
Bruyndonckx, Jan	Essentieel	
Bruyndonckx, Jan	Vertigo gli	
Bruyndonckx, Jan	Kleine Caroli	
Bruyndonckx, Jan	Een Roos a Rose	
Buchowiec, Barbara	Chou	
Buchowiec, Barbara	Acretian memories	
Buchowiec, Barbara	Magnesia	
& Moniek Darge		
Buckinx, Boudewijn	Nachtmug	
Buckinx, Boudewijn	Phlub	
Buckinx, Boudewijn	Symposion	
Buckinx, Boudewijn	Improvizasies	
Buckinx, Boudewijn	Figuren A	
Buckinx, Boudewijn	Figuren B	
Buckinx, Boudewijn	Konkrete Studie II	
Buckinx, Boudewijn	Revolutie	
Buckinx, Boudewijn	His Master's Voice	
Buckinx, Boudewijn	Stuk	
Buckinx, Boudewijn	Paszoep(sss)	
Buckinx, Boudewijn	Studie	
Buckinx, Boudewijn	Ouverture	
Buckinx, Boudewijn & Mia Loose	Studie	
Budai, Erika	The secret garden	
Budai, Erika	Space	
Budai, Erika	Melancholic dream	
Darge, Moniek	Self-Portrait in Sound: Harpje	
Darge, Moniek	For Grooves	
& Godfried-Willem Raes		
Darge, Moniek	Junks	
& Godfried-Willem Raes		
Darge, Moniek	Murphy	
& Godfried-Willem Raes		
Darge, Moniek	Magnesia	
& Barbara Buchowiec		
Dehu, Gerd & Paul Adriaenssens	Lint	
& Paul Geladi		

MATERIAL	PARTS	DURATION	RECORDING	YEAR
stereo		7'20"	composer	2007
4 channel		7'25"	composer	2008-2009
stereo		30'00"	composer	1989
mono		7'00"		1958
mono		7'00"		1959
mono		2'20"		1960
mono		4'00"		1960
mono		3'42"		1961
mono		6'00"		1961
mono		4'00"		1963
mono		18'00"		1964
mono		1'51"		1964
mono		0'54"		1964
mono		0'40"		1966
stereo			Logos Foundation	2002
5.1 surround			Logos Foundation	2007
stereo			Logos Foundation	2006
		8'00"		1963
		4'00"		1963
		6'00"		1964
		15'00"		1964
	1	9'40"		1964
		7'50"		1964
		4'30"		1964
		3'20"		1964
		10'05"		1964
		9'30"		1965
		10'10"		1965
mono	1	2'00"		1965
mono	1	9'15"	IPEM	1966
		5'00"	IPEM	1965
				1991
				1992
				1992
multilayered soundscape		0'30"	Logos Foundation	1998
stereo		22'00"	Logos Foundation	1975
stereo		6'00"	Logos Foundation	1978
stereo		2'00"	Logos Foundation	1983
stereo			Logos Foundation	2006
mono	1	9'00"		1979

NAME	TITLE	SUBTITLE
De Baerdemacker, Kris	Xplosiv	
De Baerdemacker, Kris	Splash	
De Baerdemacker, Kris	Radiomix	
De Baerdemacker, Kris	Scratch	
De Baerdemacker, Kris	Monotone	
De Baerdemacker, Kris	Monotone #2	
De Baerdemacker, Kris	Monotone #3	
De Baerdemacker, Kris	Sonic fantasy on Carceri d'Invenzione	
De Baerdemacker, Kris	Scattered sounds	
De Baerdemacker, Kris	Hamix	
De Decker, George	Modulature I	
De Decker, George	Hakanai	
De Decker, George	ETT LIV	
De Decker, George	The Bell Jar	
De Laet, Joris	Constructie van een metalen cylinder	
De Laet, Joris	Relief	
De Laet, Joris	We eindigen met punt-komma	
De Laet, Joris	Swjioobaa	
De Laet, Joris	Première	
De Laet, Joris	Scheldedichters met natte voeten	
De Laet, Joris	Cakewalk sonate	
De Laet, Joris	Khene-dimensioned	
De Laet, Joris	Masses d'algorithmes vers 12 zones chromatiques	
De Laet, Joris	Oplichtend Zwart	
De Laet, Joris	Wigwam	
De Laet, Joris	Blamis	
De Laet, Joris	Dialogo I & II	
De Laet, Joris	Penetrations	
De Laet, Joris	Transparent bodies	
De Laet, Joris	Irreversible, new environment	
De Laet, Joris	Aural silver	
De Laet, Joris	Bruit noir	from Mieux vaut la guerre que la paix en pleine misère.
De Laet, Joris	Soleil silencieux	from Mieux vaut la guerre que la paix en pleine misère.
De Laet, Joris	Pigeon Piégé	from Mieux vaut la guerre que la paix en pleine misère.
De Laet, Joris	Piece de résistance	from Mieux vaut la guerre que la paix en pleine misère.
De Laet, Joris	Catalogue	
De Laet, Joris	Art maniaque	
De Laet, Joris	Belfort 70	Hoog van de toren te blazen
De Laet, Joris	Madmatics	
De Laet, Joris	Delta	
De Laet, Joris	Amour sacré	

MATERIAL	PARTS	DURATION	RECORDING	YEAR
stereo			Logos Foundation	1999
stereo			Logos Foundation	1999
stereo				2000
stereo				2000
stereo				2000
stereo				2003
stereo				2003
stereo			Logos Foundation	2005
stereo				2005
stereo				2007
stereo		5'00"	composer	1978
stereo		5'07"	composer	1983
stereo			composer	1985
stereo		25'00"	composer	2009
stereo	1		composer	1971-1972
stereo	1	12'10"	composer, IPEM	1972
stereo	1	21'20"	composer	1973
stereo	1	16'40"	composer	1973
stereo	1		IPEM	1973
stereo	1		composer	1973
stereo	1		composer	1979
4 channel	1		composer	1983-1984
4 channel	1	11'15"	composer	1987
4 channel	1		composer	1990
4 channel	1		composer, Logos Foundation	1990
4 channel	1	20'00"	composer	1990
audiovisual composition	1		composer	1991
audiovisual composition	1		composer	1991-1992
audiovisual composition	1		composer	1992
stereo	1		composer	1992
4 channel	1		composer	1993
8 channel	1		composer	1995
stereo	1		composer	1996
stereo	1		composer	1997
8 channel	1		composer	1998
4 channel	1		composer	1999
8 channel	1		composer	2000
4 channel	1		composer	2001
8 channel	1		Mnémosyne LDC 2781125	2002
audiovisual composition	1		composer	2003
8 channel	1		composer	2004

NAME	TITLE	SUBTITLE
De Laet, Joris	EON I	
De Laet, Joris	EON II	
De Laet, Joris	Voor piano en pianist	
De Laet, Joris	Quo magnum sol eo magnum rumor	
De Laet, Joris	Je ne suis qu'une ombre passant dans la nuit	
De Laet, Joris	Une guirlande pour Bernard Parmegiani	
De Laet, Joris	Pièce paramétrique aux puces 86	
De Laet, Joris	Au plus de soleil au plus de bruit	
De Laet, Joris	Strings&Bodies	
De Laet, Joris	Macbeth	
De Laet, Joris	Rouw	
De Laet, Joris	Cordes&Corps	
De Laet, Joris	Signs and Wonders	
De Laet, Joris & Karel Goeyvaerts	Antropornitosfeer	
De Laet, Joris & Karel Goeyvaerts	Partiduur 12345	
De Laet, Joris & Karel Goeyvaerts	Meteofonie	
De Laet, Joris & Paul Adriaenssens & Dirk Veulemans	Meditatieve ruimte	
De Meester, Louis	Efficience 53	
De Meester, Louis	Ballade du robot à sa Mie	
De Meester, Louis	Danse	
De Meester, Louis	Tropique du cancer	
De Meester, Louis	Esquisse	
De Meester, Louis	Tropique du capricorne	
De Meester, Louis	Contrast	
De Meester, Louis	1ste Suite électronique	
De Meester, Louis	Galaxies	
De Meester, Louis	Bagatelles	
De Meester, Louis	Dansen op de maan	
De Meester, Louis	Ruimtevaart	
De Meester, Louis	Industrie	
De Meester, Louis	Polyester	
De Meester, Louis	Incantations (version 2)	
De Meester, Louis	Les géants de la montagne - proloog	
De Meester, Louis	Elektron	
De Meester, Louis	Marlborough s'en va'ten guerre	
De Meester, Louis	Ringvariaties voor klavier	
De Meester, Louis	Sieraden der diepten	
De Meester, Louis	Images	Hédonisme, Comparaisons, Déformations, Impulsions,
De Meester, Louis	Nocturne malgache	
De Meester, Louis	Thema en variaties	
De Meester, Louis	Environment	

MATERIAL	PARTS	DURATION	RECORDING	YEAR
audiovisual composition	1		composer	2005
audiovisual composition	1		composer	2005
			composer	2006
stereo	1		composer	2007
4 channel	1		composer	2007
			composer	2007
8 channel	1		composer	2007
6 channel	1		composer	2008
8 channel	1		composer	2008
stereo	1		composer	2009
8 channel			composer	2009
			composer	2009
8 channel	1		composer	2009
8 channel			composer	2010
4 channel, open air concert with sounds of nature		27'00"	composer	1974
2 x 2 channel		29'40"		1974
4 channel, open air concert with sounds of nature		30'00"	composer	1974
4 channel, audiovisual composition	1	60'00"	composer	1989
mono			IPEM	1953
mono			IPEM	1954
mono			IPEM	1954
mono			IPEM	1954
mono			IPEM	1954
mono			IPEM	1954
mono			IPEM	1954
mono			IPEM	1954
mono		7'30"	IPEM	1958
mono		6'00"	IPEM	1959
mono		8'00"	IPEM	1960
mono		10'18"	IPEM	1962
mono		10'00"	IPEM	1962
stereo, 4 channel		6'20"	IPEM	1962
mono		6'00"	IPEM	1963
mono		4'20"	IPEM	1963
mono		4'00"	IPEM	1963
mono		5'00"	IPEM	1963
		20'00"	IPEM	1963
stereo		9'00"	IPEM	1963-1964
mono		8'00"	IPEM	1965
mono		9'00"	IPEM	1965
mono, installation for Luc Peire		6'00"	IPEM	1967

NAME	TITLE	SUBTITLE
De Meester, Louis	Toc-ade	
De Meester, Louis	A la recherche de ...	
De Meester, Louis	Kinderdroom	
De Meester, Louis	Mimodrama	Les heures nocturnes
De Meester, Louis	Psalterion	
& David van de Woestijne		
De Meester, Louis	Ballade	
& David van de Woestijne		
De Meester, Louis	Inventions	
& David van de Woestijne		
De Meester, Louis	Suite	
& David van de Woestijne		
& Renier Van der Velden		
De Meester, Louis	Kabouters in de Vleugel	
& David van de Woestijne		
De Meester, Louis	Trilogie	
& David van de Woestijne		
De Smet, Raoul	Petite musique de vernissage	
De Smet, Raoul	Plusplusplus...	
De Smet, Raoul	Zes studies en een synopsis	Studie I-III, Synopsis, Studie IV-VI
De Smet, Raoul	3 D	Objekt/Verkleining/Vergroting
De Smet, Raoul	Adagio	
De Smet, Raoul	Muinkpark om 5 uur	
De Smet, Raoul	Ipemerij	
De Smet, Raoul	Le vierge, le vivace et le bel aujourd'hui	
De Smet, Raoul	Torso	
De Smet, Raoul	Gam '77	
De Smet, Raoul	Ephémère	
De Smet, Raoul	Kathy's nightmare and other Joys	
De Smet, Raoul	Meditation	
De Smet, Raoul	Fresco	
De Smet, Raoul	Libanon 82	
De Smet, Raoul	Efemeer nr 2	
De Smet, Raoul	Efemeer 1	
De Smet, Raoul	Efemeer 3	
Debras, Louis	Studie I	
Debras, Louis	Studie II	
Debras, Louis	Klankstructuren	
Delouvroy, Jean	Buiten beschouwd	
Delouvroy, Jean	Der Regenbaum	
Gazelle, Didier	Studie I	
Geladi, Paul & Paul Adriaenssens	Lint	
Geloën, Ludo	Seashore 1-3	voor tape
Geloën, Ludo	Tuning voor tape	
Geysen, Frans	Hoor eens 1	
Geysen, Frans	Hoor eens 2	

MATERIAL	PARTS	DURATION	RECORDING	YEAR
mono		3'53"	IPEM	1967-1968
mono		12'00"	IPEM	1968
stereo		28'05"	IPEM	1970
stereo		26'20"	IPEM	1975
mono		7'00"	IPEM	1958
mono		5'00"	IPEM	1958
mono		12'00"	IPEM	1958
mono		9'00"	IPEM	1961
mono		7'00"	IPEM	1961
mono			IPEM	1962
stereo		21'18"		1973
mono		8'42"		1973
stereo	6	28'06"	Alpha LP DBM-N 257	1974
stereo		4'12"		1975
mono		9'30"		1975
stereo		10'20"		1976
stereo		4'28"		1976
stereo		12'29"		1976
mono		7'30"		1977
stereo		5'30"		1977
stereo		38'00"		1978
4 channel		25'40"		1980
stereo		10'10"		1982
stereo		10'30"		1983
stereo		14'00"		1983
stereo		2'30"		1985
stereo		0'38"		1987
stereo		2'44"		1988
mono		7'25"		1964
mono		9'00"		1964
4 channel		6'22"		1964
8 channel	1	8'10"		2002
audiovisual	1	23'28"	composer	2006
mono		4'20"	Alpha / Cultura - 5.066-5	1963
mono	1	9'00"		1979
				2002
				2003
stereo		20'40"		1980
stereo		17'20"		1980

NAME	TITLE	SUBTITLE
Geysen, Frans	In de knoop gerakende lijntjes	
Geysen, Frans	Leuk gevaarte	
Geysen, Frans	Vijfmaal verrast	
Geysen, Frans	Toch temperamentvol	
Geysen, Frans	Plotse versnelling	
Geysen, Frans	Weerkaatsingen	
Geysen, Frans	Voorlopige stadia van een geometriseerde tijd	
Goethals, Lucien	Studie I	Reis 3
Goethals, Lucien	Studie II	Reis 1
Goethals, Lucien	Studie III	Reis 2
Goethals, Lucien	Studie IV	
Goethals, Lucien	Studie met sinus-, driehoeks- & rechthoeksgolven	
Goethals, Lucien	Cadenza uit Diálogos	
Goethals, Lucien	Endomorfie I	Electronic version
Goethals, Lucien	Studie V	
Goethals, Lucien	Riviera	
Goethals, Lucien	Contrapuntos	
Goethals, Lucien	Formosis	
Goethals, Lucien	Studie II	Version 2
Goethals, Lucien	Muziek bij sculpturen van Paul van Gijsegheem	
Goethals, Lucien	Visie	
Goethals, Lucien	Studie VI	
Goethals, Lucien	Klankcompositie	
Goethals, Lucien	Studie VII b	
Goethals, Lucien	Meliorbis	
Goethals, Lucien	Sonoor Portret van Jean Bilquin	
Goethals, Lucien	Muziek voor Roger Raveel	
Goethals, Lucien	Polyfonium	
Goethals, Lucien	Pluriversum	
Goethals, Lucien	Paysages electroacoustiques	
Goethals, Lucien	Polyfonium II '80	
Goethals, Lucien	Selva	
Goethals, Lucien	Synthèse '92	
Goethals, Lucien	Otros momentos	
Goethals, Lucien	Dendrofonies	
Goeyvaerts, Karel	Composition no. 4	with dead tones
Goeyvaerts, Karel	Composition no. 5	with pure tones
Goeyvaerts, Karel	Composition no. 6	with 180 sound objects
Goeyvaerts, Karel	Composition no. 7	with converging and diverging levels
Goeyvaerts, Karel	Nachklänge aus dem Theater I	
Goeyvaerts, Karel	Nachklänge aus dem Theater II	
Goeyvaerts, Karel	Op acht paarden wedden	

MATERIAL	PARTS	DURATION	RECORDING	YEAR
stereo		6'00"		1981
stereo		3'00"		1981
stereo		4'00"		1981
stereo		10'00"		1981
stereo		4'10"		1981
stereo		16'15"		1981
		23'35"		1989
stereo, 4 x 2		5'20"	IPEM	1962
stereo, 4 x 2		4'15"	IPEM	1962
stereo		5'20"	IPEM	1962
		4'00"	IPEM	1962
		2'52"	IPEM	1962
stereo		4'55"	IPEM	1963
		6'45"	IPEM	1964
stereo		6'07"	IPEM	1964
mono		3'05"	IPEM	1966
Several versions: stereo; 1 to 12 magnetophones		10'00"	IPEM	1967
stereo		14'00"	IPEM	1967
		4'20"	IPEM	1968
	1		IPEM	1969
	2	20'00"	IPEM	1969
stereo		11'10"	IPEM	1969
mono		14'00"	IPEM	1970
stereo		8'40"	IPEM	1973
stereo; 2 to 14 magnetophones		14'00"	IPEM	1973
stereo		24'55"	IPEM	1974
		18'00"	IPEM	1974
4 x 2		11'10"	IPEM	1975
stereo		18'40"	IPEM	1978
stereo or 4 channel		20'05"	IPEM	1980
stereo		10'00"	IPEM	1980
		10'45"	IPEM	1986
		7'35"	IPEM	1992
		14'55"	SEM	1998
		11'15"	IPEM	1999
		9'12"	Megadisc MDC 7845	1952
		2'32"	Megadisc MDC 7845	1953
mono		11'30"	Megadisc MDC 7845	1954
		1'29"	Megadisc MDC 7845	1955
stereo		5'00"		1972
stereo		8'50"		1972
8 channel		26'30"	Alp SP 6015	1973

NAME	TITLE	SUBTITLE
Goeyvaerts, Karel	Muziek voor Koninklijk Vuurwerk	
Goeyvaerts, Karel & Joris de Laet	Meteofonie	
Goeyvaerts, Karel & Joris de Laet	Partiduur 12345	
Goeyvaerts, Karel & Joris de Laet	Antropornitosfeer	
Henderickx, Wim & Jorrit Tamminga	Shri yantra	
Jantar, Maja & Esther Venrooy	Red attachement of women	
Jantar, Maja & Esther Venrooy	Signal to noise	
Jantar, Maja & Esther Venrooy	Dumping	
Jantar, Maja & Esther Venrooy	The spiral staircase	
Jantar, Maja & Esther Venrooy	Phill's kitchen	
Jantar, Maja & Esther Venrooy	Vessel	
Jantar, Maja & Esther Venrooy	Blueprint #1	
Knockaert, Yves	Inside - Reduction IV	for tape
Knockaert, Yves	Next piece no. 1	for tape
Lauwers, Kristof	Processing #2	
Lauwers, Kristof	Processing #5	
Lauwers, Kristof	Simbalism	
Lauwers, Kristof	Phass	
Lauwers, Kristof	S.N.T.	
Lauwers, Kristof	145+	
Lauwers, Kristof	Redshift	
Lauwers, Kristof & Laura Maes	Kitch 'N Glitch	
Lievens, Eugeen	Kollao IV	
Loose, Mia & Boudewijn Buckinx	Studie	
Nuyts, Frank	Chile	Una cortadura en el tiempo
Nuyts, Frank	Les angoisses de Cyntiçan	
Pletinckx, Daniel	KHONA	
Prins, Stefan	G.L.I.M.	
Raes, Godfried-Willem	Hermeties	
Raes, Godfried-Willem	Festival.val	
Raes, Godfried-Willem	For synthelog	
Raes, Godfried-Willem	BBDLSP	
Raes, Godfried-Willem	Pope John XXIII	
Raes, Godfried-Willem	Drip Drums	
Raes, Godfried-Willem	Montage	
Raes, Godfried-Willem	Standing waves II	
Raes, Godfried-Willem	Shifts	
Raes, Godfried-Willem	Summer '94	
Raes, Godfried-Willem	Spring '94	
Raes, Godfried-Willem	Beta-pi	
Raes, Godfried-Willem	Counting down from 747	

MATERIAL	PARTS	DURATION	RECORDING	YEAR
		34'50"		1985
4 channel, open air concert with sounds of nature				1974
2 x 2 channel		29'40"		1974
stereo, open air concert with sounds of nature	2	27'00"		1974
8 channel, 7.1 surround		15'41"	composer	2009
stereo		40'00"		2004
stereo		21'00"		2006
4 channel				2006
stereo		35'00"	Entr'acte LP (E50)	2007
		5'00"		2008
8 channel				2008
16 channel, audiovisual installation				2009
		3'51"		1984
		8'15"		1985
stereo	1	8'39"	Logos Public Domain series LPD03	1998
stereo	1	5'55"	Logos Public Domain series LPD03	1999
stereo	1	7'		2000
stereo	1	10'08"		2004
variabel		variabele duur		2006
stereo	1	5'19"		2007
stereo	1	7'50"		2007
stereo	7	37'48"	Cling Film Records	2001
stereo				1978
mono		2'00"		1965
stereo		16'55"	composer	1980
		10'16"	composer	1984
4 channel		11'15"		1983
stereo		12'	composer	2006
mono		20'20"	Logos Foundation	1970
mono		20'20"	Logos Foundation	1971
stereo		35'00"	Logos Foundation	1972
stereo		4'00"	Logos Foundation	1973
stereo		12'00"	Logos Foundation	1976
stereo, 4 channel		12'00"	Logos Foundation	1979
stereo			Logos Foundation	1980
stereo, 4 channel		20'00"	Logos Foundation	1985
stereo		10'00"	Experimental Intermedia XI117, Logos Foundation	1988-1989
stereo			Logos Foundation	1994
stereo		4'34"	Logos Foundation	1994
stereo			Logos Foundation	1994
stereo		12'30"	Logos Foundation	1997

NAME	TITLE	SUBTITLE
Raes, Godfried-Willem	Sincs	
Raes, Godfried-Willem & Moniek Darge	For Grooves	
Darge & Rui Capalez-Gomes		
Raes, Godfried-Willem & Moniek Darge	Junks	
Raes, Godfried-Willem & Moniek Darge	Murphy	
Rosseau, Norbert	Elektronische mis	
Rosseau, Norbert	Ode aan Gent	Impromptu
Sall, Nico	Call me	
Smetryns, Thomas	Fuge in Rot	
Spectra (group)	Spectrum '64	
Swinnen, Peter	Laborintus	for tape
Swinnen, Peter	Zimmerspiel	
Swinnen, Peter	Un face à face	for tape
Van Belle, André	7 Koans traitant de l'incertitude	
Van Belle, André	Anak timur	
Van Belle, André	Himalaya	
Van Belle, André	Etudes en fa	No. 1 et 2
Van Belle, André	Taishan	
Van Belle, André	La nuit verte	
Van Belle, André	Exorcisme	
Van Belle, André	Le Bouddha exile	Boat people, Nocturne, Cauchemar, Sutra, Nostalgie
Van Belle, André	Les Ninôs de Almagno	
Van Belle, André	Paysage nocturne	
Van Belle, André	Playing with space	
Van Belle, André	Chronomorphoses d'Orphée	
Van de Woestijne, David	Variations sur un poème de Faulkner	
Van de Woestijne, David & Louis De Meester	Ballade	
Van de Woestijne, David & Louis De Meester	Suite	
Van De Woestijne, David & Louis De Meester	Inventions	
Van De Woestijne, David & Louis De Meester	Psalterion	
Van de Woestijne, David & Louis De Meester & Renier Van der Velden	Suite	
Van de Woestijne, David & Louis De Meester & Renier Van der Velden	Kabouters in de Vleugel	
Van de Woestijne, David & Louis De Meester	Trilogie	
Van Der Avoort, Aliocha	Tropisme	
Van der Velden, Renier & Louis De Meester & David Van de Woestijne	Suite	mono

MATERIAL	PARTS	DURATION	RECORDING	YEAR
stereo		6'00"	Logos Foundation	1997
stereo		22'00"	Logos Foundation	1975
stereo		6'00"	Logos Foundation	1978
stereo		2'00"	Logos Foundation	1983
stereo		15'30"		1967
stereo		5'40"		1969
				2006
stereo	1	9'00"	composer, Logos Foundation	2003
mono		15'30"	IPEM	1964
		24'00"		1996
				1997
		17'00"	DIS 001	2001
stereo		8'20"		1980
		9'40"		1981
		15'30"		1982
		30'00"		1982
		17'10"		1983
		18'00"		1984
		12'51"		1984
stereo		32'04"		1985
		6'00"		1987
		17'45"		1988
		18'30"		1988
		20'46"		1988
mono		8'00"		1958
mono		5'00"	IPEM	1958
mono		7'30"	IPEM	1958
mono		12'00"	IPEM	1958
mono		7'00"	IPEM	1958
mono		9'00"	IPEM	1961
mono		7'00"	IPEM	1961
			IPEM	1962
		7'33"		2000
	9'00"	IPEM	1961	

NAME	TITLE	SUBTITLE
Van der Velden, Renier & Louis De Meester & David Van de Woestijne	Kabouters in de Vleugel	
Van Opstal	Destructie	
Van San, Herman	Opus electronicum	
Van San, Herman	Opus electronicum mathematicum	
Van Soens	Stochastica 01	
Van Soens	Metamorfose	
Van Weerst, Emmanuel	Sybaritmen	
Van Weerst, Emmanuel	Hygiene	
Van Weerst, Emmanuel	Cybernetica (fragment)	
Van Weerst, Emmanuel	Monochroom	
Van Weerst, Emmanuel	Soulbridge	
Vandenheede, Jan	Cendrier II	
Vandenheede, Jan	Last water	
Vandenheede, Jan	Cendrier I	
Vandenheede, Jan	Psaltérion	
Vandenheede, Jan	A tribute to Africa	The erosion of Eros
Vandenheede, Jan	Stock and sinus	
Vandenheede, Jan	Struktur I	Counterpoint, Color, Tension, Satisfaction for tape
Vanhecke, Bart	Camera Obscura	
Venrooy, Esther	Derbyshire	
Venrooy, Esther	Non-executable floorplan	Hallway
Venrooy, Esther	Non-executable floorplan	Kitchen
Venrooy, Esther	Morty	
Venrooy, Esther	Module 1	
Venrooy, Esther	Module 2	
Venrooy, Esther	The subject of my most passionate apathy	
Venrooy, Esther	Skorpa	
Venrooy, Esther	Non-executable floorplan	Living room
Venrooy, Esther	Gooseneck hollow	
Venrooy, Esther	La noche del terror ciego	
Venrooy, Esther	Jürgenson frequency	
Venrooy, Esther	Faster pussycat! Kill! Kill!	
Venrooy, Esther	Non-executable floorplan	Sauna
Venrooy, Esther	Pod mode	
Venrooy, Esther	Film faktum	
Venrooy, Esther	Red object 3	
Venrooy, Esther	Red object 4	
Venrooy, Esther	To shape volumes, repeat	
Venrooy, Esther & Maja Jantar	Red attachment of women	
Venrooy, Esther & Maja Jantar	Signal to noise	
Venrooy, Esther & Maja Jantar	Dumping	
Venrooy, Esther & Maja Jantar	The spiral staircase	
Venrooy, Esther & Maja Jantar	Phill's kitchen	

MATERIAL	PARTS	DURATION	RECORDING	YEAR
mono		7'00"	IPEM	1961
				1973
				1953-1955
			TRANSIT 2000	1956-1972
stereo		6'20"		1965
stereo		12'00"		1968
mono		5'00"		1963
mono, 4 x 1		6'50"		1964
mono		12'30"		1964
mono		6'20"		1965
mono		8'00"		1977
stereo	1	45"		1984
stereo	1	2'15"		1984
stereo	1	1'		1984
stereo	1	1'		1984
stereo	1	6'50"		1987
stereo	1	7'		1987
stereo, 4 channel	1	8'20"		1990
stereo	1	15'20"		1989
		6'30"	Robo Records robo 002	2003
		1'03"	Robo Records robo 002	2003
		2'15"	Robo Records robo 002	2003
		5'48"	Robo Records robo 002	2003
		4'32"	Robo Records robo 002	2003
		1'30"	Robo Records robo 002	2003
		1'50"	Robo Records robo 002	2003
		0'15"	Robo Records robo 002	2003
		3'23"	Robo Records robo 002	2003
		3'21"	Robo Records robo 002	2003
		0'40"	Robo Records robo 002	2003
		2'26"	Robo Records robo 002	2003
		2'50"	Robo Records robo 002	2003
		3'40"	Robo Records robo 002	2003
		2'15"	Robo Records robo 002	2003
		1'38"	Robo Records robo 002	2003
		2'16"	Robo Records robo 002	2003
		6'13"	Robo Records robo 002	2003
		3'16"	Robo Records robo 002	2003
stereo		40'00"		2004
stereo		21'00"		2006
4 channel				2006
stereo		35'00"	Entr'acte LP (E50)	2007
		5'00"		2008

NAME	TITLE	SUBTITLE
Venrooy, Esther & Maja Jantar	Vessel	
Venrooy, Esther & Maja Jantar	Blueprint #1	
Verbauwhede, Francesca	Canned	
Verstockt, Serge	Interfractions	
Verstockt, Serge	Correlations	
Verstockt, Serge	... Que de ...	
Verstockt, Serge	60 M	
Verstockt, Serge	In de schaduw van de klokken	
Verstuyft, Maurice	Passacaglia	
Veulemans, Dirk & Paul	Meditatieve ruimte	
Adriaenssens & Joris De Laet		
Veulemans, Dirk	Drie aggregatietoestanden	Three states of matter
Veulemans, Dirk	Hypertetraëder	
Veulemans, Dirk	Manna	Study aleatoric parameters
Veulemans, Dirk	12-12-12	Granular study of a 24 hour traffic stream
Veulemans, Dirk	Utopia	
Veulemans, Dirk	Nice Episode	Study
Veulemans, Dirk	Hommelage	
Veulemans, Dirk	Wind	Soundscape study in the Verbeeck organ factory
Veulemans, Dirk	Discontinuum	
Veulemans, Dirk	The Weasel is living on the lofts now	Tape version
Veulemans, Dirk	Batiment	Short study with bat recordings
Veulemans, Dirk	Spreken in tongen	
Veulemans, Dirk	Vijf vocalises	Five vocal studies for Maulwerke
Veulemans, Dirk	De piano is de wolf	
Veulemans, Dirk	Kopstoot van een ram	Remix from own compositions
Veulemans, Dirk	Artikulationsorgane	Commentary on Maulwerke
Vossenaar, Roger	Reflekties	
Vossenaar, Roger	Interferenties	
Vossenaar, Roger	Karree	
Vossenaar, Roger	Stanza	
Vossenaar, Roger	Meeting 1, 2	
Vossenaar, Roger	Elektrosolfège	
Vossenaar, Roger	Sin-Tees	
Vossenaar, Roger	Projekt 3	
Weis, Ward	Zonder voet	
Weis, Ward	Improvisatie voor glas met water	
Ysenboodt	Voedingsbodem met uitwassen	

MATERIAL	PARTS	DURATION	RECORDING	YEAR
8 channel				2008
16 channel, audiovisual installation				2009
			Logos Public Domain LPD003	1996
				1984
				1985
				1991
				2000
SA (Bruges from 3 churches)				2002
stereo				1975
4 channel, audiovisual composition	1	60'00"	composer	1989
4 channel	3	10'	Robo Records robo 007	1990
stereo	1	9'15"	composer	1991
stereo	1	1'37"	composer	1991
4 channel	1	9'37"	composer	1992
4 x 2	1	8'06"	composer	1995
stereo	1	3'04"	composer	1996
8 channel	1	11'	Robo Records (stereo) robo 007	1998
8 channel		6'50"	Robo Records (stereo) robo 007	1999
8 channel	1	10'	Robo Records (stereo) robo 007	2000
8 channel	1	11'18"	Robo Records (stereo) robo 007	2001
stereo	1	1'01"	Robo Records (stereo) robo 007	2001
8 channel	1	10'51"	Krikri CD 2005	2004
4 channel (parts 1,2,4,5), 8 channel (part 3)	5	ca, 15'	composer	2004
8 channel	3	9'	composer	2004
8 channel	1	11'	composer	2007
8 channel	1	9'23"	composer	2008
stereo		12'40"		1972
stereo		21'00"		1973
stereo		21'30"		1973
stereo		15'10"		1973
stereo, 4 channel		21'00"		1973
stereo		17'00"		1973
stereo		6'00"		1975
stereo				1976
stereo		10'35"	IPEM	1983
stereo		10'45"	IPEM	1983
stereo		9'20"		1973

CHRONOLOGICAL INVENTORY OF FLEMISH TAPE MUSIC SINCE 1950

YEAR	NAME	TITLE	SUBTITLE	MATERIAL	PARTS	DURATION	RECORDING
1952	Goeyvaerts, Karel	Composition no. 4	with dead tones			9'12"	Megadisc MDC 7845
1953	De Meester, Louis	Efficiënce 53		mono			IPEM
1953	Goeyvaerts, Karel	Composition no. 5	with pure tones			2'32"	Megadisc MDC 7845
1953-1955	Van San, Herman	Opus electronicum					
1954	De Meester, Louis	Ballade du robot à sa Mie		mono			IPEM
1954	De Meester, Louis	Danse		mono			IPEM
1954	De Meester, Louis	Tropique du cancer		mono			IPEM
1954	De Meester, Louis	Esquisse		mono			IPEM
1954	De Meester, Louis	Tropique du capricorne		mono			IPEM
1954	De Meester, Louis	Contrast		mono			IPEM
1954	De Meester, Louis	1ste Suite électronique		mono			IPEM
1954	De Meester, Louis	Galaxies		mono			IPEM
1954	Goeyvaerts, Karel	Composition no. 6	with 180 sound objects	mono		11'30"	Megadisc MDC 7845
1955	Goeyvaerts, Karel	Composition no. 7	with converging and diverging levels			1'29"	Megadisc MDC 7845
1956-1972	Van San, Herman	Opus electronicum mathematicum					TRANSIT 2000
1958	Bruyndonckx, Jan	Rails		mono		7'00"	
1958	De Meester, Louis	Bagatelles		mono		7'30"	IPEM
1958	De Meester, Louis & David van de Woestijne	Psalterion		mono		7'00"	IPEM
1958	De Meester, Louis & David van de Woestijne	Ballade		mono		5'00"	IPEM
1958	De Meester, Louis & David van de Woestijne	Inventions		mono		12'00"	IPEM
1958	Van de Woestijne, David	Variations sur un poème de Faulkner		mono		8'00"	
1959	Bruyndonckx, Jan	Nocturne voor twee		mono		7'00"	
1959	De Meester, Louis	Dansen op de maan		mono		6'00"	IPEM
1960	Bruyndonckx, Jan	Black magic		mono		2'20"	
1960	Bruyndonckx, Jan	Variaties voor voetstappen en gitaar		mono		4'00"	
1960	De Meester, Louis	Ruimtevaart		mono		8'00"	IPEM
1961	De Meester, Louis & David van de Woestijne	Suite		mono		7'30"	IPEM
1961	Bruyndonckx, Jan	Pater noster		mono		3'42"	
1961	Bruyndonckx, Jan	Verloren paradijs		mono		6'00"	
1961	De Meester, Louis & David van de Woestijne	Kabouters in de Vleugel		mono		7'00"	IPEM
1961	Van der Velden, Renier & Louis De Meester & David Van de Woestijne	Suite		mono		9'00"	IPEM
1962	De Meester, Louis	Industrie		mono		10'18"	IPEM
1962	De Meester, Louis	Polyester		mono		10'00"	IPEM
1962	De Meester, Louis & David van de Woestijne	Trilogie		mono			IPEM
1962	Goethals, Lucien	Studie I	Reis 3	stereo, 4 x 2		5'20"	IPEM
1962	Goethals, Lucien	Studie II	Reis 1	stereo, 4 x 2		4'15"	IPEM
1962	Goethals, Lucien	Studie III	Reis 2	stereo		5'20"	IPEM
1962	Goethals, Lucien	Studie IV				4'00"	IPEM
1962	Goethals, Lucien	Studie met sinus-, driehoeks- & rechthoeksgolven				2'52"	IPEM
1963	Bruyndonckx, Jan	7 poèmes de Paul de Vree	(fonetische bewerking)	mono		4'00"	
1963	Buckinx, Boudewijn	Nachtvogel				8'00"	
1963	Buckinx, Boudewijn	Phlub				4'00"	

YEAR	NAME	TITLE	SUBTITLE	MATERIAL	PARTS	DURATION	RECORDING
1963	De Meester, Louis	Les géants de la montagne - proloog		mono		6'00"	IPEM
1963	De Meester, Louis	Elektron		mono		4'20"	IPEM
1963	De Meester, Louis	Marlborough s'en va'ten guerre		mono		4'00"	IPEM
1963	De Meester, Louis	Ringvariaties voor klavier		mono		5'00"	IPEM
1963	De Meester, Louis	Sieraden der diepten				20'00"	IPEM
1963	Gazelle, Didier	Studie I		mono		4'20"	Alpha / Cultura - 5.066-5
1963	Goethals, Lucien	Cadenza uit Diálogos		stereo		4'55"	IPEM
1963	Van Weerst, Emmanuel	Sybaritmen		mono		5'00"	
1963-1964	De Meester, Louis	Images	Hédonisme, Comparaisons, Déformations, Impulsions,	stereo		9'00"	IPEM
1964	Bruyndonckx, Jan	Essentieel		mono		18'00"	
1964	Bruyndonckx, Jan	Vertigo gli		mono		1'51"	
1964	Bruyndonckx, Jan	Kleine Caroli		mono		0'54"	
1964	Buckinx, Boudewijn	Symposion				6'00"	
1964	Buckinx, Boudewijn	Improvizaties				15'00"	
1964	Buckinx, Boudewijn	Figuren A			1	9'40"	
1964	Buckinx, Boudewijn	Figuren B				7'50"	
1964	Buckinx, Boudewijn	Konkrete Studie II				4'30"	
1964	Buckinx, Boudewijn	Revolutie				3'20"	
1964	Buckinx, Boudewijn	His Master's Voice				10'05"	
1964	Debras, Louis	Studie I		mono		7'25"	
1964	Debras, Louis	Studie II		mono		9'00"	
1964	Debras, Louis	Klankstructuren		4 channel		6'22"	
1964	Goethals, Lucien	Endomorfie I	Electronic version			6'45"	IPEM
1964	Goethals, Lucien	Studie V		stereo		6'07"	IPEM
1964	Spectra (group)	Spectrum '64		mono		15'30"	IPEM
1964	Van Weerst, Emmanuel	Hygiene		mono, 4 x 1		6'50"	
1964	Van Weerst, Emmanuel	Cybernetica (fragment)		mono		12'30"	
1964	De Meester, Louis	Incantations (version 2)		stereo, 4 channel		6'20"	IPEM
1965	Beyst, Etienne	Spasis		mono	1	16'20"	
1965	Beyst, Etienne	Ekresis		mono	1	4'37"	
1965	Buckinx, Boudewijn	Stuk				9'30"	
1965	Buckinx, Boudewijn	Paszoep(sss)				10'10"	
1965	Buckinx, Boudewijn	Studie		mono	1	2'00"	
1965	Buckinx, Boudewijn & Mia Loose	Studie				5'00"	IPEM
1965	De Meester, Louis	Nocturne malgache		mono		8'00"	IPEM
1965	De Meester, Louis	Thema en variaties		mono		9'00"	IPEM
1965	Van Soens	Stochastica 01		stereo		6'20"	
1965	Van Weerst, Emmanuel	Monochroom		mono		6'20"	
1966	Bruyndonckx, Jan	Een Roos a Rose		mono		0'40"	
1966	Buckinx, Boudewijn	Ouverture		mono	1	9'15"	IPEM
1966	Goethals, Lucien	Riviera		mono		3'05"	IPEM
1967	Aertgeerts	Drie fabels		mono		9'50"	
1967	Beyst, Etienne	Aleph		mono	1	14'00"	
1967	De Meester, Louis	Environment		mono, installation for Luc Peire		6'00"	IPEM

YEAR	NAME	TITLE	SUBTITLE	MATERIAL	PARTS	DURATION	RECORDING
1967	Goethals, Lucien	Contrapuntos		Several versions: stereo; 1 to 12 magnetophones		10'00"	IPEM
1967	Goethals, Lucien	Formosis		stereo		14'00"	IPEM
1967	Rosseau, Norbert	Elektronische mis		stereo		15'30"	
1967-1968	De Meester, Louis	Toc-ade		mono		3'53"	IPEM
1968	Arras, Thomas	A. B. C.				8'33"	Composers' Voice CV 7903
1968	De Meester, Louis	A la recherche de ...		mono		12'00"	IPEM
1968	Goethals, Lucien	Studie II	Version 2			4'20"	IPEM
1968	Van Soens	Metamorfose		stereo		12'00"	
1969	Bekaert, Jacques	The day after				7'08"	
1969	Goethals, Lucien	Muziek bij sculpturen van Paul van Gijsegem			1		IPEM
1969	Goethals, Lucien	Visie			2	20'00"	IPEM
1969	Goethals, Lucien	Studie VI		stereo		11'10"	IPEM
1969	Rosseau, Norbert	Ode aan Gent	Impromptu	stereo		5'40"	
1970	De Meester, Louis	Kinderdroom		stereo		28'05"	IPEM
1970	Goethals, Lucien	Klankcompositie		mono		14'00"	IPEM
1970	Raes, Godfried-Willem	Hermeties		mono		20'20"	Logos Foundation
1971	Raes, Godfried-Willem	Festival.val		mono		20'20"	Logos Foundation
1971-1972	De Laet, Joris	Constructie van een metalen cylinder		stereo	1		composer
1972	Beyls, Peter	Studie I		stereo	2	24'00"	IPEM
1972	De Laet, Joris	Relief		stereo	1	12'10"	composer, IPEM
1972	Goeyvaerts, Karel	Nachklänge aus dem Theater I		stereo		5'00"	
1972	Goeyvaerts, Karel	Nachklänge aus dem Theater II		stereo		8'50"	
1972	Raes, Godfried-Willem	For synthelog		stereo		35'00"	Logos Foundation
1972	Vossenaar, Roger	Reflekties		stereo		12'40"	
1973	Beyls, Peter	Alea lacta est		stereo	2		IPEM
1973	Beyls, Peter	Ruimtelijk I		stereo	2	14'14"	IPEM
1973	Beyls, Peter	Ruimtelijk II		stereo	2	24'00"	IPEM
1973	De Laet, Joris	We eindigen met punt-komma		stereo	1	21'20"	composer
1973	De Laet, Joris	Swjjoobaa		stereo	1	16'40"	composer
1973	De Laet, Joris	Première		stereo	1		IPEM
1973	De Laet, Joris	Scheldedichters met natte voeten		stereo	1		composer
1973	De Smet, Raoul	Petite musique de vernissage		stereo		21'18"	
1973	De Smet, Raoul	Plusplusplus...		mono		8'42"	
1973	Goethals, Lucien	Studie VII b		stereo		8'40"	IPEM
1973	Goethals, Lucien	Meliorbis		stereo; 2 to 14 magnetophones		14'00"	IPEM
1973	Goeyvaerts, Karel	Op acht paarden wedden		8 channel		26'30"	Alp SP 6015
1973	Raes, Godfried-Willem	BBDLSP		stereo		4'00"	Logos Foundation
1973	Van Opstal	Destructie					
1973	Vossenaar, Roger	Interferenties		stereo		21'00"	
1973	Vossenaar, Roger	Karree		stereo		21'30"	
1973	Vossenaar, Roger	Stanza		stereo		15'10"	
1973	Vossenaar, Roger	Meeting 1, 2		stereo, 4 channel		21'00"	
1973	Vossenaar, Roger	Elektrosolfège		stereo		17'00"	
1973	Ysenboodt	Voedingsbodem met uitwassen		stereo		9'20"	

YEAR	NAME	TITLE	SUBTITLE	MATERIAL	PARTS	DURATION	RECORDING
1974	Beyls, Peter	Prints		stereo	2	9'25"	IPEM
1974	Beyls, Peter	Syrtis		stereo	2	21'20"	IPEM
1974	Beyls, Peter	Slow motion		stereo		8'40"	IPEM
1974	Beyls, Peter	Similis		4 channel	4	56'00"	IPEM
1974	Beyst, Etienne	Aquirro		stereo	1	17'00"	
1974	Beyst, Etienne	Empedokles' dood		mono	1	52'00"	
1974	De Laet, Joris & Karel Goeyvaerts	Antropornitosfeer		4 channel, open air concert with sounds of nature		27'00"	composer
1974	Goeyvaerts, Karel & Joris de Laet	Partiduur 12345		2 x 2 channel		29'40"	
1974	De Laet, Joris & Karel Goeyvaerts	Meteofonie		4 channel, open air concert with sounds of nature		30'00"	composer
1974	De Smet, Raoul	Zes studies en een synopsis	Studie I-III, Synopsis, Studie IV-VI	stereo	6	28'06"	Alpha LP DBM-N 257
1974	Goethals, Lucien	Sonoor Portret van Jean Bilquin		stereo		24'55"	IPEM
1974	Goethals, Lucien	Muziek voor Roger Raveel				18'00"	IPEM
1975	Beyls, Peter	It always takes a short time					
1975	Beyls, Peter	SEA/AIR					
1975	Darge, Moniek & Godfried-Willem Raes & Rui Capalez-Gomes	For Grooves		stereo		22'00"	Logos Foundation
1975	De Meester, Louis	Mimodrama	Les heures nocturnes	stereo		26'20"	IPEM
1975	De Smet, Raoul	3 D	Objekt/Verkleining/Vergroting	stereo		4'12"	
1975	De Smet, Raoul	Adagio		mono		9'30"	
1975	Goethals, Lucien	Polyfonium		4 x 2		11'10"	IPEM
1975	Verstuyft, Maurice	Passacaglia		stereo			
1975	Vossenaar, Roger	Sin-Tees		stereo		6'00"	
1976	Aertgeerts	Didactische montages		stereo			
1976	Beyls, Peter	evolution and human ecology tape					
1976	De Smet, Raoul	Muinkpark om 5 uur		stereo		10'20"	
1976	De Smet, Raoul	Ipemerij		stereo		4'28"	
1976	De Smet, Raoul	Le vierge, le vivace et le bel aujourd'hui		stereo		12'29"	
1976	Raes, Godfried-Willem	Pope John XXIII		stereo		12'00"	Logos Foundation
1976	Vossenaar, Roger	Projekt 3		stereo			
1977	Beyls, Peter	Rothko		stereo	2	18'00"	IPEM
1977	De Smet, Raoul	Torso		mono		7'30"	
1977	De Smet, Raoul	Gam '77		stereo		5'30"	
1977	Van Weerst, Emmanuel	Soulbridge		mono		8'00"	
1978	Darge, Moniek & Godfried-Willem Raes	Junks		stereo		6'00"	Logos Foundation
1978	De Decker, George	Modulatude I		stereo		5'00"	composer
1978	De Smet, Raoul	Ephémère		stereo		38'00"	
1978	Goethals, Lucien	Pluriversum		stereo		18'40"	IPEM
1978	Lievens, Eugeen	Kollao IV		stereo			
1979	Adriaenssens, Paul	A short walk with Karl F.		stereo, also for 5 synthesizers	1	5'00"	
1979	Adriaenssens, Paul	Long ago there was something in me, but now that thing is gone		4 channel	1	8'00"	
1979	Adriaenssens, Paul & Paul Geladi & Gerd Dehu	Lint		mono	1	9'00"	
1979	Beyls, Peter	The Headless Horseman					

YEAR	NAME	TITLE	SUBTITLE	MATERIAL	PARTS	DURATION	RECORDING
1979	De Laet, Joris	Cakewalk sonate		stereo	1		composer
1979	Raes, Godfried-Willem	Drip Drums		stereo, 4 channel		12'00"	Logos Foundation
1980	Adriaenssens, Paul	My old radio goes beserk		stereo	1	9'00"	
1980	Beyls, Peter	Asleep at the switch		stereo	2		IPEM
1980	Beyls, Peter	Painted Words					
1980	Beyls, Peter	Patterns					
1980	Beyls, Peter	The Hollow Man					
1980	Blondia, Rudy	Hybrid experiment for Bourges		stereo	1	18'56"	
1980	De Smet, Raoul	Kathy's nightmare and other Joys		4 channel		25'40"	
1980	Geysen, Frans	Hoor eens 1		stereo		20'40"	
1980	Geysen, Frans	Hoor eens 2		stereo		17'20"	
1980	Goethals, Lucien	Paysages electroacoustiques		stereo or 4 channel		20'05"	IPEM
1980	Goethals, Lucien	Polyfonium II '80		stereo		10'00"	IPEM
1980	Nuyts, Frank	Chile	Una cortadura en el tiempo	stereo		16'55"	composer
1980	Raes, Godfried-Willem	Montage		stereo			Logos Foundation
1980	Van Belle, André	7 Koans traitant de l'incertitude		stereo		8'20"	
1981	Adriaenssens, Paul	Three easy ways to slice an egg		stereo	3	6'00"	
1981	Adriaenssens, Paul	Pseudanisotropie		stereo	1	120'00"	
1981	Geysen, Frans	In de knoop gerakende lijntjes		stereo		6'00"	
1981	Geysen, Frans	Leuk gevaarte		stereo		3'00"	
1981	Geysen, Frans	Vijfmaal verrast		stereo		4'00"	
1981	Geysen, Frans	Toch temperamentvol		stereo		10'00"	
1981	Geysen, Frans	Plotse versnelling		stereo		4'10"	
1981	Geysen, Frans	Weerkaatsingen		stereo		16'15"	
1981	Van Belle, André	Anak timur				9'40"	
1982	De Smet, Raoul	Meditation		stereo		10'10"	
1982	Van Belle, André	Himalaya				15'30"	
1982	Van Belle, André	Etudes en fa	No. 1 et 2			30'00"	
1983	Adriaenssens, Paul	Strange Attractors		stereo, also synthesizer version	1	12'00"	
1983	Adriaenssens, Paul	Adventures of the wandering pacemaker		stereo	1	8'00"	
1983	Darge, Moniek & Godfried-Willem Raes	Murphy		stereo		2'00"	Logos Foundation
1983	De Decker, George	Hakanai		stereo		5'07"	composer
1983	De Smet, Raoul	Fresco		stereo		10'30"	
1983	De Smet, Raoul	Libanon 82		stereo		14'00"	
1983	Pletinckx, Daniel	KHONA		4 channel		11'15"	
1983	Van Belle, André	Taishan				17'10"	
1983	Weis, Ward	Zonder voet		stereo		10'35"	IPEM
1983	Weis, Ward	Improvisatie voor glas met water		stereo		10'45"	IPEM
1983-1984	De Laet, Joris	Khene-dimensioned		4 channel	1		composer
1984	Beyls, Peter	A quiet disturbance		stereo		14'30"	IPEM
1984	Knockaert, Yves	Inside - Reduction IV	for tape			3'51"	
1984	Nuyts, Frank	Les angoisses de Cyntiçan				10'16"	composer
1984	Van Belle, André	La nuit verte				18'00"	
1984	Van Belle, André	Exorcisme				12'51"	
1984	Vandenheede, Jan	Cendrier II		stereo	1	45"	

YEAR	NAME	TITLE	SUBTITLE	MATERIAL	PARTS	DURATION	RECORDING
1984	Vandenheede, Jan	Last water		stereo	1	2'15"	
1984	Vandenheede, Jan	Cendrier I		stereo	1	1'	
1984	Vandenheede, Jan	Psaltérion		stereo	1	1'	
1984	Verstockt, Serge	Interfractions					
1985	Adriaenssens, Paul	Levels II		stereo, also for flute and 2 tapes	1	12'00"	
1985	Adriaenssens, Paul	Sturzgeburt		4 channel	1	3'00"	
1985	De Decker, George	ETT LIV		stereo			composer
1985	De Smet, Raoul	Efemeer nr 2		stereo		2'30"	
1985	Goeyvaerts, Karel	Muziek voor Koninklijk Vuurwerk				34'50"	
1985	Knockaert, Yves	Next piece no. 1	for tape			8'15"	
1985	Raes, Godfried-Willem	Standing waves II		stereo, 4 channel		20'00"	Logos Foundation
1985	Van Belle, André	Le Bouddha exilé	Boat people, Nocturne, Cauchemar, Sutra, Nostalgie	stereo		32'04"	
1985	Verstockt, Serge	Correlations					
1986	Beyls, Peter	The Life and Times of Oscar					
1986	Beyls, Peter	Arena					
1986	Goethals, Lucien	Selva				10'45"	IPEM
1987	Beyls, Peter	Heartbeat					
1987	De Laet, Joris	Masses d'algorithmes vers 12 zones chromat.		4 channel	1	11'15"	composer
1987	De Smet, Raoul	Efemeer 1		stereo		0'38"	
1987	Van Belle, André	Les Ninôts de Almagno				6'00"	
1987	Vandenheede, Jan	A tribute to Africa	The erosion of Eros	stereo	1	6'50"	
1987	Vandenheede, Jan	Stock and sinus		stereo	1	7'	
1988	Adriaenssens, Paul	Current Affairs		stereo	1	8'30"	
1988	Adriaenssens, Paul & Joris De Laet & Dirk Veulemans	Meditatieve ruimte		4 channel, audiovisual composition	1	60'00"	
1988	Bogaerts, Mark	Comp Sax				12'04"	
1988	Bogaerts, Mark	Comp Guitare				12'04"	
1988	De Smet, Raoul	Efemeer 3		stereo		2'44"	
1988	Van Belle, André	Paysage nocturne				17'45"	
1988	Van Belle, André	Playing with space				18'30"	
1988	Van Belle, André	Chronomorphoses d'Orphée				20'46"	
1988-1989	Raes, Godfried-Willem	Shifts		stereo		10'00"	Experimental Intermedia XI117, Logos Foundation
1989	Adriaenssens, Paul	In cirkels		stereo, audiovisual installation	1	16'00"	
1989	Adriaenssens, Paul	Watertoren		4 channel, audiovisual installation	1	20'00"	
1989	Beyls, Peter	Louis					
1989	Brewaeyts, Luc	Metallofonie		stereo		30'00"	composer
1989	Geysen, Frans	Voorlopige stadia van een gegeometriseerde tijd				23'35"	
1989	Vanhecke, Bart	Camera Obscura	for tape	stereo	1	15'20"	
1990	Adriaenssens, Paul	Friction		stereo	1	9'30"	
1990	Adriaenssens, Paul	Camera obscura	concert version	4 channel	1	8'30"	
1990	Adriaenssens, Paul	Kathedraal		12 channel, audiovis. comp.	5	24'00"	

YEAR	NAME	TITLE	SUBTITLE	MATERIAL	PARTS	DURATION	RECORDING
1990	Adriaenssens, Paul	Camera obscura		4 channel, installation	1	90'00"	
1990	De Laet, Joris	Oplichtend Zwart		4 channel	1		composer
1990	De Laet, Joris	Wigwam		4 channel	1		composer, Logos Foundation
1990	De Laet, Joris	Blamis		4 channel	1	20'00"	composer
1990	Vandenheede, Jan	Struktur I	Counterpoint, Color, Tension, Satisfaction	4 channel stereo,	1	8'20"	
1990	Veulemans, Dirk	Drie aggregatietoestanden	Three states of matter	4 channel	3	10'	Robo Records robo 007
1991	Adriaenssens, Paul	Tunnel vision I	concert version	stereo	1	12'00"	
1991	Beyls, Peter	China Piece					
1991	Budai, Erika	The secret garden					
1991	De Laet, Joris	Dialoog I & II		audiovisual composition	1		composer
1991	Verstockt, Serge	... Que de ...					
1991	Veulemans, Dirk	Hypertetraëder		stereo	1	9'15"	composer
1991	Veulemans, Dirk	Manna	Study aleatoric parameters	stereo	1	1'37"	composer
1991-1992	De Laet, Joris	Penetrations		audiovisual composition	1		composer
1992	Adriaenssens, Paul	Centrifuga		stereo, audiovis; compo.	1	7'30"	
1992	Adriaenssens, Paul	Whatever comes next		installation		1	12'00"
1992	Budai, Erika	Space					
1992	Budai, Erika	Melancholic dream					
1992	De Laet, Joris	Transparent bodies		audiovisual composition	1		composer
1992	De Laet, Joris	Irreversible, new environment		stereo	1		composer
1992	Goethals, Lucien	Synthèse '92				7'35"	IPEM
1992	Veulemans, Dirk	12-12-12	Granular study of a 24 hour traffic stream	4 channel	1	9'37"	composer
1993	Adriaenssens, Paul	4x4		stereo, installation		4	16'00"
1993	De Laet, Joris	Aural silver		4 channel	1		composer
1994	Raes, Godfried-Willem	Summer '94		stereo			Logos Foundation
1994	Raes, Godfried-Willem	Spring '94		stereo		4'34"	Logos Foundation
1994	Raes, Godfried-Willem	Beta-pi		stereo			Logos Foundation
1995	De Laet, Joris	Bruit noir	from Mieux vaut la guerre que la paix en pleine misère.	8 channel	1		composer
1995	Veulemans, Dirk	Utopia		4 x 2	1	8'06"	composer
1996	De Laet, Joris	Soleil silencieux	from Mieux vaut la guerre que la paix en pleine misère.	stereo	1		composer
1996	Swinnen, Peter	Laborintus				24'00"	
1996	Verbauwhede, Francesca	Canned					Logos Public Domain LPD003
1996	Veulemans, Dirk	Nice Episode	Study	stereo	1	3'04"	composer
1996-2000	Beyls, Peter	Oscar					
1997	Brackx, Joachim	NetMusic		stereo		1'00"	composer
1997	De Laet, Joris	Pigeon Piègé	from Mieux vaut la guerre que la paix en pleine misère.	stereo	1		composer
1997	Raes, Godfried-Willem	Counting down from 747		stereo		12'30"	Logos Foundation
1997	Raes, Godfried-Willem	Sincs		stereo		6'00"	Logos Foundation
1997	Swinnen, Peter	Zimmerspiel					
1998	Adriaenssens, Paul	Sleep tight, sweet reptile		stereo	1	12'00"	
1998	Brackx, Joachim	Shifting landscapes II		stereo		15'00"	composer

YEAR	NAME	TITLE	SUBTITLE	MATERIAL	PARTS	DURATION	RECORDING
1998	Darge, Moniek	Self-Portrait in Sound: Harpje		multilayered soundscape		0'30"	Logos Foundation
1998	De Laet, Joris	Piece de résistance	from Mieux vaut la guerre que la paix en pleine misère.	8 channel	1		composer
1998	Goethals, Lucien	Otros momentos				14'55"	SEM
1998	Lauwers, Kristof	Processing #2		stereo	1	8'39"	Logos Public Domain series LPD03
1998	Veulemans, Dirk	Hommelage		8 channel	1	11'	Robo Records (stereo) robo 007
1999	De Baerdemacker, Kris	Xplosiv		stereo			Logos Foundation
1999	De Baerdemacker, Kris	Splash		stereo			Logos Foundation
1999	De Laet, Joris	Catalogue		4 channel	1		composer
1999	Goethals, Lucien	Dendrofones				11'15"	IPEM
1999	Lauwers, Kristof	Processing #5		stereo	1	5'55"	Logos Public Domain series LPD03
1999	Veulemans, Dirk	Wind	Soundscape study in the Verbeeck organ factory	8 channel		6'50"	Robo Records (stereo) robo 007
1999-2000	Adriaenssens, Paul	"A"'s for "Abstract"		8 channel, audiovis. comp.	1	11'00"	
1999-2000	Bradt, Sebastian	IN CARNEM CATULAE		stereo		5'17"	composer
1999-2005	Adriaenssens, Paul	Among the machines	electronic suite	stereo	6	30'00"	
2000	De Baerdemacker, Kris	Radiomix		stereo			
2000	De Baerdemacker, Kris	Scratch		stereo			
2000	De Baerdemacker, Kris	Monotone		stereo			
2000	De Laet, Joris	Art maniaque		8 channel	1		composer
2000	Lauwers, Kristof	Simbalism		stereo	1	7'	
2000	Van Der Avoort, Aliocha	Tropisme				7'33"	
2000	Verstockt, Serge	60 M					
2000	Veulemans, Dirk	Discontinuum		8 channel	1	10'	Robo Records (stereo) robo 007
2001	Adriaenssens, Paul	Si te ciega la sirena, escucha el faro	(for Lucien Goethals)	4 channel		1'00"	
2001	Brackx, Joachim	Music for HNE 2001		stereo		6'00"	composer
2001	De Laet, Joris	Belfort 70	Hoog van de toren te blazen	4 channel	1		composer
2001	Lauwers, Kristof & Laura Maes	Kitch 'N Glitch		stereo	7	37'48"	Cling Film Records
2001	Swinnen, Peter	Un face à face	for tape			17'00"	DIS 001
2001	Veulemans, Dirk	The Weasel is living on the lofts now	Tape version	8 channel	1	11'18"	Robo Records (stereo) robo 007
2001	Veulemans, Dirk	Batiment	Short study with bat recordings	stereo	1	1'01"	Robo Records (stereo) robo 007
2002	Brackx, Joachim	Music for Ontluiken		stereo		30'00"	composer
2002	Brackx, Joachim	Music for Klara in het Paleis		stereo		15'00"	composer
2002	Buchowiec, Barbara	Chou		stereo			Logos Foundation
2002	De Laet, Joris	Madmatics		8 channel	1		Mnémosyne LDC 2781125
2002	Delouvroy, Jean	Buiten beschouwd		8 channel	1	8'10"	
2002	Geloen, Ludo	Seashore 1-3	voor tape				
2002	Verstockt, Serge	In de schaduw van de klokken		SA (Bruges from 3 churches)			
2003	Adriaenssens, Paul	Défi lunaire #1	Mare tranquillitatis	stereo	1	8'00"	

YEAR	NAME	TITLE	SUBTITLE	MATERIAL	PARTS	DURATION	RECORDING
2003	De Baerdemacker, Kris	Monotone #2		stereo			
2003	De Baerdemacker, Kris	Monotone #3		stereo			
2003	De Laet, Joris	Delta		audiovisual composition	1		composer
2003	Geloën, Ludo	Tuning voor tape					
2003	Smetryns, Thomas	Fuge in Rot		stereo	1	9'00"	composer, Logos Foundation
2003	Venrooy, Esther	Derbyshire				6'30"	Robo Records robo 002
2003	Venrooy, Esther	Non-executable floorplan	Hallway			1'03"	Robo Records robo 002
2003	Venrooy, Esther	Non-executable floorplan	Kitchen			2'15"	Robo Records robo 002
2003	Venrooy, Esther	Morty				5'48"	Robo Records robo 002
2003	Venrooy, Esther	Module 1				4'32"	Robo Records robo 002
2003	Venrooy, Esther	Module 2				1'30"	Robo Records robo 002
2003	Venrooy, Esther	The subject of my most passionate apathy				1'50"	Robo Records robo 002
2003	Venrooy, Esther	Skorpa				0'15"	Robo Records robo 002
2003	Venrooy, Esther	Non-executable floorplan	Living room			3'23"	Robo Records robo 002
2003	Venrooy, Esther	Gooseneck hollow				3'21"	Robo Records robo 002
2003	Venrooy, Esther	La noche del terror ciego				0'40"	Robo Records robo 002
2003	Venrooy, Esther	Jürgenson frequency				2'26"	Robo Records robo 002
2003	Venrooy, Esther	Faster pussycat! Kill! Kill!				2'50"	Robo Records robo 002
2003	Venrooy, Esther	Non-executable floorplan	Sauna			3'40"	Robo Records robo 002
2003	Venrooy, Esther	Pod mode				2'15"	Robo Records robo 002
2003	Venrooy, Esther	Film faktum				1'38"	Robo Records robo 002
2003	Venrooy, Esther	Red object 3				2'16"	Robo Records robo 002
2003	Venrooy, Esther	Red object 4				6'13"	Robo Records robo 002
2003	Venrooy, Esther	To shape volumes, repeat				3'16"	Robo Records robo 002
2004	De Laet, Joris	Amour sacré		8 channel	1		composer
2004	Lauwers, Kristof	Phass		stereo	1	10'08"	
2004	Jantar, Maja & Esther Venrooy	Red attachment of women		stereo		40'00"	
2004	Veulemans, Dirk	Spreken in tongen		8 channel	1	10'51"	Krikri CD 2005
2004	Veulemans, Dirk	Vijf vocalises	Five vocal studies for Maulwerke	4 channel (parts 1,2,4,5), 8 channel (part 3)		ca, 15'	composer
2004	Veulemans, Dirk	De piano is de wolf		8 channel	3	9'	composer
2005	Adriaenssens, Paul	Beet root		stereo	1	18'00"	
2005	Brackx, Joachim	Music for vers		stereo		1'00"	composer
2005	Brackx, Joachim	Music for little bits		5 channel, also stereo vers.	12'00"		composer
2005	De Baerdemacker, Kris	Sonic fantasy on Carceri d'Invenzione		stereo			Logos Foundation
2005	De Baerdemacker, Kris	Scattered sounds		stereo			
2005	De Laet, Joris	EON I		audiovisual composition	1		composer
2005	De Laet, Joris	EON II		audiovisual composition	1		composer
2006	Adriaenssens, Paul	Mizu no oto	after Basho	stereo	1	6'00"	
2006	Brackx, Joachim	Music for 4 people 2 days		stereo		15'00"	composer
2006	Bradt, Sebastian	MONDO		stereo		4'30"	composer
2006	Bradt, Sebastian	Rouge - Blanc - Dorée,...et un p'tit peu Noir...		stereo		5'30"	composer
2006	Buchowiec, Barbara & Moniek Darge	Magnesia		stereo			Logos Foundation
2006	De Laet, Joris	Voor piano en pianist					composer
2006	Delouvroy, Jean	Der Regenbaum		audiovisual	1	23'28"	composer
2006	Lauwers, Kristof	S.N.T.		variabel		variab. duur	

YEAR	NAME	TITLE	SUBTITLE	MATERIAL	PARTS	DURATION	RECORDING
2006	Prins, Stefan	G.L.I.M.		stereo		12'	composer
2006	Sall, Nico	Call me					
2006	Jantar, Maja & Esther Venrooy	Signal to noise		stereo		21'00"	
2006	Jantar, Maja & Esther Venrooy	Dumping		4 channel			
2007	Adriaenssens, Paul	Ringtone for Ilse	(extended version)	stereo	1	2'30"	
2007	Adriaenssens, Paul	3x3	after Melencolia	stereo	1	9'00"	
2007	Adriaenssens, Paul	Melencolia	after Dürer	stereo	1	6'00"	
2007	Bradt, Sebastian	Era Zero		stereo		7'20"	composer
2007	Buchowiec, Barbara	Acretian memories		5.1 surround			Logos Foundation
2007	De Baerdemacker, Kris	Hamix		stereo			
2007	De Laet, Joris	Quo magnum sol eo magnum rumor		stereo	1		composer
2007	De Laet, Joris	Je ne suis qu'une ombre passant dans la nuit		4 channel	1		composer
2007	De Laet, Joris	Une guirlande pour Bernard Parmegiani		8 channel	1		composer
2007	Lauwers, Kristof	145+		stereo	1	5'19"	
2007	Lauwers, Kristof	Redshift		stereo	1	7'50"	
2007	Jantar, Maja & Esther Venrooy	The spiral staircase		stereo		35'00"	Entr'acte LP (E50)
2007	Veulemans, Dirk	Kopstoot van een ram	Remix from own compositions	8 channel	1	11'	composer
2008	Adriaenssens, Paul	Throwing stones ru?		stereo	1	6'00"	
2008	De Laet, Joris	Pièce paramétrique aux puces 86		6 channel	1		composer
2008	De Laet, Joris	Au plus de soleil au plus de bruit		8 channel	1		composer
2008	Jantar, Maja & Esther Venrooy	Phill's kitchen				5'00"	
2008	Jantar, Maja & Esther Venrooy	Vessel		8 channel			
2008	Veulemans, Dirk	Artikulationsorgane	Commentary on Maulwerke	8 channel	1	9'23"	composer
2008-2009	Bradt, Sebastian	.RUN.FOOL.+		4 channel		7'25"	composer
2009	Adriaenssens, Paul	Tricycle	A study in phase shift, modified repetition/ pseudorepetition, cyclic structure and parameter translation	stereo	1	6'00"	
2009	Adriaenssens, Paul	Ataraxia		stereo	1	15'00"	
2009	De Decker, George	The Bell Jar		stereo		25'00"	composer
2009	De Laet, Joris	Strings&Bodies		stereo	1		composer
2009	De Laet, Joris	Macbeth		8 channel			composer
2009	De Laet, Joris	Rouw					composer
2009	De Laet, Joris	Cordes&Corps		8 channel	1		composer
2009	Henderickx, Wim & Jorrit Tamminga	Shri yantra		8 channel, 7.1 surround		15'41"	composer
2009	Jantar, Maja & Esther Venrooy	Blueprint #1		16 channel, audiovis. installation			
2010	De Laet, Joris	Signs and Wonders		8 channel			composer

LIST OF STUDIOS AND RECORD COMPANIES

STUDIOS

IPEM Institute for Psychoacoustics and Electronic Music

Rosier 44, B-9000 Gent (Belgium)



Mail address

Ghent University, IPEM - Dept. of Musicology,

Blandijnberg 2, B-9000 Gent (Belgium)

tel +32 (0)9 264 41 26 - fax +32 (0)9 264 41 43

www.ipem.ugent.be

IPEM is a research center for musicology and belongs to the Music department at Ghent University. IPEM was founded in 1963, as a joint venture between the Belgian Radio and Television broadcasting company (BRT) and Ghent University. The idea was to combine audio engineering with music production, thus building a bridge between scientific research and artistic research. The institute was first located in the electronics laboratory of Prof. dr. ir. H. Vuylsteke, but soon after it was associated with the department of musicology, which was lead by Prof. dr. J.L. Broeckx and later on by Prof. dr. H. Sabbe. Music production at IPEM was lead by the composers L. De Meester, K. Goeyvaerts and L. Goethals, all employed by the BRT. Since 1987, IPEM became a research center for musicology, with a focus on music information retrieval and embodied music cognition. IPEM has meanwhile grown to a center with more than 30 researchers working on music. Based on an elaborate network of international collaboration, the institute is currently an attractive place for visiting researchers from all over the world.

Logos Foundation

Kongostraat 35, B-9000 Gent (Belgium)

tel +32 (0)9 223 80 89

info@logosfoundation.org - www.logosfoundation.org

Logos Foundation is actively involved in the Belgian music scenery since 1968. The foundation is a workplace for new music production, with a workshop for experimental instrument building and a scientific lab for electro-acoustical research. Apart from that, Logos also organizes concerts with contemporary music from all over the world. The recording of every one of these concerts, for over 40 years, is the foundation for the Logos' unique archive, that contains more than 16.000 original recordings of new music from Belgium and abroad. The collection is fully catalogued and open to the public.

Naturally, electronic music plays a big role in the foundation's activities, even though it has never been the sole focus of the organization. Especially since the '90's, there is a shift towards the digital control of acoustical music. Founder Godfried-Willem Raes designed and constructed more than 40 non-amplified instruments for this purpose. All of them can be played very accurately with a computer and standard software like a MIDI sequencer or Pure Data, and also by using the in house developed software GMT.



Logos © Logos Foundation

SEM Studio for Experimental Music

Kapelstraat 44, B-3140 Keerbergen (Belgium)

tel +32 (0)15 23 57 50

jorisdelaet@hotmail.com - jorisdelaet.magix.net/website

SEM, Studio for Experimental Music, was founded by Joris de Laet in 1973 as a publically accessible electronic studio. Moreover, SEM organized lectures, workshops, courses and concerts. A specialized ensemble was founded and, over the years, the activities were further extended with a music lending service and a specialized journal. In 1987, SEM moved to a new environment ('AVhangART', Kontich). At that time, its activities mostly concentrated on composition and presentation of purely electro-acoustic experimental music and video art. There were also collaborations with plastic artists. Studio initiations, workshops and research remained a permanent base for the studio's activities and were permanently available for all interested visitors. Since 1998, SEM activities are reduced to a private studio and a two-weekly program on electronic music for the Antwerp radio channel Radio Centraal (FM106.7 and <http://streaming.radiocentraal.org>). Furthermore, Joris de Laet manages the extensive archive of SEM.



SEM studio © SEM

RECORD COMPANIES

Composers' Voice (Donemus)

Rokin 111, 1012 KN Amsterdam (Netherlands)

tel +31 (0)20 344 60 00 - fax: +31 (0)20 673 35 88

info@mcn.nl - www.donemus.nl

Entr'Acte

www.entracte.co.uk - info@entracte.co.uk

Experimental Intermedia

224 Centre Street At Grand, Third Floor

New York, NY 10013

xirecords@experimentalintermedia.org - www.experimentalintermedia.org

Krikri

www.krikri.be - info@krikri.be

Logos Public Domain

Kongostraat 35, B-9000 Gent (Belgium)

tel +32 (0)9 223 80 89

info@logosfoundation.org - www.logosfoundation.org

Megadisc

Lange Varenweg 12, B-9031 Drogen (Belgium)

Tel +32 (0)9 227 53 58 - fax +32 (0)9 227 05 98

mail@megadisc.be - www.megadisc.be

Mnémosyne

Mnémosyne Musique Média

Place André Malraux - BP 39, Bourges 18001 (France)

tel +33 (0)2 48 20 45 87 - fax +33 (0)2 48 20 45 5

www.mnemosyne-musique.com - mnemosyne-musique@orange.fr

Robo Records

roborecords@pandora.be

TRANSIT / Flanders Festival

Brusselsestraat 63, B- 3000 Leuven (Belgium)

Tel + 32 16/20 05 40 - fax + 32 16/ 20 52 24

www.festivalvlaamsbrabant.be - info@festivalvlaamsbrabant.be

TRACK LIST CD

1. Paul Adriaenssens [6:05]

Tricycle

© Paul Adriaenssens

2. Peter Beyls [1:44]

The Headless Horseman (excerpt)

© Peter Beyls / VUB 1988

3. Joris de Laet [8:38]

Cordes & Corps

© Joris de Laet

4. Louis De Meester [6:31]

Incantations

© IPEM Archive

5. Lucien Goethals [9:11]

Contrapuntos

© IPEM Archive

6. Karel Goeyvaerts [9:12]

No. 4 'with dead tones'

© & © Megadisc MDC 7845

7. Kristof Lauwers [5:19]

145+

© Kristof Lauwers

8. Serge Verstockt [14:18]

Interfractions

© Logos Foundation: Live recording 1987

9. Dirk Veulemans [9:23]

Artikulationsorgane

© Dirk Veulemans

Total time: [70:21]

Mastered by Acoustic Recording Service

For promotional use only. Not for sale.

© & © MATRIX 2010/01

Acoustic Recording Service

Mobile recording - classical & jazz

5.1 digital mastering room

classically trained engineers

Belgium and surrounding countries

www.acousticrecordingservice.be

info@acousticrecordingservice.be

