

The Domain ArtScience

March 19, 2004

From September 2004 a new curriculum will be offered for students who feel attracted to combining an interest in studying creative and performing arts with an interest in developing scientific skills. The new curriculum is an extension and re-formulation of the Image and Sound curriculum which has been on offer since 1989. It is organized in such a way that individual creative and performing qualities will be developed in combination with the exploration of the basic principles underlying the making of art. This means that besides discovering individual forms of expression, students will take part in research projects covering all aspects of the process of creation itself.

Individual creative skills will be coached through a series of compact introductory courses centered on topics such as *Sense Interference*, *Ear Cleaning*, *Sketching Methods*, *Sound/Color/Form*, *Music Theater*, *Image and Sound*, *Human Interfaces*, *Interaction Models in Sound and Space*, *Pattern and Visualization*, *Making Art of Databases*, *Artificial Intelligence*, *Thought Processes in Art and the Language of Image and Sound*.

The research projects are focused on the production of knowledge supporting the development of artistic ideas, concepts and models, the structural and contextual aspects of art, the principles and processes involved in perception, cognition and communication, and the potential role of the new media in creating new aesthetic experiences. The projects will be organized via research groups, consisting of several teachers and guest teachers working together with the students, all of whom will be actively involved in the process of the creation of art and the production of knowledge of the creative process. Students will be guided to present the results of these processes in a variety of forms: personal presentation, written documentation, recorded image and sound, portfolio, website, etc. Some of the central research topics are: *Developing Models for the Creative Process*, *The Relationship between Art, Place and Spatial Environment*, *Mental versus Virtual Space: an Actualization of Camillo's Theater of Memory*, *Interaction in Old Art and New Media*, *Interactive Sonic Spaces*, *Transformation Processes in Ecology and Landscaping: "The Farm"*, and *The Struggle between Structure and Context in Contemporary Art: "Moving Cooking"*.

The need to define the new domain of ArtScience emerged from the awareness of how contemporary art is increasingly interwoven with technology, science and the social matrix in the widest sense of these words. Without a doubt, the information society has consequences for the arts, where new information arts are developing in relation to new information science. However, a curriculum dealing with these developments can hardly be found. More and more rapidly young artists integrate the new technologies which become available in ways which cross the borders of the traditional fields within and outside of the arts. The aim of this program is to offer a practical and theoretical framework for a new generation of artists who take for granted that they can imagine a new language.

The exploration of this new domain not only focuses on the usual artistic disciplines such as the fine arts, music, theater, dance, literature, etc., but is particularly directed to the use and production of knowledge of the new media and the resulting dynamization of the arts in new temporal and virtual forms: film, video, sound art, mixed media, moist media, small media, computer animation, internet, interactive environments and new types of performances. In their relatively short history interdisciplinary art curriculums have been usually based on the various disciplines they were trying to bridge. ArtScience abandons this in favor of an approach based on research groups. In stead of pretending to chart the new territory by allotting areas to the traditional artistic disciplines, the main question is to investigate more appropriate ways to structure the new domain. ArtScience is the study of connecting art to the new media and creating new relations to the diversity of social institutions addressed by fields ranging from the familiar in architecture, ecology, farming, and landscaping to the undigested emerging sciences and technologies. It is expected that by this approach art will be produced and presented in unexpected environments, from alternative and underground venues to quite unusual public places and immersive environments created by using the new technologies.

The ambition to connect the creative artistic process with scientific research has major consequences for the character of the curriculum. Teachers and students are involved in initiating creative processes that may take the form of experiments that can be considered as scientific exploration and artistic research at the same time. One of the consequences of this will be a fusion of the art studio with the scientific laboratory. All participants, teachers and students, are expected to dig into the deepest corners of their imagination to use this faculty as a creative and intuitive source of knowledge as well as a source of ideas to realize unusual works of art. Together, the teachers and students will investigate which creative methods may take the form of research in the scientific sense of word. This can result in works of art, in a presentation of the results of the research, or in a combination of both.

A domain as described here, in which education, research and production are focused on the bringing together of art and science hasn't been mapped before. The student is not only acquiring knowledge and skills, but he is also challenged to contribute to this program, which can be considered as an art work itself, and to the exploration of the new discipline: ArtScience. This requires a special motivation, an eager research attitude and a dedicated input by the teachers and the students. The motivation should be directed to the development of the ability to learn by translating opinions into questions, and to produce new knowledge and skills as a result of the research. This also implies that the student is not only capable of receiving criticism in the form of feed-back, but that he himself is able to formulate criticism in a similar way, too.

The curriculum offers many opportunities for multi-gifted students who want to develop their creative and explorative talents, since it is designed as a field in which the different courses and research groups are organized not only in the familiar successive order, but also simultaneously. This enables the student at any time during his studies to choose for a particular course or research project fitting to his own needs at that particular moment. A consequence of this is that the student can create his own personal road through the curriculum, only limited by the minimum number of courses and projects he is supposed to participate in, for earning his degree. Gradually the student learns to define his personal field of fascination and his own particular way to do the needed research. Besides the courses and research projects, from the second year on the student is supported by two personal coaches who will help him to define his own approach to the creation of art and to the acquisition of knowledge, to assist him in making choices for the way he wants to travel through the curriculum and to help him to find his personal way in the art world outside of the school.

After finishing his initial studies, the student may choose to enter the professional arts practice immediately. The success of this will depend highly on the experiences in the art world already acquired during the studies, and the skills he has mastered to be able to deal with particular challenges, including the ability to work in response to fixed commissions. Working as an artist means, economically, to work in a mixed professional practice, consisting of making personal contributions by creating independent, autonomous works of art, next to being active as a teacher or a cultural entrepreneur, or simply by working in a modest job to earn some money to be able to continue his own projects. However, next to the option of immediately starting as a practicing artist, it is also possible to continue the studies for another two years by following a masters program at an art school or university. The Hogeschool van Beeldende Kunsten, Muziek en Dans offers a masters program in the field of Creation, Research and Development, whereas Leiden University offers, among many master programs, the program Master of Mediatechnology.

Determination of the Domain ArtScience

The new domain ArtScience is explored by the Interfaculty Art, Research and Knowledge Production of the Hogeschool van Beeldende Kunsten, Muziek en Dans (Royal Conservatory and Royal Academy of Art) in close collaboration with the Faculty of Creative and Performing Arts of Leiden University. The curriculum is partly the result of the innovation project for vocational education *Interfacuteit Beeld en Geluid: muziektheater en mediakunsten 1991-1994 (Interfaculty Image and Sound: music theater and media arts 1991-1994)*. In these years and the years after, this interfaculty realized a great number of interdisciplinary research projects and productions which have been centering on the subjects: light and color, composed musical space, human interfaces and language. On the basis of the experiences and results of these projects a number of new curriculums were developed, starting with a new initial course in the field of music, the specialization Media Arts of the Music Registration course and, more recently, the specialization Image and Sound of the Fine Arts curriculum. Next to this, in 2001, a new masters program was developed, which became one of the directions of the music master program Creation, Research and Development (Second Phase). And since 2002, many teachers of the Interfaculty Image and Sound contribute to the Master of Mediatechnology program, which is presented by the Faculty of Mathematics and Natural Sciences of Leiden University. And, for another part, the present program resulted from a recent evaluation of the past approaches to the innovation of art education and a discussion of the desired future directions and developments. This resulted in the commonly expressed desire to further intensify the relation with the professional field by developing new types of environmental forms of art and art events related to art education. Ideally these projects should be based on collaborative research by artists, scientists, engineers and institutional representatives addressed at creating new forms of communication in the public domain.

Characteristic for these new programs, including the present one, is that a large part of the curriculum is organized in the form of team-teaching and collective projects. Team-teaching is an ideal scheme in which teachers from different disciplines are compelled to learn each other's language. At the same time the

students learn a lot, including having a bit of fun, from the dialogues in which the sometimes very divergent approaches of different teachers are debated in front of the students. By learning each other's language it is possible to realize collective projects, in which a wide range of knowledge and skills are brought together. In the team-teaching lessons, as well as in the collective projects theory and practice are combined by making models and doing practical exercises.

It is a real challenge to use these intense and lasting experiences with collaborative educational forms to further articulate research projects in which different disciplines play a role. When entering a completely new domain, as it is the case in ArtScience, one first has to explore the domain, since known territories are left behind to enter the newly discovered *terra incognita*. Since it is not immediately clear what will be the most suitable research methods to work with, part of the research consists of developing specific methodologies for exploring the new domain. At this point, it can be useful to distinguish between three different types of research: fundamental research, practice based research and extended research.

Fundamental research concerns the study of the multiplicity of expressions, art pieces, artifacts and the written records, all of which are part of our cultural heritage. Traditionally fundamental research has been the task of universities where these subjects are studied in scientific disciplines like Archeology, Art History, Anthropology, Language Studies, etc. One of the challenges of the new domain ArtScience will be to explore in what way these disciplines may be of help in describing the characteristics and uncovering of the underlying principles of the creative process itself, and in what way ArtScience may contribute to the other scientific disciplines.

The second type, practice based research, concerns the study of the contemporary arts practice, the work of the leading artists, the characteristic trends and dynamics of today's art world, and the institutional support systems. Next to this, practice based research may take the form of an inquiry of the aesthetical and technical qualities of materials and instruments that may be used to arrive at new forms for the creative and performing arts. Often, this last type of research requires a collaborative approach, in which ArtScience research projects will be related to methodologies and strategies used in technology, industry, governmental and non-governmental organisations.

The third type of research, extended research, may take the form of experimentation. Experiments are characterized by a continuous process of playing with ideas and materials. Usually this process starts with an intuitive idea which may grow into a web of related ideas during the working process by giving them form, observing the effects this has, evaluating them and changing the form according to the newly formed ideas. The whole process of experimental research and development is characterized by the cycle: thinking - making - perceiving - thinking - making, etc. In what phase the process begins is of minor importance. Important is the moment that the actual making starts, which is often realized in the form of a plan or a model.

The different parts of the curriculum will be developed in close collaboration with the different faculties of the hogeschool and the university. This does not mean, however, that all activities will be concentrated behind the walls of the academic institutions. Often research groups will be organized on locations which have a meaningful connection to the research theme as, for instance, in the project *The Farm*, in which the actual questions regarding the transformation processes in landscaping, ecology and food production will be actually studied at one of the sites in question.

The ArtScience Curriculum

General information

The BA program is a four-year study, whereas the MA program can be finished after two years of study. The course year is divided into six periods in which parallel programs are offered from which the students have to make a choice. From beginning-September till half-October the lecture series ArtScience is offered, next to six basic courses which are directed to develop basic knowledge and practical skills for the production of art. The lecture series consists of a weekly session of half a day during six weeks, whereas the courses consist of six full-day classes and four individual study days which are concentrated in two weeks. Another six courses are offered in the period beginning-February till half-March. The research projects last one month each and consist of twelve full-day classes and eight individual study days. They will take place from half-October till half-December and from half-March till the end of May. The last research project results in the production of a public manifestation. January and June are periods for individual study, resulting in

presentations of the works of the students which will be examined and discussed by teachers and peers.

Lecture series ArtScience

In the lecture series ArtScience all teachers will present their own view on the new domain ArtScience as seen from the perspective of their own arts practice, discussing the way art theory and research have played a role in the creative process as it developed in their own art. Next to the regular teachers a number of guest teachers will be invited who will discuss the domain of ArtScience from a scientific, technological or social point of view. The lecture series will be open to all students studying at the Royal Conservatory, the Royal Academy of Art and Leiden University.

Introductory courses

In the introductory courses basic theory is combined with basic hands-on training of a variety of skills. In part the courses are a continuation of the courses as they were developed during the last decade for the Image and Sound program and for the curriculum of Mediatechnology. Added to these are some new courses, which were specially developed for the new curriculum ArtScience. In the coming years new introductory courses will be developed in collaboration with the Faculty of Creative and Performing Arts, the Faculty of Social and Behavioural Sciences, the Faculty of Mathematics and Natural Sciences, and the Faculty of Archeology of Leiden University. The introductory courses are open to all ArtScience students and to university students, who have passed a special entrance examination. The maximum number of participants for each course is 17. Admission in order of application.

Zero courses

Twice a year four zero courses are organized, in which the students learn the basics of recording, storage, editing and production of digital video and audio, and website design. The technical skills will be trained by studying examples of the history of film and the analogue techniques which predated the present digital ones. And, next to the practical and theoretical issues, attention will be given to the social and ethical aspects of sharing the use of equipment with other users. The courses are obligatory for all students who want to work with equipment available at the respective institutions and for those who want to follow those introductory courses which are marked with an asterisk (see *Course Descriptions*).

Research groups

Each year seven research groups are formed around central themes which have come up from the practice and research of the ArtScience staff. These themes are then discussed and approved if they are seen to have the potential of furthering our understanding of the process of creating art. These may be, for instance, the personal characteristics of the artist, the role of the work in the personal oeuvre and personal style periods, as well as the role of the more formal characteristics of models, places, structures, contexts, interactions, information values, and memory and transformation processes. The research groups are initiated by the ArtScience teachers who will also invite guest teachers to contribute to the research by their specific specialist backgrounds. Students will be actively involved in the research process by confronting them with all kinds of questions and tasks, like exploring the possibilities to transform the research themes into concepts for works of art, doing library and internet searches to answer specific research questions, and to document the research by using all kinds of media, including language. The research projects can be joined by students from outside after doing a special entrance examination. The maximum number of participants for each group is 17. Admission in order of application. In some cases applications are only accepted after the student has followed introductory courses.

Manifestation

Once a year a public manifestation is organized in which research results are presented and discussed. This manifestation may take the form of a performance, an event, an environment, an exhibition or a festival in combination with a conference in which elements of the research are discussed in a forum of international experts. The manifestation is prepared by a large group of teachers and guest teachers, and is realized with the help of the students. During their studies the students are expected to participate in two of those manifestations, the first time during the year before their propedeutic examination.

LabLand

In LabLand research is focused on the study of interaction and interfacing in the widest sense of these words, ranging from the direct interaction between men and the indirectly operating man-machine interfaces, to the relation between the creator, the public and the environment at large. This interfacing laboratory was founded to experiment with unusual configurations of analogue and digital equipment (sound, video, computer, etc.), moist media (plants) and instruments (microscopes and telescopes) to study phenomena on different scales. Basic tools like soldering irons and measuring instruments are available to develop new forms of hardware. In LabLand information and knowledge is gathered about the characteristics of traditional and new materials, and the ways these can be used for practical and aesthetical purposes, supporting the creative processes. It sometimes happens that students are faced with unforeseen, interesting aspects of their work or research and that they want to spend a substantial amount of time to study these aspects more deeply. When this happens a proposal may be written by the student to work for one or more months in LabLand.

RecPlay

Since a number of years students can participate in RecPlay, a live electronica improvisation group, which rehearses weekly and performs regularly in all kinds of well-known and obscure venues, outside of the school. Students who want to become an active member of RecPlay will have to apply for a special admission procedure to determine if their skills and aims fit to those of the present RecPlay members.

Optional Courses

Optional courses can be followed at the Royal Conservatory, the Royal Academy of Art and Leiden University. The website of Faculty of Creative and Performing Arts offers a detailed guide to the courses that are available. Students from The Hague can choose optional courses in Leiden such as literature, art history, philosophy, pedagogy, communications etc. In the guide of optional courses (keuzevakkengids), the requirements demanded for each subject are outlined according to required ability or previous qualifications. The majority of Leiden's optional courses are open to interested students from The Hague, provided that they successfully have passed their propedeutic examination. Entry to an optional course at the Royal Academy of Art will be dependent on a meeting with the involved teacher who will discuss the student's previous work in relation to the option chosen. For students wishing to take an optional course at the Royal Conservatory there are two possibilities: 1) a theoretical and general musical course or; 2) an instrumental or vocal course (*practicum musicae*). For the last option, the student has to demonstrate that he has the potential to become successful in this part of the musical study. The *practicum musicae* is a one year course. After this it may be decided if the student may be successful in an entrance exam for a minor in music or for the special course for multi-gifted students. The guide in which all optional courses are described can be found at: <http://www.studiegids.leidenuniv.nl/>.

Internships and studies abroad

In case students want to do an internship at an institution or company outside of the school, or want to follow a part of the studies abroad in another art school or university, it is advised to do so during the first semester of the third year. Internships have to be prepared by producing a work plan that has to be discussed with the study coaches and with the person who will coach the students at the institute where he is going to do the internship. After finishing his internship he has to write a report according to the general rules concerning internships as they are formulated by the Royal Academy of Art. Similar conditions are valid for a study abroad.

Minors

Although it is principally possible to follow more than one major study simultaneously, experience has learned that this is hardly possible in practice. For ArtScience students who want to combine their study with another discipline it is possible to follow a minor program from the second year onwards. In those cases the conditions and credits to be earned will be determined after discussing these with the student and his coaches.

Presentation, discussion and judgment of students' work

Twice a year the student has to publicly present a finished work of art, including the documentation about the working process and the research in their updated portfolio, first in January and the second time in June (except for students who are preparing for their final examination). After the presentation the quality of the work is discussed by teachers and peers, resulting in a common advice for the student how to proceed. All students are expected to be present at the presentations of their peers, to ask questions and to comment on the works in a critical way. The presentations are also the moments, when the teachers' evaluations of the students' participation of the courses and research groups are collected, after which the number of credit points will be determined.

The First Year

The work presented in January is the only one that is made according to a fixed assignment. All first year students have to make a mobile, a hanging art object in which image, sound and movement are integrated in a special way. Next to this the students have to make a study of the past and present of kinetic art and write a short paper (3-5 pages) about a kinetic artist of their choice or about a direction or trend within kinetic art.

The minimum requirements for doing the propaedeutic examination in June are that the student has attended to the lecture series ArtScience, participated in three introductory courses, two research groups and the manifestation, and has presented a mobile in January. In case all this has resulted in positive marks, the student may present his first free work for the propaedeutic examination. The quality of the work is judged according to the following criteria:

- 1) The student makes an authentic work of art which appeals to more than one sense modality, or consists of a design for an artwork that is shaped as a model, a concept or text, or as a completely new artistic medium;
- 2) The different parts of the work should form a whole in which the parts are compositionally or intrinsically connected;
- 3) The different parts have to be detailed proportionally;
- 4) The work should demonstrate that the student has learned from the courses and research groups;
- 5) The used materials and means should be in proportion to the relevance of the executed idea.

When the student has successfully passed the propaedeutic examination he is asked to select two teachers who will be his personal coaches during the second year of his studies, and if he is planning to follow a minor studies next to ArtScience.

The Second Year

At the beginning of the second study year the student contacts his coaches to discuss with them how frequently they are going to meet (maximum 20 hours per coach per year), what his interests are, what research he will do for this, how he is going to continue his road through the curriculum, what courses he wants to follow, in what research groups he wants to participate, what optional courses he wants to follow, what he expects to learn from his minor, what kind of work he wants to make, and in what activities or work he is involved outside of his studies.

In January as well as in June the student presents a work of art and the documentation of his research and other relevant activities in his updated portfolio. The quality of the work is judged according to the same criteria as they were formulated for the propaedeutic examination, to which is added the written report of the research he has done to substantiate the quality of his work. By the end of the second year the students are asked which teachers they want to have as their personal coaches in the third year.

The Third Year

At the beginning of the third year the student contacts his coaches to discuss his study plan for the third year, the kind of research he wants to do, what kind of work he wants to develop, and in what social context he wants to operate. Usually during the third year students start making contact with the professional environment outside of the school. Sometimes this may lead to problems with following parts of the curriculum. When this happens it is important to communicate this with the coaches since, in exceptional cases, these activities may result in compensational credit points. In those cases reports of the activities

have to be written and to be added to the portfolio, which has to be presented during the presentations in January and June. Again the quality of these works is judged according to the six criteria as they were valid for the second year, but also this time a new criterion is added. From the third year students it is expected that by the end of the year they have created a personal website in which their art work and all other relevant information is presented by the media of the internet: text, image and sound with a coherent interface that fits the content of the work best.

By the end of the third year the student selects again two teachers who will be his personal coaches to guide him to the final examination.

The Fourth Year

The curriculum is designed in such a way that it is possible to finish the study ArtScience after four years. The final examination consists of the presentation of an artwork, documentation concerning the work, a research report, the updated portfolio in the form of a website, and the minimum amount of credit points earned by:

- 1) Attending to the lecture series ArtScience;
- 2) Participation in twelve introductory courses;
- 3) Participation in six research projects and two manifestations;
- 4) The presentation of six art works, including research reports and portfolio;
- 5) Attending three optional courses, having done an internship or having studied a semester abroad;

All students who are opting to do the final examination at the end of the fourth year (or later) have to submit the plan for the work he wants to present at his examination in June by the end of January and to deliver a description of the work for the website of ArtScience and for the Final Examination Book of the Royal Academy of Art. In May it will be checked if the work is proceeding in such a way that it may be reasonably be expected that the work will result in a positive judgment of the examination. When this is doubted the student will be advised to withdraw from the examination procedure. The final examinations are in June. The works will be part of the exhibition organized by the Royal Academy of Art.

The MA Program: Curriculum, Presentations and Final Examination

Students of the MA program Creation, Research and Development discuss their research plan and the parts of the curriculum which are relevant for their studies with their personal coaches (maximum 40 hours per coach per year). Next to this, MA students may ask productional support from the assistant teachers, to be able to find their way through the institutes and the procedures.

In the MA program credit points are not automatically earned by participating in the general curriculum, since the road these students take will be highly individual. Their progress is measured by their presentation of four works of art (each semester one), including research reports and website updates and their final examination.

How to be selected for the entrance examination?

To be admitted to the ArtScience curriculum the candidate has to demonstrate his capabilities in the creative and/or the performing arts, as well as his well-developed intellectual skills. He has to show examples of earlier works and has to motivate his choice to study ArtScience in written and personal form. Next to this he has to describe the outlines of a work of art he wants to realize. In case he is selected to come to The Hague for the actual entrance examination, he has to present a model of the art work he wants to realize.

Although Dutch candidates for the BA program ArtScience are invited to meet the head of the Interfaculty Art, Research and Knowledge Production, Frans Evers, for a personal interview, foreign students can contact him by email (frans.evers@interfaculty.nl) to discuss by mail if the applicants needs are met by the curriculum, what the applicant thinks he might be able to contribute to the curriculum and to the art world at large, and to determine if the applicant will have any chance to be selected for the entrance examination.

Applicants for the MA program Creation, Research and Development should contact the coordinator Horst Rickels (horst.rickels@interfaculty.nl). The selection procedure for the MA program is basically the same as

that for the BA program, however with two major exceptions. Candidates can only apply when they have already earned a BA degree in the arts and/or sciences. And, next to this, candidates have to write a research plan in which a clear and detailed description is given of the field and theme of their research, in what ways the theme is related to the ArtScience curriculum, what materials and equipment they need for their research, in what context they want to present their results, and by which teachers they want to be coached. Like the applicants for the BA program, they also have to send in a letter of motivation, a portfolio, the examination commission, and the required official documents, before June 1.

Letter of motivation

In the letter of motivation the candidate describes:

- the outlines of his artistic past (see also *portfolio*);
- in what forms of art he is interested;
- what musical instruments he plays;
- what techniques he masters;
- what type of education he has followed;
- what he wants to achieve with the study ArtScience;
- his general interest in art, science and culture at large;
- his specific interests in genres, styles, other disciplines and technology;
- what he wants to contribute to the climate of the learning environment and the artistic profession;
- what questions he has regarding the study he wants to follow (the answer should reflect his ability to transform his opinions into questions; this is important since exploration and research are basic elements in the program);
- his curriculum vitae (resume)

Portfolio

In the portfolio the candidate describes earlier works of art, performances or other contributions to the world of art, illustrated with photos, drawings, reviews, etc. If wanted, the portfolio can be illustrated with recordings on audio CD, video DVD or VHS videotape. In these cases the candidate should mark a specific part of maximum three minutes he absolutely wants to be viewed by the selection committee. Please note: never send in originals, since, for practical reasons, portfolios cannot be returned.

Examination assignment

The examination assignment consists of two parts. Together with the letter of motivation and the portfolio the candidate has to send in a description of an artwork he wants to make in a way which is completely free, except that the work should consist of visual and sonic components. When the candidate is actually selected for the examination, he has to bring and present a 3D scale model based on the description of the artwork he has sent in.

Official documents

Together with the letter of motivation, the portfolio and the examination commission, a copy of your passport, your visa (if needed), a copy of your diploma, 2 passport photos and your email address should be sent in. Please, take care that you send all required materials in one package which should at last be received by mail on May 30. Packages received after this date (date postmark) will not be part of the selection procedure.

Mail address

The package should be sent to: Interfaculty Art, Research and Knowledge Production, PO Box 11670, 2502 AR Den Haag, The Netherlands.

Entrance examination

On June 15 the candidates will be informed by email if they are selected for the examination, or not. The BA examination will take place on June 28, 29 and 30 in the Royal Conservatory, Juliana van Stolberglaan 1, Den Haag. MA candidates will be informed by Horst Rickels about the dates of their entrance examination.

Course Descriptions

Sense Interference

by Robin Deirkauf and Jan Peter van der Wenden

The relationships between the sense modalities are studied by doing simple cross-modal exercises. These will result in a greater awareness of the connectedness of the different sense organs in perception and a better understanding of the ways these connections may find an expression in art.

Ear Cleaning

by Horst Rickels, Robert Pravda and Edwin van der Heide

Like in all sensory processes, what we actually hear is highly dependent on what we have learned to hear. We only can distinguish sensory characteristics when we have learned to label them. But sometimes these labels can prevent us to hear new things. Then it is time for ear cleaning.

Sketching Methods

by Klaus Baumgärtner and Peter Max

How can we record initial ideas? Sometimes this can be done by using words. But the use of pictorial methods has a special place in the creative process. How can one discover one's own favorite sketching method to catch the thought processes in images to use them for the creative process?

Sound/Color/Form

by Frans Evers, Peter Max, Robert Pravda and Mike Rijnierse

Since very old times colors have been associated with sounds and music. The rational basis of these associations can be questioned, but at the same time it is true that this approach has resulted in the development of theoretical color models with a highly practical user value for industry as well as for the arts.

Music Theater

by Paul Koek, Horst Rickels and Martijn Padding

Music and theater share their common origin as a human response to natural phenomena, like the sounds and movements of animals, thunder, lightning etc. In the course students are asked to create small music theater scenes, first to be executed on the table-top and after this to perform them on stage.

*Image and Sound**

by Kasper van der Horst and Robert Pravda

Using digital technology it is possible to instantly compose live visual imagery in relation to the real-time generation of electronic sounds and music, as this is shown when DJ's and VJ's combine their sets. But what happens when sound artists and visual musicians start collaborating?

*Human Interfaces**

by Robin Deirkauf and Jan Peter van der Wenden

The relation of man and his environment is determined by a complex of natural and cultural processes. But, sometimes it is possible to recognize analogue patterns in natural phenomena of differing scales. How may these insights be used to build new sensors, actuators and controllers for interactive works of art?

*Interaction Models in Sound and Space** by Edwin van der Heide, Bas Haring and Joel Ryan

The aim of the course is to develop and judge interactive sound environments. Up to which extend are common words in music like style, skill, form and development applicable to interactive installations? Can we compare playing an instrument to interacting with an installation?

*Pattern and Visualization** by Joost Rekveld and Joel Ryan

What are the differences and similarities between attempts to 'uncover' order by means of scientific visualization and the way artists use constraints, rules and systems to structure their work? The generation of patterns is used as a case study to introduce a number of approaches to visualization and composition.

*Making Art of Databases** by Crit Cremers, Jan Peter van der Wenden and Joel Ryan

Databases are designed to store large amounts of data in a systematic way in order to locate and retrieve specific information. But, what happens when databases are used according to artistic rules in order to generate new meanings, contexts or processes? Is it possible to create new forms of art in this way?

*Artificial Intelligence** by Bas Haring and Maarten Lamers

One of the problems with Artificial Intelligence is that it is very difficult to transform automated processes into intelligent, functional systems. What will happen when Artificial Intelligence re-directs its scope into the direction of Artistic Intelligence when the concept of artificial imitation will be replaced by artistic creation?

Thought Processes in Art and the Language of Image and Sound by Michael van Hoogenhuyze and Frans Evers

Can art be considered as an alternative way of thinking in which verbal and mathematical thinking are paralleled by forms of imagination -visualization and audition- which communicate a type of information by directly speaking to the eye or the ear? Is it justified to call this the Language of Image and Sound?

Masters of the 20th Century by Paul Slangen, Michael van Hoogenhuyze and Horst Rickels

Usually the meaning of art is not only generated by the art work itself, since it is also defined by the place the work has in the total oeuvre of the artist and by his personality. To understand art we have to understand the artist himself. Who can be considered as the masters of art of the 20th century?

Research Topics

The coming years a research program will be developed to study the basic questions related to the mapping of the domain ArtScience. The questions will vary from general questions about defining basic concepts, methodologies and formal aspects of the creative and performing arts to specific questions relating to individual works of art, the place of the art work in the artist's oeuvre and his personal motives and aims, the contextual aspects playing a role in the realization of the work, and the collaborative characteristics of art works with are realized by artists working in teams with other artists, scientists, engineers and co-creators, representing institutions of all kinds. Some of the research topics will be:

Developing Models for the Creative Process

"Man is faced with a reality which is allotted to him. The 'model' of this reality is created by man which allows him to play with it". Starting from this motto the role of models in the creative process is explored. This exploration concerns both the students' concrete proposals for their own projects, as well as the role models have played in earlier collective projects, varying from liquid forms, abstract and conceptual forms of cinematography, cartography, (tele-)communication, music script, the open form, music theater, multimedia productions, etc. Models represent reality by making a transformation in 'flat' abstractions like language, script, numbers, diagrams, computer programs, etc., or in the form of 3D scale models, globes, planetariums, war games, demonstration models for educational purposes, etc. Because of their abstract

and manageable character they have an operative quality. By the use of models, the reality of the production of art can be 'played back' without the lumber of logistic questions such as the use of expensive materials, the use of space, or the creation of complicated technical constructions. In this way models can be helpful to gain insight into specific mechanisms which may appear during the process of creation. Thus, models are not directly contributing to the resulting artwork itself, but they support the creative process on an analytical level.

The Relationships between Art, Place and Spatial Environment

Particular places in nature have inspired people to create works of art or to react to them spiritually in rituals having characteristics related to the spirit of the place, the so-called *genius loci*. In the course of time art has become independent of these places when special buildings like theaters, churches, concert halls and museums were built to execute the rituals of art. After this, the relationship between the artwork and the place where it is made has been weakened even further by the technological possibilities of reproduction and mass dissemination. The present, virtual environment as a product of the digital media has lost any connection to the spatial environment, resulting in products which are only reacting on each other. In this way the virtual environment creates its own context, a process which is strengthened by the fact that the traditional stages and museum environments have not been able to transform themselves into venues where technological art forms could find a place. What criteria should be developed for spaces designed to attract audiences for these art forms? To achieve this, the concept of environment will have to be further developed outside of the walls of the museum into the public space. Artists can help to reconstruct these spaces for this aim by creating temporary or permanent studios and laboratories where the work in progress can find a place.

Mental versus Virtual Space: an Actualization of Camillo's Theatre of Memory

In the sixteenth century Giulio Camillo built a number of versions of his *Theater of Memory*. It consisted of a spatial installation of images through which the spectator could navigate freely, generating new meanings by making connections. Together, the images chosen by Camillo formed a model of the structure of the world. The present research project aims at creating an actual version of the theater of memory, by focussing on two of its aspects:

- 1) navigation: the theater of memory is not a representation of the world which can be passively experienced; it is an active model, a system to move in and play with;
- 2) sensory reduction: the images in the theater of memory are not realistic, they are emblems or pictograms.

Part of the research will be to investigate related image- and navigation systems such as the classical art of memory, board games, Eisenstein's 'montage of attractions', Bergson's parallel between the human mind and the film projector, and contemporary phenomena such as hypermedia and virtual reality.

Interaction in Old Art and New Media

At the end of the 1980's Roy Ascott and Peter Weibel, the former director of Ars Electronica, coined the concept of interactive art. Since then this term has often been used by artists working with digital media to express their intention to give the audience an active role in the realization of the art work. Usually it is suggested that interactivity is one of the most promising characteristics of digital media whereas, until now, these expectations are hardly made true. In the research project *Interaction in Old Art and New Media* some fundamental questions are raised about the meaning and implications of the concept of interactive art. An analysis will be made of earlier forms of interaction, as they have been realized in the 50's and 60's in experimental art forms like happenings, environments and events, and in the musical 'open form' experiments in which new forms of interaction between composers and performers were realized. Besides these analytical approaches, the project aims at realizing a new work of art which will be characterized by the realization of interaction on many levels: interaction between the participants in the project, the interaction of the artists with the art work in the preparatory stage and, finally the interaction of the art work with a general audience in a public place.

Interactive Sonic Spaces

Up to what extend can auditory display of information be integrated in a musical approach to sonic spaces?

Traditionally, concert halls have been used to present music performed in front of the audience. The architecture of concert halls is designed to serve musical performances in the best way. During the last decades composers have started to explore new ways to present music by distributing musicians and/or loudspeakers in special configurations over the space in order to create determined musical effects related to the architectural performance space. However, what will happen when we change our thinking from focusing on sounds in a space towards thinking about sounding space? What will happen when visitors will be able to co-determine the characteristics of such sonic spaces? Will it be possible to make a space sound meaningfully different when one person enters it, compared to a situation when a group of people is entering the space? What about different groups entering the space? Will it be possible to address people in a general way and, simultaneously, in an individual way? In what way is it possible to detect the behavior of the visitors? How may an image of the particular way a visitor moves through the space and the sounds he produces himself be interpreted and translated into a way which determines the characteristics of the sounding space? The research will focus on the question how musical structures can be applied and extended to realize a sonic architectural space that interacts with the information created by the interaction of individual and group behaviour in an environment which is especially designed for such a purpose.

Transformation Processes in Landscaping and Ecology: "The Farm"

Technological development and the rationalization of production processes have a permanent influence on the character of the built environment. During the past decades many buildings have lost their original functions, like warehouses in harbours and all kinds of factories which had been built originally for the installation of heavy machines. Since a number of years this process is not restricted anymore to city areas or industrial sites, but is extending to rural areas which had been in use for agriculture and cattle breeding, for hundreds of years. What can be done with the land originally belonging to the domain of the farm? Will farmers be transformed into managers of natural sites? Has the original landscape to be reconstructed? Or will completely new landscapes have to be designed for purposes of open-air recreation? The initiative for this project has been taken by the Dutch Ministry of Agriculture, Nature and Food Quality. The central question of inquiry is in what way performing artists may be able to intensify the public debate about good food, land, animals, farmers, and the landscape?

The Struggle between Structure and Context in Contemporary Art: "Moving Cooking"

Considering a work of art we may distinguish two aspects which determine its form. All works of art consist of a collection of elements (relations between forms, colors, notes, sound values, etc.) which, together, constitute the structure of the work. But, on the other hand, a work of art relates to the surrounding world. The interaction between the art work and the environment (the actual physical space or the theoretical relations) may be considered to be the contextual sphere of influence of the art work which is often, or sometimes less often, co-composed during the process of creation. In the course of the last century a polarization can be observed, which has driven music and art further apart than ever before. Where art music has been focusing more and more on structural complexity, the fine arts have been focusing on the context of the art work. The present research project investigates what kinds of parameters context and structure are; what the positive and negative sides of this polarization are; how context and structure may influence each other in the process of creation and in the artistic results; and what contextual structures (grammars) and structural contexts (meanings) may be discovered or developed. To study these questions in a way that everybody will be able to relate to, the research is focused on food, the bodily movements made during the preparation of different kinds of meals, the different structures in taste and the contextual influences on recipes are explored to dramatize the struggle between the concepts of structure and context.

Teachers' Biographies

All teachers involved in the ArtsScience curriculum have, without exception, strong ties with the Royal Conservatory, the Royal Academy of Art and Leiden University because of their, sometimes very long lasting, contributions to the Electronic Studio, the Institute of Sonology, the Center for Audiovisual Media (CAM), the Interfaculty Image and Sound and the Master of Mediatechnology program. Despite their very divergent backgrounds all of the teachers share an interest in creating multi-, inter- and meta-disciplinary art forms, which has resulted in the presentation of their work as a product of fine art, as a form of literature, in the form of multimedia installations and performances, or in theatrical form. Besides this they share a

fundamental and deep involvement with music and sound, since almost all of them share a long experience as composer, performer or improviser. Because of these common interests and experiences it has been possible to realize some extremely innovative, large productions in the fields of music theater (*Die Glückliche Hand - Geöffnet*, 1993, *Scheuer im Haag*, 1995, *The Man with the Hammer*, 1998), sound art and environmental art (*Fort Klank*, 1993, *School for Soundmen*, 1994, *The Promenoire van Mondriaan*, 1994, *Sounds*, 1999), and live electronica (*Sonic Acts Festival*, 1994-2003).

The teachers' biographies are printed in the order of seniority regarding their respective involvement in the innovation of the educational curriculums as they have been developed during the past decades which finally resulted in the determination of the new domain ArtScience.

Dick Raaijmakers studied piano at the Royal Conservatory before he became a radio engineer in the Philips radio factory. After this he worked as composer and engineer in the electronic studio of Philips Research laboratories (NatLab). In 1960 he was one of the founders of the Studio for Electronic Music at Utrecht University, which later became known as the Institute of Sonology. In 1966 he founded the Electronic Studio at the Royal Conservatory. Since that time he expanded his activities as a composer of film music to music theater, performance art, the fine arts and literature. From 1987-1995 he has been teaching at CAM and the Interfaculty Image and Sound. Since then he has been incidentally lecturing for students following the Sonology curriculum and since 2001 he is lecturing for the students following the Image and Sound direction of the music masters program Creation, Research and Development (Second Phase).

Frans Evers studied developmental and experimental psychology at the University of Amsterdam. After his studies, in 1979, he initiated the research project *Experimental Synesthesia* concerning the influence of sound of visual perception. In 1984 he received a Fulbright Award enabling him to continue his research at Yale University, first as Visiting Fellow and later as Research Fellow with dr. Lawrence E. Marks at the John B. Pierce Laboratory in New Haven (U.S.). In 1986 he continued his work as a researcher at the Sonology Department of the Royal Conservatory, where he started to develop innovative courses in the field of new media, first in the Center for Audiovisual Media (CAM), which he founded with Dick Raaijmakers, the Aula Lecture series which he started with Hans Locher in the Haags Gemeentemuseum, and in 1989 by initiating the Interfaculty Image and Sound, a partnership of the Royal Conservatory and the Royal Academy of Art. In 1994 he initiated a structural collaboration with club Paradiso in Amsterdam, in the form of the yearly Sonic Acts Festival. In 2001 he was invited to contribute to the founding of the new Faculty of Creative and Performing Arts of Leiden University.

Kasper van der Horst studied Photography at the School of Photography in The Hague. After his studies he became interested in video, computer animation and computer graphics and started his own company Sparks. In 1988 he was invited to teach video at CAM, and a year later to become a teacher at the Interfaculty Image and Sound, where he first taught analogue video and since 1995 *Digital Imagery*. During his classes students started to develop moving digital graphics, resulting in the first, so-called, *visuals*, which accompanied DJ acts at the Sonic Acts Festival. During the collective projects he often worked with a small group of students on special visual effects which relate in delicate ways to the general theme of the project.

Robin Deirkauf studied publicity and design at Academie Artibus in Utrecht after which he continued his studies at Ateliers 63 in Haarlem. His paintings of that time are characterized by a mix of constructivist elements combined with the bright colors of the Caribbean where he grew up. After this period he has turned to a more formal and conceptual way of analyzing the image which resulted in the development of a matrix used to create a pictographic alphabet consisting of primary colors and forms. Since then his research focuses on the possibilities this alphabet has for computer applications. In 1989 he was invited to become teacher at the Interfaculty Image and Sound for which he developed the courses *Sense Interference* and *Human Interfaces*. His contributions to the collective projects usually consists of designing monumental stage sets which extend to the architecture of the building where the production is realized. Since 2001 he is involved in the program Master of Mediatechnology at Leiden University, most recently as the founder of the interface laboratory LabLand, where university students and art students can do small research projects to study the characteristics of new and old materials for the creation of new hardware.

Horst Rickels studied piano construction at Grotrian-Steinway in Braunschweig and worked in that function at Bechstein in Berlin. After this he studied music in Kassel where he composed ballet- and theater-music for the Staatstheater. In 1972 he started studying electronic composition at the Royal Conservatory. From 1973 he worked as a composer for the theater group Proloog in Eindhoven. In 1983 he earned his degree in music theory at the Brabants Conservatorium with a thesis on the dialectics of Brecht's texts and Eisler's music. During the next years he formulated new principles for multimedia-theater, resulting a.o. in *Van Gogh's Laatste Oor* and *The Simulated Wood*. Supported by a grant of the Fonds voor Scheppende Toonkunst he focused his research on the development of sound objects, sound sculptures and sound

installations. The central question of his research is how the principle of instability of tuning-systems, pictorial structures and performance practices can be made the central theme of art works. Another important aspect of his research is the study of special qualities of sound in relation to the natural and built environment. As sound artist he has shown his works in many countries and at international festivals. Often he has participated in projects which aimed at transforming outstanding places into a soundscape, such as *Fort Klank* in 1994 in which he, together with Dick Raaijmakers and Walter Maioli, transformed an old fortification into a monumental musical instrument. Since 2002 is coordinator of the Image and Sound specialization of the masters program Creation, Research and Development.

Paul Koek studied percussion at the Royal Conservatory where he, together with Louis Andriessen and others founded the ensemble Hocketus in 1976 as a reaction to the upcoming minimal music from the U.S. Next to this he played in different new music and free improvised music ensembles, such as Loos, and worked together with composers as Karlheinz Stockhausen, Dick Raaijmakers and Louis Andriessen. Early 80s he became attracted to theater and he started his research into to new forms of music theater with his own music theater group the Ned Rok Ensemble. A few years later he became artistic director at theater group Hollandia. In 1990 a long and intensive collaboration started with Raaijmakers which resulted in the development of new forms of electric music theater. In 1991 he became teacher at the Interfaculty Image and Sound where he and Raaijmakers shared their approach to theater with the teachers and students of the interfaculty, resulting in some major productions during the following years. In 1994 he started the Veen Studio. In this laboratory, which was a part of Hollandia, he continued his research into new forms of theater on the basis of musical skills, musical laws and musical worlds. During the process of making he developed a new form of directing in which he searches for a balance between image, light, sound and movements based on musical ideas. Because of the extreme complexity and enormous potency of this, the research will be continued in the coming years.

Michael van Hoogenhuyze studied History of Art at Leiden University. After his graduation in 1974 he has been working as an art history teacher contributing to many curriculums and, next to this has been a school manager for many years. In 1993 he started teaching at the Interfaculty Image and Sound and contributed to the collective projects with art historical analyses of the research themes. Next to his work as a teacher he is active in areas where art criticism and the reflection on art are transformed in actual contributions to the creative process. In this way, for instance, he participated in a project of Jan van der Pol, IOEYA BFG ZNQD KWTRL HMJD, for which he translated Horappolo's *Hyroglyphia* from Greek into Dutch. This book was exhibited together with 195 prints in the Graphical Museum in Groningen and in the Lakenhal in Leiden. Next to this he has been working as a dramaturgist for a number of music theater productions of ZT Hollandia, under the direction of Paul Koek. He ardently collects stones and fossils, plays street music with his accordion and refuses to make a difference between high and low culture. Since 2002 he is a member of the think-tank of the Faculty of Creative and Performing Arts of Leiden University. Last year he was assigned as a lecturer to study and teach in the research area *Art as a Source of Knowledge*.

Klaus Baumgärtner studied at the Kunstgewerbeschule in Basel. In his art practice he uses different media to create small sculptures often consisting of natural materials which are transformed into art pieces by making a minimum of adjustments to their original form. He knows a lot about plants and even more about trees. The branches he uses are carefully selected. Sometimes he helps the trees to grow the branches in a form he likes them to use for his art. In this way he tries to express a line of non-verbal, visual thinking, which he himself considers as an iconic way of reasoning in which he plays with meanings. He cuts in cans, bends copper, hammers on lead, casts forms in bronze, aluminum and plaster. In his lessons he teaches the students a number of methods by which they can record their initial ideas. The objective is to teach students to discover their own sketching methods to facilitate the development of their own projects.

Joost Rekveld was a member of the first group of students who subscribed for the Image and Sound course in 1989, after he followed the International Sonology course. He developed a special taste for the history and contemporary practice of experimental film and since then he has been making mainly abstract animation films and kinetic installations. In 1999 his film *#11, Marey < - > Moiré* won the Grand Prix for non-narrative animation at the Holland Animation festival. His most ambitious dream is to develop a form of light art which humanizes fundamental aspects of our contemporary reality by translating them into a musical and sensory experience. For some time his research has been expanding into different directions, practically in the direction of making light environments, compositional systems and software, as well as theoretically into the direction of geometry, crystallography, and the history of perspective and optics. Next to his work as a filmmaker and visual artist he is active as a musician in the ensemble Farabi, where he plays ney, tanbur and dutar. In 1995 he was invited to teach at the Interfaculty Image and Sound. In his courses, which he also teaches for the students of the Master of Mediatechnology program at Leiden University, he gives an overview of a wide variety of artistic and scientific approaches to the conception and production of moving images. In 2003 he was one of the curators of the Sonic Light festival in Paradiso for which he organized a

conference on light art in De Balie in Amsterdam.

Edwin van der Heide studied Sonology at the Royal Conservatory, where he graduated in 1992. The central theme of his work is the interaction of sound and space. His current work is hard to define in the terms of traditional music, sound art or media art because he is often working on the edge by manipulating the characteristics of the used medium. In this sense the medium does not just mediate but is being explored and redefined in its own right. Although musical qualities and musical language are being used in the development of the work it is hardly ever presented in the form of a concert, since it often takes the form of an installation, an environment, or a new kind of performance. In 1995 he was invited to teach at the Interfaculty Image and Sound and since two years he also teaches for the students of the Master of Mediatechnology program. In 2003 he was one of the curators of the Sonic Light Festival for which he initiated collaborations between musicians who composed special programs for the dodecaphonic sound-system, which was specially installed in the Paradiso for this occasion. He composed the soundtrack for Joost Rekveld's prize-winning film # 11 and together with artist Marnix de Nijs he realized the installation Spatial Sounds which was awarded in 2001 with the Honorary Mention Prix Ars Electronica. His research subjects vary from the study of layers in sound and music and the development of interactive sound environments to live performances in which his musical compositions are transformed into kinetic laser light sculptures.

Taco Stolk studied at the Interfaculty Image and Sound where he earned his degree in 1996. During his studies he developed a conceptual approach to the creative arts which is based on a meta-disciplinary point of view, resulting in the work in progress *Wlfr*. In 1998 he was invited to become teacher at the Interfaculty Image and Sound. In his *MetaMedia* lessons he stresses that the choice for a certain art medium in itself can be viewed as an artistic statement, which has to be integrated in the creative process. By this approach he wants to stimulate the use of uncommon or totally new media in the arts. To achieve this he presents a theoretical framework in which the characteristics of the new media are discussed from the points of view of conceptual art and cultural philosophy in courses for the art students and for the students of the Master of Mediatechnology program, as well. In 2001 he founded the ExtraFaculty in which students of the Royal Academy of Art are offered projects which pass the boundaries of their disciplines.

Paul Slangen studied Theater Sciences at Utrecht University. Since 1991 he is working with Theater Group Hollandia where he, as a dramaturgist, has been actually contributing to the realization of many performances, since 1997. In 1999, he was invited to become a teacher at the Interfaculty Image and Sound, for which he developed the course *Masters of the 20th Century* together with Michael van Hoogenhuyze and Horst Rickels. In this course the work of a variety of leading artists, who can be considered as the forerunners of the interdisciplinary art forms of today, is presented and discussed. Thanks to the team teaching scheme often discussions are aroused in which teachers and students exchange their points of view. Through this an awareness is created of the different perspectives from which the appreciation of the arts arises. Next to this he is developing a course for students to learn them to write about their own art.

Joel Ryan studied physics, switched to philosophy and studied some time with Herbert Marcuse, one of the leading philosophers of the 1960's. Though early taken by modern music he pursued his musical interests outside the academy. Later he began to fabricate electronic instruments with the help of the hacker artists and the garage engineers of what was becoming Silicon Valley. He is a pioneer in the design of musical instruments based on real-time digital signal processing. He works as a live electronic musician in the world of improvised music with George Lewis, Evan Parker, and Joëlle Leandre, in the theater world with William Forsyth's Ballet Frankfurt and at the Royal Shakespeare Theatre. He is a member of STEIM in Amsterdam, teaches in the Sonology Department of the Royal Conservatory and the Interfaculty Image and Sound. Recently he contributed to the V2_ workshop *Making Art of Databases* by developing a course on music visualization.

Peter Max studied visual art at Tegneskolen in Copenhagen, which he finished in 1997. Searching for a multidisciplinary art studies he found the Interfaculty Image and Sound where he studied till 2002. During these studies he did research in the field of spatial installations and environments. After his graduation he has been building audiovisual machines for live-cinema projects using toy-lasers, mirrors, audio and video feedback and pattern interference. The live performed material is recycled in electronic music projects with various artists and musicians. Next to this he builds light and sound installations and environments which have been exhibited in several countries, lately at the opening of the Vendsyssel Museum of Art in Denmark. Since two years he is assistant-teacher at the Interfaculty Image and Sound where he contributes to the courses *Sketching Methods* and *Sound/Color/Form*.

Robert Pravda studied from 1987 till 1991 engineering at the Technical University of Novi Sad (former Yugoslavia), after which he dedicated himself to making music in experimental underground circles. His

interest in the interdisciplinary arts brought him to the Interfaculty Image and Sound, where he earned his degree in 2002. During his studies he concentrated on building instruments for multimedia performances and making algorithmic compositions for spatial sound and light installations. His examination project was awarded with the visitors prize of Shell's Young Artist Award. Since then he has participated in exhibitions in the Netherlands and abroad. In 2001 he started WEIM, the workshop of electro-instrumental music, which resulted in the electronica improvisation ensemble RecPlay, consisting of Image and Sound students, which often performs in all kinds of venues. After his examination he was invited to continue this activity as an assistant-teacher.

Jan Peter van der Wenden studied Image and Sound, after he had been working as a television program maker for the local broadcast station of The Hague. During his studies his research focussed on interactive multimedia installations. To deepen his knowledge regarding the connections between art, science and technology he followed the Master of Mediatechnology course at Leiden University, where he earned his degree in 2003. Next to his studies he has been member of the production team which organized the Sonic Acts Festival, and was co-editor of the conference book *The Art of Programming*, the international conference on the programming of art, which was held in 2002. As a video maker he is member of the Polyvinyl Big Band, an international collective of DJ's and VJ's and, next to this, he has contributed to many exhibitions in which his installations were shown, as, for instance, a number of times in the Dutch National Media Institute, Montevideo in Amsterdam. In 2004, he was invited to become study-coordinator for the Image and Sound studies, to contribute as assistant-teacher to the courses *Sense Interference* and *Human Interfaces*, and to assist students who want to do their research in LabLand.

Sanne van Rijn studied from 1981 to 1988 classical ballet at the National Ballet Academy in Amsterdam, after which she studied Photography at the School of Photography in The Hague where she earned her degree in 1992. From 1992-1996 she studied at the Interfaculty Image and Sound, where she developed short performances based on movements taken from daily life. After her education she played with the British ensemble Forced Entertainment in the 24 hours lasting performance piece *Who can sing a song to unfrighten me?* And with Theatergroup Hollandia she realized, a.o. *De Val van de Goden* and *Taslit*. Next to this she developed, first with the Gasthuis in Amsterdam and later with ZT Hollandia in Eindhoven a number of performances, among which *Zo geef ik mijn kat een pilletje*, *Laten we flink zijn en Langzaam tot nul*. In 2000 she was awarded with the Theater Stimulation Award by the City of Amsterdam and the Mime Award by the United Boards of Directors of the Dutch Theaters and Concert Halls. In 2001 she created together with Paul Koek the performance *Zwanenmeer* with inhabitants of a home for the elderly. This performance was selected for the National Dutch Theater Festival in 2002. Recently she was invited to contribute as a guest teacher to the further development of some parts of the new ArtScience program.

ArtScience, Magazine for Art, Research and Knowledge Production

January 2005 the first issue will be published of the new magazine ArtScience. In the magazine research findings will be published and discussed which are intended to add to the knowledge of all aspects of the creative process in the creative and performing arts, i.e. the development of artistic ideas, concepts and models, the structural and contextual aspects of art, and the principles and processes involved in the perception, cognition and communication of art.

Website

Keep checking the website www.interfaculty.nl during the coming months to find out if there is more news.

The Course Year 2004-2005

September

2-5	Excursion Ars Electronica (1 st year students)		
6	Introductory course 1	Introductory course 2	Zero course 1
13	Introductory course 1	Introductory course 2	Zero course 2
20	Introductory course 3	Introductory course 4	Zero course 3
27	Introductory course 3	Introductory course 4	Zero course 4

October

4	Introductory course 5	Introductory course 6	
11	Introductory course 5	Introductory course 6	
18	-----		
25	Research group 1	Research group 2	

November

1	Research group 1	Research group 2	
8	Research group 1	Research group 2	
15	Research group 1	Research group 2	
22	Research group 1	Research group 2	
29	Research group 3	Research group 4	

December

6	Research group 3	Research group 4	
13	Research group 3	Research group 4	
20	Research group 3	Research group 4	
27	-----		

January

3	-----		
10	Self study	Self study	
17	Self study	Presentation 3 rd year	
24	Self study	Presentation 2 nd year	
31	Self study	Presentation 1 st year	

February

7	-----		
14	Introductory course 7	Introductory course 8	Zero course 1
21	Introductory course 7	Introductory course 8	Zero course 2
28	Introductory course 9	Introductory course 10	Zero course 3

March

7	Introductory course 9	Introductory course 10	Zero course 4
14	Introductory course 11	Introductory course 12	
21	Introductory course 11	Introductory course 12	
28	Research group 5	Research group 6	

April

4	Research group 5	Research group 6	
11	Research group 5	Research group 6	
18	Research group 5	Research group 6	
25	Manifestation	Manifestation	

May

2	-----		
9	Manifestation	Manifestation	
16	Manifestation	Manifestation	
23	Manifestation	Manifestation	
30	Self study	Presentation 2 nd year	

June

6	Self study	Presentation 3 rd year	
13	Self study	Propedeutic Examination	
20	Self study	Final Examination	
27	Self study	Entrance Examination	