Hanzehogeschool
Prins Claus
Conservatorium

RESEARCH INFORMATION LEAFLETS

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In the following research leaflets, we try to very shortly picture types of research which might be relevant for conservatoire students.

The leaflets are so short that inevitably they fall short in nuance. Also, it is clear that elements of different types of research may be combined in a specific research project, and that there are many more types of research than the ones described hereafter.

The leaflets aim at nothing more than giving a first idea of suitable types of research to answer research questions as formulated by conservatoire students. You are invited to use them as an inspiration for your own research project, and to speak to your content and methods coaches about the specificities of your personal research project.

RIL 1. Artistic research
RIL 2. Reflective practitioner research
RIL 3. Intervention research
RIL 4. Design research
RIL 5. Ethnographic research
RIL 6. Case study
RIL 7. Survey research
RIL 8. Musicological (historical, theoretical) research
RIL 9. Experimental research

RESEARCH INFORMATION LEAFLETS 1: ARTISTIC RESEARCH

What is artistic research?
Artistic research is researching which the artistic process – composing or performing – is seen as a specific form of research in itself.

For which kind of research problems do I use artistic research?
You use artistic research if you want to show how your performance or composition practice delivers new knowledge and insights which might be useful for yourself and other performers or composers.

What kind of research questions might be used in artistic research?
How can I incorporate elements of Monk's piano playing and composition into my own practice as a jazz guitarist?

How does the research design in artistic research look like?

- *What kind of data do I use and how do I collect them?*

The data you will be using will be connected to your musicianship. That means that data will partly be musical: recordings of your own playing, of practicing sessions, draft compositions, et cetera. Other data may be reflections on that musical material: your own reflections (for example in the form of a reflective diary you keep during the process) or reflections by others (fellow students, teachers, musical experts). It is crucial to this form of research that you find ways in which you capture the artistic process you go through, not only in your reflective diaries but also by making recordings of your playing (not only at the end in the form of a final product, but also during the process) or by collecting sketches and draft versions of compositions.

- *How do I analyze the data?*

Analysis is partly done by scrutinizing the combination of the musical data in combination with your reflections and reflections of others. Analysis may also be partly non-verbal, in the sense that in your playing or composing during the process a form of 'practical analysis' will be constantly present. This should be reflected upon in your reflective diary. The analysis of the data may thus not only take place at the end of the process but also during the process, in which case the phases of data collection and data analysis are not strictly separated.

What kind of conclusions can I expect, and how do I report them?
The conclusions you will present are conclusions about the artistic product on the basis of the artistic process you went through. Presentation will in nearly all cases be partly non-verbal, in the sense that some of the results are easier demonstrated in a performance than put across in writing or speaking.

Are there specific things I should be aware of when I choose artistic research?
Be aware that serious artistic research puts high demands on your reflectivity, and on your ability to combine verbal and musical forms of reflection and presentation. Also, be aware that artistic research is still hotly debated in the academic community, and that for some researchers outside the domain of the arts it is not yet straightforward that this is a valid form of research.

RESEARCH INFORMATION LEAFLETS 2: REFLECTIVE PRACTICTIONER RESEARCH

What is reflective practitioner research?
Reflective practitioner research is research in which you look at yourself as a 'practitioner' (performer, composer, teacher, conductor, workshop leader, et cetera) and try to raise new knowledge and insights about your specific practice which might be useful for yourself or other practitioners.

For which kind of research problems do I use reflective practitioner research?
Reflective practitioner research may be used when you have questions about your own 'practice' (for example your playing or your teaching) and would like to know how solve problems in it.

What kind of research questions might be used in reflective practitioner research?
How can I make my way of practicing the drums more efficient?

How does the research design in reflective practitioner research look like?

- *What kind of data do I use and how do I collect them?*

In order to keep track of what your reflections are about, it is crucial that you document the process you are reflecting on. You may do that by keeping a detailed logbook of what you are doing, or you may use regular recordings of yourself (audio or video) to keep track of the process. The main data you use, however, are reflections on your own 'practice'. They may take various forms: you may keep a written reflective diary or regularly record your own spoken reflections on audio or video. The combination of process description and process reflection will allow you in the end to render a precise reflection on your own 'practice'. Your reflection may be fortified by using some additional reflections on your process by experts (fellow students, teachers).

- *How do I analyze the data?*

Analysis of the data should combine the process description and process reflection data because process reflections influence the process itself continuously during the research. Your analysis therefore is a meta-reflection on the combination of process description and process reflection. In order to avoid confusion about process reflection and metareflection, it may be wise to do the metareflection after you have collected all process description and process reflection data, or to build in specific points of (for example bi-monthly) metareflection into the process.

What kind of conclusions can I expect, and how do I report them?
You may expect to come up with conclusions about your own 'practice' and how you have ameliorated it or will do so in the future. Reporting will be more plausible if in the report you are able to show concrete elements of the process itself and your reflections on it.

Are there specific things I should be aware of when I chose reflective practitioner research?
If you choose this form of research, quality is heavily dependent on your ability to document process as well as reflections.

RESEARCH INFORMATION LEAFLETS 3: INTERVENTION RESEARCH

What is intervention research?
In intervention research (sometimes considered the equivalent of action research, or dubbed a 'field experiment'), you notice that there is a problem somewhere and you design an intervention of which you hope that, after the intervention has been carried out, has contributed to solving the problem.

For which kind of research problems do I use intervention research?
You use intervention research when you have the feeling that you, as a musician, may contribute to solve existing problems.

What kind of research questions might be used in intervention research?
How can I give a workshop that may help the various groups of population in a specific neighborhood to appreciate each other more?

How does the research design in intervention research look like?

- *What kind of data do I use and how do I collect them?*

In order to assess whether the intervention has worked, it is crucial that you are able to compare the state of affairs before and after the intervention. This means that you must deliver data describing the state of affairs before the intervention, and data describing the state of affairs after the intervention. Ideally, those are the same kind of data: for example, observations of the behavior of the participants, or interviews with the participants, or a combination of both of them. If observations are used, it may be wise to combine your own observations with observations by others in order to prevent suspicions of partiality.

- *How do I analyze the data?*

Data should be analyzed after the intervention has been carried out, and should compare the situation before and after the intervention.

What kind of conclusions can I expect, and how do I report them?
The conclusions you may expect are conclusions about the effect of the intervention. Reporting may be done verbally, preferably with very concrete reference to the observations or interviews (direct quotations) on which the conclusions are based.

Are there specific things I should be aware of when I choose intervention research?
In this type of research you assess – or even measure - the effect of an intervention. This means you try to establish a chain of causality: because I did an intervention, the situation changed. The basis for those kinds of effect assessments/measurements are always disputable: how do you know the change you have observed or interviewees have reported are really an effect of the intervention? If done at all (see also the remarks about the Experiment in Information Leaflet 9), the conclusions of this type of research are best expressed in terms of plausibility and likelihood, and should be connected to a robust corpus of literature which may support your claims.
Because the intervention is meant to solve a perceived 'problem', ethical questions in this type of research may become very important.

RESEARCH INFORMATION LEAFLETS 4: DESIGN RESEARCH

What is design research?
Design research is a form of research in which you design a product or process.

For which kind of research problems do I use design research?
You use design research if you feel that, as a musician, you may design a product or process that may help for example other musicians in doing their work. Design research is often carried out in educational settings where, for example, educational material for a specific goals is designed.

What kind of research questions might be used in design research?
How can I design a website that helps non-native Russian speakers with the pronunciation and interpretation of Russian song lyrics?

How does the research design in design research look like?

- *What kind of data do I use and how do I collect them?*

Design research is a which overall has four phases: an analytical phase, a development phase, a test phase, and a reflective phase. Each phase works with its own set of data. In the analytical phase, data must be gathered about the situation the design is meant for and the wishes of the users of the design. In the development phase leading to a design (prototype), it is wise to keep track of the development process by for example storing consecutive concepts. In the test phase, data must be gathered about what works and what doesn't work. In the reflective phase, decisions are taken about possible refinement of the prototype. The process may then start again – design research may have the form of a spiral.

- *How do I analyze the data?*

As each phase has its own dataset, analysis in each phase is different. Important is that each phase is concluded before the next phase is entered, and that data are analyzed with the goal of making an optimal prototype.

What kind of conclusions can I expect, and how do I report them?
You may on the basis of design research conclude whether a design has fulfilled its purposes – whether it worked in the specific circumstances it was developed for; and also whether refinements in the prototype led to a better working design. Some caution in the second type of conclusions must be maintained given the fact that cause/effect-chains are always hard to proof.

Are there specific things I should be aware of when I choose design research?
Proper design research takes time, especially when the research project not only develops a first prototype but also tries to evaluate it by testing it several times. Careful planning and sticking to deadlines is crucial. And never forget the analytical phase; it is of utmost importance to know exactly for whom and for which situation you are designing for.

RESEARCH INFORMATION LEAFLETS 5: ETHNOGRAPHIC RESEARCH

What is ethnographic research?
Ethnographic research is a form of research in which you try to figure out how a group of people (or even an individual) looks at the world, or at an aspect of the world such as, for example, music.

For which kind of research problems do I use ethnographic research?
Ethnographic research may be used when you are curious how other people than yourself understand the (musical) world they live in.

What kind of research questions might be used in ethnographic research?
What are the images and ideas Moroccan migrants in the Netherlands have about western classical music?

How does the research design in artistic ethnographic look like?

- *What kind of data do I use and how do I collect them?*

Ethnographic research uses three sorts of data: observations (caught in field notes), interviews (recorded on audio or video), and documents. Observation is usually done in the form of participant observation, meaning that the researcher not only observes the group studied but actually participates in their everyday activities.

- *How do I analyze the data?*

Analysis of ethnographic data is usually done by a form of 'close reading' of the gathered data and a process called 'coding'. Analysis can either be done afterwards, strictly separated from the data gathering phase, but is usually done while gathering the data (it then coincides with what is called a 'grounded theory' approach).

What kind of conclusions can I expect, and how do I report them?
Ethnographic research may give a detailed insight into the world views of other people. Reports often contain many direct quotations from the data in order to give evidence.

Are there specific things I should be aware of when I choose ethnographic research?
As the analysis of ethnographic data is time-consuming, careful planning is essential. Specifically in participant observation, the researcher is in a sense his own research tool, which requires a fair dose of self-reflection from the researcher.

RESEARCH INFORMATION LEAFLETS 6: CASE STUDY

What is a case study?
A case study is a thorough and detailed description of a specific 'case' (a musician for example; or a performance) in order to learn from that case.

For which kind of research problems do I use case study research?
You may use case study research if you think that a specific question you have may be answered by studying a situation or person you think may serve as a strong example.

What kind of research questions might be used in case study research?
What happens in a workshops series where musicians work with people with dementia and their carers as given in the Music for Life-project in London?

How does the research design of a case study look like?

- *What kind of data do I use and how do I collect them?*

Data to be used are data which help to give a detailed description of the case: video and audio recordings, observations, interviews with participants in the case, logbooks and/or reflective diaries of participants, and existing documents belonging to the case may all be gathered.

- *How do I analyze the data?*

The different types of data are all meant to contribute to an integral picture of the case. Therefore, it is crucial that different types of data are not analyzed I isolation but that they are treated as related to each other. The eventual case description must, on the basis of very different data, give a unified picture which takes all the data into account.

What kind of conclusions can I expect, and how do I report them?
The result of a case study is an in-depth description of a specific case, which may give rise to reflections about the relevance of the case for your own professional practice. The description should be reported in a way that makes the description vivid; a feeling for details and direct quotations as well as pictures or audio-visual elements reinforce the description of the case.

Are there specific things I should be aware of when I choose case study research?
Because many different data may be used, it is often unclear 'where to begin'. Also, there is the danger of 'data overload': so many data are gathered that analysis becomes virtually impossible. A careful choice of the types and amount of data is crucial.

RESEARCH INFORMATION LEAFLETS 7: SURVEY RESEARCH

What is survey research?
Survey research is a form of research in which you try to figure out what people think of a specific topic by gathering answers from a large amount of individuals to specific questions.

For which kind of research problems do I use survey research?
You may use survey research if it is necessary to know what other people (for example the members of your possible audience) feel or think about a certain topic.

What kind of research questions might be used in survey research?
Is there a difference in appreciation between younger and older audience members of the classical chamber music concerts as organized by the Groningsche Muziekvereeniging GMV?

How does the research design in survey research look like?

- *What kind of data do I use and how do I collect them?*

Data used are usually relatively straightforward: answers to specific questions (often closed questions) either written down in a questionnaire or given in a structured interview.

- *How do I analyze the data?*

Data analysis is strictly separated from data gathering; first all the data are gathered, than the analysis takes place. Usually data are analyzed quantitatively, that is by counting; often they lead to conclusions about percentages of the sample of interviewees that gave a specific type of answer.

What kind of conclusions can I expect, and how do I report them?
Survey research may lead to conclusions about how often certain answers are given within the sample of interviewees.

Are there specific things I should be aware of when I choose survey research?
The preparatory phase of survey research is extremely important and may cost much time. Construction of the questionnaire/interview instruction as well as testing them thoroughly are necessary to do good survey research. Another specific point is the selection of interviewees: usually they should function as representatives of a broader group in society, which requires careful selection.

RESEARCH INFORMATION LEAFLETS 8: MUSICOLOGICAL RESEARCH

What is musicological research?
Although 'musicology' is a discipline which may contain any form of research, in this leaflet we **C**onsider musicological research as research into the history of theory or music.

For which kind of research problems do I use musicological research?
You may use musicological research if you feel that an in-depth study of the history or theory of music may lead to knowledge and insights which will enrich for example your and other musicians' performance practice.

What kind of research questions might be used in musicological research?
What are the differences and commonalities in repertoires of music described as 'Greek-Cypriotic' and 'Turkish-Cypriotic'?

How does the research design in musicological research look like?

- *What kind of data do I use and how do I collect them?*

Data used are usually pieces of musical repertoire as well as documents shedding light on them: interviews with composers or musicians, letters, articles, liner notes or books written by them, statements from contemporaries, et cetera.

- *How do I analyze the data?*

In historical musicology, different historical sources are read as documents reflecting the opinions of the time and place where they originated, which requires extensive historical and cultural sensitivity. In theoretical musicology, analysis usually is rooted in a specific analytical school (Schenkerian for example for tonal classical music, or modal harmony in jazz.

What kind of conclusions can I expect, and how do I report them?
Musicological research may lead to new insights into the history of music or the musical construction of pieces, which may inform your performance practice. Reporting is usually done in writing with extensive reference to either scores and/or audio-visual examples.

Are there specific things I should be aware of when I choose musicological research?
Musicological research is a specialism which is sometimes carried out detached from performance practice, so always keep an eye on the practical relevance of your findings.

RESEARCH INFORMATION LEAFLETS 9: EXPERIMENTAL RESEARCH

What is experimental research?
Experimental research is a form of research in which you carry out an experiment in order to figure out 'what causes what'.

For which kind of research problems do I use experimental research?
You may use experimental research if you have a very specific idea - hypothesis - about causes and effects in music, based on an available scientific theory, and you want to test that idea.

What kind of research questions might be used in experimental research?
Does listening to classical music in school breaks make young children between the age of 6 and 9 more concentrated in school?

How does the research design in experimental research look like?

- *What kind of data do I use and how do I collect them?*

Usually the data you gather in experimental research are some sort of quantitative data. They will be gathered in an experiment that is set up specifically to gather the data (unless data are gathered in a real-life situation which might be considered as an experiment, the so-called quasi-experiment or natural experiment).

- *How do I analyze the data?*

In experimental research, quantitative data analysis based on (sometimes advanced) statistics are common.

What kind of conclusions can I expect, and how do I report them?
Conclusions in experimental research usually take the form of the rejection or supporting of a hypothesis which is derived from a theory.

Are there specific things I should be aware of when I choose experimental research?
Experimental research basically describes the world in terms of causal chains, modelled on the paradigm of the natural sciences. If one is ready to accept such a paradigm, it may be good to remember that causes and effects in human life are often 'likelihoods' rather than 'laws of nature'. Experimental research is a refined form of research which requires a very strict research design with a very explicit theoretical and conceptual framework. Statistical analysis usually is an important part of the research process. Experimental research often studies singled out elements in (quasi-) laboratoire situations, which may make the relation of its findings to real-world situations problematic.