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# DUAL FOCUS ON STUDY TRIPS

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#### ABSTRACT

In a time of increased demands for documented learning and increased requirements for accreditation of educations based on research, it is unfortunate that the numerous registrations and experiences connected to study trips are not used to disseminate the latest knowledge and to support research findings to a greater extent. Field study instructions for registration within architecture and design, which we are currently developing, specify a didactic grip, structure the collected material and link recorded observations to testing methods. Moreover, the instructions prepare the ground for reflections or analyses and dissemination of observations. The field study instructions are designed in a manner that enables them to deal with current professional issues and thereby contribute to the collection of the latest knowledge. The aim is that the presentation of this knowledge and the gained experience will be of such quality that professionals can benefit from registration when starting up projects. Study trip reports may thus provide a basis for sponsor support. This study looks at the possibilities inherent in study trips, both as a teaching tool and as a tool for gathering knowledge. In this context, the tests of field study instructions have identified that some instructions are appropriate for implementing registrations in connection with study trips, and that some are not.

Keywords: Study trip, research trip, registration, design, architecture

#### **1** INTRODUCTION

Study trips, which are activities in university educations, have some well-defined professional goals and ought to be research related. The goal may be that after the study trip, the students should be able to demonstrate a frame of reference within the fields of contemporary architecture and design based on selected works observed on site. Furthermore, they should be able to demonstrate an understanding of selected works of aesthetic and technical qualities, as well as the development of a given work and its social significance. Well-defined study instructions, specified registrations to be performed during the study trip, and requirements to reporting jointly constitute an opportunity for knowledge production. Such reporting is seen when study trips are integrated into the semester course package as for example in the Background for architectural engineering [1]. Research is related to the study trip through courses which demonstrate and train the students' ability to decode works and apply theoretical principles in practice in connection with their reporting. The present investigation is based on study trips carried out through quite different conditions. The subject matter consists of study trips offered as free study activities not directly attached to the mandatory courses of the education. The free study activities have been characterised by clear learning goals, but it has been more or less up to the students themselves to decide if they would only gain knowledge on selected topics or if they would gain competence in for example exploring the development of a work or its social significance. The research link has been limited to the teacher's communication of research results related to the study tour activities.

In spite of the voluntary nature of these trips, most students make registrations, especially sketches and photo records, both in connection with the programmed activities and when they experience the site on their own. This, often extensive material, represents knowledge more or less shared among all the participants, and it represents a large, untapped potential for acquiring new, non-trivial knowledge, and that is a shame. Students and graduates refer to study trips in their curriculum vitae without being able to prove a real professional output. Therefore, the student has an interest in study trips resulting in knowledge production in which the professional designers and architects are able to perceive value. From a didactic as well as a research point of view, it is frustrating that many registrations are not even

arranged in the form of a common mind map formation of file folders. Core organisation: goal/field of the trip, topics: activities/visits, and problems: problematisation plus a field study instruction [2]. The electronic means have not made the recovery less problematic. In the present study, a mind map file system is also viewed as an association tree for the development of the field study instructions described in the section of the same name.

# 2 FIELD STUDY INSTRUCTIONS

Inspired by the study trip with a research approach (see template 5 below), we tested visit recoding during a trip to Berlin in 2008 in order to find out if this approach could provide educational knowledge. This resulted in new knowledge about the ecological production of textiles and about a design process with a completely different organisation than we were familiar with. Additionally, we gained knowledge about a conflict between a city's population groups, which must be taken into account when designing for the public.

Based on the foregoing considerations and the experiences from the study trip in 2008, we formulated the following initial problem: How can we combine design research with an improved didactic approach during a thematic study trip?

It is generally known that the didactic yield increases significantly when the participants try out professional methods and analyses, reflect on and present a part of the collected material. The problem can thus be limited to: Which methods are suitable both as eye openers with regards to professional issues, structuring the collected material, and serving as a base for design research?

Based on known professional registration methods such as Svend Hesselgren's [6], Jan Gehl's [7] and Martin Helander's [8] methods, we investigated whether it was possible to give the methods a compact form tailored to study tour activities. This meant that the registrations should be carried out within 4-8 hours, depending on whether they were to be combined with company or museum visits or city walks. Specifically, it meant that in groups of 2-3, the participants were given field study instructions containing:

- a list of the paraphernalia necessary for the field study,
- a focus area with a corresponding description of the registration method,
- a theoretical basis for analyses of or reflections on the recording of data,
- a layout template for the preparation of their contribution to the final travel report data sheet.

The field study instructions were tailored to the main themes, activities and location of the study tour. The framework for the study trip in this investigation is a one week trip abroad, 2 ECTS, approx. 40 students and the locality of Berlin. For this reason, the participants should be able to use transport, and, respectively, to be aware of the instructions and background material and to analyse and layout results on the way home. The participants are attending a multidisciplinary 5th semester with the subject areas architecture, digital, industrial, and urban design all represented. The study trip has a dual focus equivalent to template 2, plus a focus on field studies. The general participation in study trips is between 50% and 90% of a semester's students. Students at our education are encouraged to participate in 4 to 6 study trips during their civil engineering education. The project preparatory study trips (see template 3 below) have the greatest attendance. Therefore, we may ask if the students find the learning value of this particular study tour adequate in relation to the spare time they spend earning money to cover transport and accommodation.

The study trip has some social features such as a final night party. It is therefore not a good idea to plan a registration on the last day of the trip. For the same reason, many students prefer to complete their data sheets after returning home.

# **3 TEMPLATES FOR STUDY TRIPS**

The Academy of Fine Arts has a long tradition for including study tips in architecture and design educations with an 'observation and registration methodical approach' [3]. Some of the university studies have similar traditions; one example hereof is the Copenhagen Business School (CBS) which arranges study trips focusing on international business economics and law within the fields of market economy and foreign trade. The purpose of CBS' study tours is to deepen an investigation area and to illustrate a number of theories brought into practice. The authors have participated in such a trip to Spain [4]. The Technical University of Denmark (DTU) provides a *Study tour to a large construction project* [5] with a focus on professional traditions and the cultural influence on the implementation of

selected projects. Based on contacts to related educations, the following templates for study trips have been outlined:

1. <u>Observation and registration methodical approach</u>: this involves concentrated work periods at typical locations where the participants depict the relationships between buildings/design, terrain, textures, colours, shadows etc. Registration methods: sketching, colouring, manufacturing textured imprints (frottage), measurement and also studies of materials and structures, as well as analyses of design principles in terms of product archetypes, proportions, compositions etc.

2. <u>Design and architecture, historical approach:</u> this involves working groups searching relevant source material for information about the background of the formation of the project/artefact, political and social intervention in the project during its realisation, and, in connection with old artefacts, their development, for example from salt to bath or from administrative headquarters to hostel. The working group makes a thematic breakdown of the source material and prepares a short presentation of each artefact, which is experienced on site, as part of an exhibition, or at a museum. All presentations are collected in the study tour guide with a preface, which presents the selected themes related to the contemporary historical context. Experiencing the artefacts firsthand and the ensuing professional discussions make up the core content of the study trip.

3. <u>Project based approach</u>: this involves the participant examining a series of projects addressing a range of issues similar to the problems the students themselves are going to deal with. I.e. the study trip begins with the participant identifying the state of the art through literature studies. The gathered material is put together in a single compendium. The focus during such trips is to discover and explore the projects studied in context in order to determine the conditions or problems that must be taken into consideration in the project. Architectural firms and advisory authorities are also visited; partly to uncover the design process, and partly to gain insight into the latest developments in the field. The Danish authorities and architectural firms such as Mangaard & Nagel carry out similar study trips. The aim of the study tour is to secure that the problems the students are treating in their own projects are consistent with the state of the art; not only in relation to literature but also in terms of international practice.

4. <u>Ethnographic approach</u>: this implies a focus on population, lifestyle and/or their artistic or crafting skills. The study trip may include ethnographic studies as preparation for designing products that can improve local livelihood (e.g. rolling drinking water barrels for transporting drinking water). The ethnographic studies can alternatively be made to improve a population's revenue base, for example by creating sales channels for products people can produce themselves for export. The local population's targets are decoded and the participants help by developing concepts that exploit its artistic skills or materials such as coir crafts (e.g. jewellery or rugs).

<u>5. Research approach</u>: this implies that a research project defines both the theme of the trip and a framework for observations or interviews to be completed in connection with the trip's activities. During the preparation of the observations or visit reports, the students gain insight into the practices associated with research in this field and the latest theories pertaining to the research area. The activities of the study trip contribute to exemplify the mentioned problems. In relation to research, the collected material is often used either to illustrate that the research problems tackled are real or to substantiate the theories used in the research project.

The first three templates follow the progression of architecture and design educations. At the same time, they present tours with different perspectives; each with its own learning goals. In the first study trip, registrations are subject to assessment. Study trips can be combined with drawing courses or a workshop on location. Thus, two free study activities have actually been combined.

The study tours following templates 2 and 3 have both been evaluated through an examination involving group presentations of background material and extracts from relevant research results – in practice often processed in the bus between the activities.

In terms of design research, this does not contribute any new knowledge. If the participants were divided into teams during parts of the trip, this was followed by meetings where the students presented their findings to each other.

Currently, study trips with the ethnographic approach do not seem to be in use as templates for trips for large groups. By contrast, enterprising students have created the website www.innoaid.org as a meeting place for students who want to participate in an ethnographic research trip together with students from e.g. social science, design, environment and/or architecture. According to Associate Professor Hanne Lindegaard (DTU), design students at Design & Innovation have conducted ethnographic study trips in 3<sup>rd</sup> world countries as a part of semester projects by participating in interdisciplinary study trips, collaborating with other students they have met through InnoAid. On the other hand, study trips following templates 3-5 could potentially contribute to research design since their format is similar to that of research trips organised by professional architects, designers and researchers. The biggest difference is the way the reporting is planned and implemented.



Figure 1. Example of photo records street furniture. Recorded by Kirstine Reese, Ann Sofie Grimshave Christensen and Helene Lassen Nørlem

# 4 INVESTIGATION OF THE USEFULNESS OF FIELD STUDY INSTRUCTIONS

The trip with field study instructions involves testing particular theories of phenomenology and semiotics in the analyses of artefacts. The study tour guide and program for the trip establish the field of study. The study tour guide describes the theme, presents the activities/objects of study and gives practical information, such as accommodation, dress code and local transport. The program outlines the plan for visits and other activities, addresses and contact persons.

The program and study tour guide were determined by the teachers. However, a few students participated in the editorial work. The participants were handed a set of field study instructions. The field study instructions were carried out at selected locations during the study tour. Data sheets for the common trip report were to be completed immediately after returning home. In relation to the mind map file structure, the core consisted of Berlin's development after the Wall came down. Mind map file system topics corresponding to the keywords are underlined in the list of instructions. During the study trip to Berlin in October 2009, field study instructions with the following topics were tested:

- 1. Summaries of architectural drawing office visits,
- 2. Recording and analyses of *idioms* and colour schemes [6],
- 3. Functional building envelopes,
- 4. The city's street furniture Design for All, see Figure 1 [7],
- 5. Ergonomic studies of products [8],
- 6. <u>Semiotic movement</u> recording and analysis [9],
- 7. Investigation of a museum's <u>interactive computer</u> program,
- 8. <u>Semiotic</u> analyses of selected museum <u>objects</u>, see Figure 2 [10],
- 9. Decoding of development trends

Field studies dealing with problems bordering other disciplines:

- 10. Guards and temporary access roads,
- 11. Female identity in modern architecture [11],
- 12. Integration of arts into a part of the town [12].

The present study has further emphasised that some of the field study instructions are experimental/provocative in terms of investigation methods and subjects alike in order to provide impetus for creative solutions and ideas for new research methods.



Figure 2. Example of records products: Plopp by HAY, Toot-a-Loop by Panasonic and Phono boy fra Grundig. Recorded by Søren Nørby, Sofie Holmgaard and Sara Clement

### 5 THE FINDINGS

Field Study instructions no. 2, 3, 4, 6, 8, 10, 11 and 12 resulted in the data sheet, which fully met the expectations in relation to the time allocated for implementation. Since semiotics is introduced in a lecture before the trip, it is not surprising that the responses to number 6 and 8 were really good. On the other hand, also number 10 and 11 were among the best, which indicates that the slightly different themes have motivated the students. In contrast to the study trip in 2008, during the trip in 2009 we visited a drawing office owned by German designers/architects. It did not give rise to new knowledge, unlike visits to the Danish-owned architectural firms the year before. This may be due to the fact that foreigners need to examine the working conditions and find their own niche.

In connection with the ergonomic studies of the products, the framework of the trip did not allow us to involve users from the products' target groups. It was found that the instruction could provide a basis for practical experience with the method, but the ergonomic studies gave no new knowledge.

Only the field study instructions concerning the purpose of interactive computer programs and user interface turned out to have a much more limited inquiry basis than expected. This type of program was not as widespread in German museums as in Danish museums where both adults and children are increasingly activated by means of such programs. The art museum Arken [13] runs a discussion program for adults, and at www.Trapholt.dk 'family narratives' the art museum Trapholt runs a program which aims at enhancing the opportunities for children and adults to experience art together [14]. Deutsches Technikmuseum Berlin, however, could offer an interactive computer program on a machine that also has Braille characters and a moving reading mesh with answers Braille signs. The computer program could both answer questions and give directions to the exhibits.

The social aspects of the study trip must be considered in relation to the fact that four specialisations participate in the tours. Because the study trips contain both common and discipline-specific activities, the working groups consisted of 2-3 students from the same specialisation, but not from the same semester project groups. This was firstly because in the project teams there are about 5-6 people, which is too much, and secondly because the project semester groups are very differently represented on the trip, from a single student to an entire group. In two cases, this resulted in problems in terms of implementing instructions.

The field study instruction that was directly related to research in the start-up phase was instruction no. 12 on integrating art into city neighbourhoods. Herein, the opportunities to build a part of the study on existing work placements rather than on the integration process was probed. The model was shown not to be precise enough to be able to provide answers to the questions raised.

The field study instructions have also resulted in data sheets which demonstrate that the learning objectives of the study trip are achieved. The clarification of the focus areas, which are either extensions of or included in the main themes of the study tour, can provide the desired double effect since instructions 10-12 seemed to serve as eye-openers for new observation perspectives.

# 6 PERSPECTIVES

The site has usually not been visited previously, and therefore we took into account that there could be situations without testing foundation adequate for individual field study instructions. Consequently, the set contains extra, as of yet, untested instructions, which we look forward to testing during future

study trips. The mind map file system will also be subject to testing on the next study tour. The present study results also provide a basis for developing an actual design research study tour analogous to template no. 5.

Based on the experiences we have gained, we are currently in the process of establishing standards for specific design research areas in an effort to alleviate the burden of developing future field study instructions. The study trip report from 2009 will be used in an attempt to seek sponsor support to cover some of the students' travel expenses as travel costs have had a big impact on the choice of destinations.

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