Leo Gürtler,
Mechthild Kiegelmann
and
Günter L. Huber
(Eds.)

Areas of Qualitative Psychology - Special Focus on Design

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Content

Introduction and Overview[1]

Leo Gürtler and Silke-Birgitta Gahleitner

This report note reviews the fourth annual meeting of *Qualitative Psychology* in Blaubeuren (near Ulm, Germany) Oct., 22-24, 2003 organized by the Center for Qualitative Psychology (Tübingen, Germany). The question of *Research Design* was chosen as the central topic of the conference. Researchers from different professions took part. The range of experience of the participants was very heterogeneous: Beginning with young researchers, different levels of expertise were represented (up to and including very experienced scholars and researchers). Participants also came from different countries. The main work was done in small working groups. In these groups each study and its outcome(s) was critically discussed and remarked upon. Plenum lectures were also held, in which selected experts presented their thoughts on the central topic — research design. The following report gives a brief summary of those studies presented at the workshop, however, two of them are unfortunately not in this volume. An attempt is also undertaken to evaluate the findings and the workshop as a whole in the context of the development of qualitative research in psychology.

Overview

The 2003 conference focused on the design of qualitative research, in particular, and the design of research, in general. All contributions were based on participants' thoughts and arguments about the decisions they made in regard to the designs of their studies.

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[1] This introduction is a modified version of Leo Gürtler and Silke-Birgitta Gahleitner's (2004, August) publication: Conference Report: Fourth Annual Meeting of Qualitative Psychology. "Areas of Qualitative Psychology — Special Focus on Design" [30 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research* [On-line Journal], *5*(3), Art. 31. Available at: http://www.qualitative-research.net/fqs-texte/3-04/04-3-31-e.htm [Date of access: 24, Sept. 2004].

These decisions were made for personal reasons, for reasons
related to the research questions, or were restricted by the circum-
stances of their fields of research. To demonstrate design
structures developed by experts, three plenum presentations and
discussions were held at the beginning, in the middle and at the
end of the conference. These sessions were organized by experts
in order to foster an understanding of professional decision
making in the process of designing qualitative psychological re-
search. The experts were in charge were: (a) Jarg Bergold, (b)
Günter L. Huber and Mechthild Kiegelmann, and (c) Thomas
Burkart, Gerhard Kleining, and Harald Witt.

Working groups in which participants were given the
opportunity to present their work and to discuss critical questions
as well as getting appropriate feedback were held between these
sessions. Three plenum discussions shifted the focus to different
fields of interest. Jarg Bergold opened with some fundamental
thoughts about professional decision making, supported by a
review of the literature. Kiegelmann and Huber concentrated
mainly on promoting discussion between the conference members
and emphasized the need to use a circular approach to optimize
the research. Kleining, Burkart and Witt focused attention on a
theory of feeling (Burkart) — including criticism of the develop-
ment and basic assumptions of that theory (Witt). Finally, Klei-
ning explored and illustrated his method of a qualitative-heuristic
approach to theory building.

Design in Qualitative Psychology: Differential Approaches, Entries, and Accesses

At the workshop, Bergold gave an introductory presentation on
qualitative research in community psychology ("Community psy-
chology, qualitative research designs, and decision making;" see
also Bergold 2003). In qualitative research, in contrast to quanti-
tative research, it is not possible to determine a fixed design in
advance. However, it is advisable to consider typical problems
that may arise in advance. Bergold began by noting the basic
characteristics of community psychology; which claims to be
holistic and multi-perspectivist, to view individuals as embedded
in their respective contexts and environments, to be true to life
and every-day happenings and to stimulate empowerment pro-
cesses for and with the participation of its research participants.
Thus, "gaining access to the field" is particularly important to
work out the purpose of the study in question. In Bergold's view,

research is always simultaneously an intervention, and people may therefore understandably react defensively to it. Thus, the issue is, to quote Denzin (1989, p.48): "How to capture the phenomenon?" Here the search for suitable stakeholders is of major importance, likewise the careful selection of certain research strategies for sampling, data collection, and analysis. These strategies are used to incorporate research participants, e.g. participative strategies. In the optimal strategy the researcher passes through a cycle from foreign applicant to newcomer, then to being a trainee, coworker and arriving finally as a source of information and advisor. However, in order to be able to advance through this cycle in an optimal manner, researchers must constantly remain self-reflective in their dealings with the respective contexts. In fact, the research relationship is not symmetrical. It is thus always important to include the research participants' subjective views by means of dialogue and to use them to contextualize the results. However, it cannot be taken for granted that the research will offer something to the social system. In sum, Bergold concluded that we need more studies like "The Jobless of Marienthal" (Jahoda, Lazarsfeld & Zeisel, 1975), i.e. complex, involved, and empowerment-oriented research.

Huber and Kiegelmann emphasize in their contribution in this volume on "Design in qualitative psychology" the circular nature and non-linearity of the whole research process. Dividing the research process into three main parts leads to the following process elements: (1) exploration, (2) explication, and (3) application. Further possibilities to differentiate the various research phases into further components are important aspects of adapting the research design to the actual surroundings and conditions. Non-linearity describes an experience every researcher herself or himself is confronted with from time to time: i.e., some change occurs during the research which affects the (whole) design in some way or the other. As a consequence, research activities have to be adjusted, repeated, or altered. Another aspect of non-linearity points to the change an initial research question undergoes by integrating various perspectives in the midst of planning, explicating, and formulating hypotheses.

Interestingly, this process model claims not only to describe the qualitative design, but also quantitative approaches (maybe with some restrictions at selected steps). Both authors explain that multiple qualitative decisions have to be made as quantitative research is designed. A more extreme provocation would subsume the quantitative model as a subsection of the qualitative one.

Kleining, Burkart and Witt address the question of "How to develop theory from data – toward a theory of feeling." Kleining ("The qualitative-heuristic approach to theory;" see also Kleining & Witt 2000) emphasize that theory development within the qualitative-heuristic methodology is a dialectic process. Kleining's procedure always begins with the collection of data, not with a hypothesis about possible results. The researcher should be as open as possible to approaches other than the ones considered to be most plausible at the outset. The data also should be most varied and most different from each other (Rule 3 on maximal structural variation of perspectives) to find out the similarities within the differences (Rule 4 on analysis toward similarities). This procedure shows the structure of the data or reveals a pattern and will gradually produce a theory, a concept abstracted from a wide range of data and reflecting it. However, in Kleining's view, the theory is only valid within the range of the data used for its construction. There are no universal theories in the human sciences because all human relations are social and in a process of change. However, they may be valid for a certain societal, temporal and spatial situation.

Burkart ("Towards a Theory of Feeling") demonstrates this process in an ongoing qualitative heuristic study on emotional experience. Burkart points out that the research is comprised of a study on the experience of actual feelings in everyday life, carried out using the method of group-based dialogic introspection. It contains a qualitative exploration of descriptions of feelings by psychotherapeutic patients. It also includes a content-analysis of characteristic terms and expressions of feeling, gathered in everyday life and in dictionaries. Personal introspection data — detailed notes taken shortly after the self-observation of a process of feelings — are also included. Burkart reports that the results demonstrate feeling as an integral system of body-related evaluation, motivation and communication. Feelings reflect the situation of the person integrally in relation to current expectations, goals and needs. Burkart cites Damasio's (1994) theory of somatic markers to explicate the role of body sensations as a source of emotions and actions. In Burkart's view, feelings motivate actions by changing the person's bodily and mental state, by preparing action or by eliciting impulses to act. Thus, feelings also have a communicative function. The evaluative, motivational, and communicative functions of feeling should be realized by a more or less intense transformation of experience of self and world.

Witt ("Evaluation of the approach — a comparison of methodologies") analyzes theory building in emotional psychology and

compares it with the qualitative-heuristic approach. He begins by questioning Burkart's theory of feeling. As a starting point, common knowledge and results about emotions and feelings are used to formulate questions to establish if Burkart's theory is capable of explaining and forecasting the "hard facts." Major points of his argumentation include pointing out the very spontaneous nature of emotions, the different causes that can evoke the same emotion and the opposite case of the arousal of varying emotions as a consequence of the same situation. He explicates further points of discussion, which include a description the characteristics of emotions (quality, intensity), the appropriateness of the fit of situation and feelings and (cognitive) appraisals. In evaluating Burkart's theory, Witt remarks that this approach represents a dynamic dialogical understanding of an ongoing flow of emotions which stands as a contrast to many well-known static oriented theoretical approaches. Some points (e.g., the spontaneous nature) can not be explained satisfactorily by Burkart's approach, but as Witt states, "that does not blame the theory, because it is a most difficult problem and I did not find a single theory which can explain this fact satisfyingly." Other questions Witt asks can be answered fully by Burkart's approach. (e.g. a continuous adaptation process adjusts and coordinates the relationship of situation and emotion to reach the cited fit between them).

Presentations in work groups

In six groups studies and research approaches were presented and critically discussed during the workshop. Since not all contributors found extra time to include the comments and to revise their papers, we introduce the papers published in this volume not in the context of work groups, but in alphabetical order:

Bischkopf ("The Application of a Grounded Theory-Based Research Design for Analyzing Caregiver Burden: How to Increase the Specificity of Concepts") draws attention to the area of conflict between specificity and abstraction in grounded theory. To demonstrate the relevance and implications of this question, the discussion is based on a research design used to analyze caregiver burden and coping strategies among depressed patients' spouses. As might be expected, one possible solution can be found between the two poles, i.e. in a compromise enhanced by the application of thought experiments (by researchers in a different social context) and dialectical investigation of the pheno-

menon. On the other hand, this also means integrating quantitative and qualitative methodologies to achieve a good fit between specificity and generalization and between grounding and the application of pre-existing conceptual and theoretical frameworks.

Domínguez and Medina ("Qualitative Research in Intercultural Processes in the Fields of Geography and History in Secondary Education") examined the traditional disciplines of geography and history in secondary education in Spain. Here, a combination of questionnaire survey, dialogue-based group work, task analysis, and self-criticism were utilized. The underlying goal was to assess the relevance of several aspects of professionalization for professional teacher training. These aspects are mostly related to the self: self-development, personal (professional) identity, emotions, and knowledge (inter-cultural, multi-disciplinary). These aspects came as a result of doing research on teachers. They can be seen as key qualifications, and should help teachers to improve and apply their knowledge in classes The results of discussion groups comprised of people from five separate regions in Spain were explored.

Gahleitner ("Between Difference and Deconstruction: The Significance of the Open Qualitative Research Process for Gender Research") demonstrates the significance of the open qualitative research process for gender research by presenting a study on gender-sensitive therapy and counseling. Considering Nentwich's (not in this volume) insight that in research on the gender-"typical" aspects of a phenomenon we are in danger of reproducing gender duality, Gahleitner uses a research design in which the data are recoded by two additional coders to call the gender-"typical" perspective into question. She employs Hagemann-White's (1993; 1994) procedure in combination with Mayring's (2000) qualitative content analysis to achieve a gender sensitive content analysis of her data. Carol Hagemann-White (1994, pp. 301ff.) describes this procedure as a "systematic search for utterances that fall within the category of gender relevance." Presenting the results for two interviewees as an example, Gahleitner draws attention to the fact that therapeutic interventions aimed at helping men and women to come to terms with sexual abuse should be oriented towards gender-specific solutions. To be "successful," interventions may need to be directed at the coping strategies which are atypical for the client's sex and which have thus previously been less actively employed.

Gento, Domínguez and Medina ("The Axiological Bases of a New Curriculum Design") presented a model that arose from the idea of developing a framework of reference to evaluate insti-

tutional quality. Multiple contacts with teachers, headmasters, parents, and other professionals shaped the initial idea and supported a development towards a more realistic approach to evaluation. The methodological design includes both quantitative and qualitative elements. The qualitative part helps to formulate hypotheses for comparing and contrasting the elements of educational institutions' quality empirically. Contacts with experts and professionals were helpful in critically analyzing the proposal. The quantitative analysis used a questionnaire that was given to 3500 people (teachers, students, parents, school heads) from different countries. An important perspective derived from the critical focus of the study on transformation rather than elimination of current educational institutions. Gento ended his research report with a list of values to be promoted by education.

Gürtler ("Qualitative Video Analysis: Design of a Study on the Function of Humor in Teaching Discourses on Mindfulness") emphasized the benefit of understanding the substance of who or what we are investigating when designing qualitative research. Gürtler's research topic was teaching discourses of a ten day Vipassana-meditation retreat (http://www.dhamma.org/). Theoretical issues are explained by discourses. These are video-based and therefore highly standardized in each center worldwide. They were video-analyzed with AQUAD 6. His research question focused on the role of humor in these discourses. He argued that the humor can only be understood if the researcher knows the content of the discourses and the special demands of each day. Gürtler hypothesized that the best way to understand the function of humor was to analyze the seminar itself. If the process (demands of each day, difficulties, and curriculum) is understood, a comparison of how humor was used on each day would illustrate the ways humor fit into the unique characteristics of each day. Students learned different things on different days, and the humor — according to his thesis — reflected the content that was being taught. Without knowledge of this process and relationship a researcher cannot reconstruct humor or its constructive potential correctly.

Huber ("Qualitative Analysis "cis transcriptionae": Direct Processing of Sound and Video Data") showed new opportunities in computer-assisted qualitative analysis with AQUAD 6 (see http://www.aquad.de/). The main innovative feature of the new AQUAD 6 version is its ability to process audio-visual data directly without requiring them to be transcribed onto paper. Apart from the fact that transcription is a time consuming process, it also usually costs money and cannot always be done by the researcher

himself. S/he therefore needs to be able to read the transcript to be able to work on it. Now, with direct analysis data can be listened to or watched in their original form (if they are in the right computer compatible format), and memos can also be added for each sequence, and critical incidents can be transcribed if necessary. Huber listed the prerequisites for this analysis: .mp3 audio- or .avi videoformat, which is compressed and usually fits onto a conventional CD-ROM. To complete his presentation, Huber gave a brief introduction to audio-video based work with AQUAD 6, via beamer.

Huber ("Qualitative Methods in Evaluation") discussed evaluation from a qualitative point of view. Here, the outcome of evaluation is understood not only as a final (brief) summary which distinguishes between "good" and "bad," but rather as the monitoring of processes "on-the-fly." Process outcomes are also included in this evaluation procedure. Qualitative methods provide an opportunity to come into contact with participants and with the subjects to be evaluated. The qualitative pool provides many possibilities to do justice to the subject under evaluation. Consequently, the goal of evaluation can be not only to "evaluate," but to intervene as soon as possible to prevent failures.

Jeschke ("Addressing Self-Determination and Sexual Violence in Residential Institutions for Mentally Handicapped Young People") explored research on the process of dealing with sexual self-determination and sexualized violence of young people with mental disabilities in residential institutions. On the methodological side, her paper introduced an adaptation of "Global Analysis," a method of analysis developed by Böhm, Legewie and Muhr (1992) for gaining access to the field on a superficial, but topical level which she found highly suitable for the exploratory nature of the theme. The long-term goal is the development of a handbook for self-help for people with mental disabilities as well as for the staff working with them. The underlying model of assessment was also greatly influenced by and adapted from the ecological model of Bronfenbrenner (1979).

Lim and Ullrich ("Living with People with Disabilities: Perspectives of L'Arche Assistants") has continued her work on people with disabilities in a community in Australia called L'Arche. This time her interest was in establishing the views of assistants working there and the personal transformation they experienced (mostly on a spiritual level) as a result of their work with the disabled. This ranged from the motives and intentions to the actual experiences of assistants. As was to be expected, social interaction and personal relationships appeared to be important issues. Interestingly, this research was focused not only on well-

being, but also on spiritual aspects. Well-being pointed to the integration of people with disabilities and how they can cope with life within the community. But assistants' — as the helping people are called there — well-being has to be taken into account as well. The term spirituality referred to the bases of the community of L'Arche. The philosophy of L'Arche emphasizes a system of beliefs about the value of persons with disabilities, the importance of relationships, and a sense of community.

Maslo and Strods ("Code System Building for Qualitative Data Analysis for Pupils' Social- Cultural Learning Experiences: Research in an Open School Project in Latvia") contributed a study on innovative projects in Latvian education. The main focus of this "open school" project is on the socio-cultural experiences of students and their classroom organizations and learning contexts. A combination of quantitative and qualitative methodologies was used to evaluate these contexts. The aim was to conduct a longitudinal study in which data were collected to compare the characteristics of Latvian schools with those of schools in other European countries. Maslo and Strods also emphasized that self-evaluation by the schools is an important tool to foster the development there. Then, autonomy can be developed from the start of these long lasting changes.

Nentwich ("Researching Gender and Not Essentializing Sex: An Example for a Research Design;" not in this volume) emphasized that the challenge in research about gender is not to define the categories one wants to investigate before investigating them. Research about the social construction of gender needs to address the question as to how research can be designed to focus on social processes (gender) and not on the essentialized products of construction (sex). Nentwich therefore presented some basic implications of a social constructionist perspective and showed how she attempted to avoid essentializing sex in a study on the social construction of gender and gender equality. Nentwich used West and Zimmerman's (1987) concept of doing gender, i.e. she referred to the use of language and how accounts are used in an argument instead of focusing on practices in general. In the analysis of her data Nentwich examined how the overall question as to how gender, work, family, leadership and the dichotomies between men and women, work and family, subject and organizations are constructed.

Soini and Flynn ("The Importance of Emotion and Rhythm for Learning") emphasized the living nature of research subjects — in this case: students. Citing Whitehead (1929) they pointed out that students have to be involved with the subjects they study. If

this is not understood and taken into account, then education is reduced to "inert knowledge." If, however, it is taken into consideration, students become highly personally engaged in their learning. Both researchers presented results from longitudinal studies during which they had asked students to describe the situations in which they "really learned something." These situations occur when students can identify with or relate to the subject being taught; for example, if a subject shares an element which has some importance in the students' personal lives. The emotional experiences that result are also variable. Further critical characteristics of important learning situations were: time to reflect, the opportunity to consider and explore the ideas of others, and the opportunity for students to obtain feedback from professionals or experts working in their area of interest. Soini and Flynn explored these findings based on the assumption that learning has a rhythm and evolves in cycles.

Watzlawick ("Experiencing Sexual Orientation") talked about an online-survey on adolescents' development towards awareness of their sexual orientation. The internet as a tool offers much wider opportunities for doing research on taboos such as homosexuality and bisexuality than studies in the classroom. However, samples of internet surveys are mostly self-selected which results in bias and a concomitant lack of knowledge about distributions of characteristics in the population as a whole. Additionally, the requirement of having access to the internet (or not) restricts samples even further. Data were analyzed by various methods. One noteworthy result on the awareness of personal sexual identity indicates that the main concerns for heterosexual adolescents are their first love(s) and the longing for physical closeness, whereas homosexual and bisexual adolescents more often have to deal with doubts and worries. They also tend to remember feelings such as panic, desperation, and ambiguity. The results reveal the importance of providing information about sexual orientation as early as it is appropriate to these adolescents to ensure that their awakening sexuality is not a cause of anxiety or worry.

Discussion

Two noteworthy points were raised at this workshop. The first point concerns the application of so called "mixed methods." One might think that the use of mixed methodology was influenced by the "Zeitgeist"; i.e. that it is compatible with the mainstream of a given social or professional context. It can be questioned whether

mixed methodologies are in fact used or not. To judge by the various studies reviewed this is not the case. Many researchers (e.g. Bischkopf, Watzlawick, Domínguez and Medina) emphasized the important role of this "new" paradigm in social research. Moreover, it would seem short-sighted to evaluate research on the basis of knowledge about the instruments used alone. Rather, it is our view that the use of methods depends on the research question and not vice versa — although one might find oneself investigating issues for which no suitable methodological instruments or data analysis procedures yet exist. But this is another matter.

A second point of interest addressed was the field of sexual identity, sexual violence and abuse, especially in the context of disadvantaged groups and minorities (see, for example, Gahleitner, Jeschke, and Watzlawick). These important issues also still seem to be taboo and an unresolved problem in our society (and perhaps also in some areas of social research). This taboo could be viewed as being still as important as the confrontation with death and dying that were the root topics of the grounded theory approach. Thus it is even more important that these issues should gradually rise to the surface in research to allow the development of a large knowledge base on which professionals working in various fields of applied psychology and social work can draw. Gender research is also confronted with a specific methodological problem: if we focus too strongly on the duality of gender we risk reifying the binary system and thus contributing to its construction. The question as to what research methods can be used to deconstruct and reconstruct gender roles in a suitable design has not yet been adequately resolved. This remains a task for future research on gender-specific topics to solve.

To return to the subject of design in social research, the different approaches presented brought to our awareness how different individual fields and subjects of research are and also how difficult it is to realize the principles of qualitative research in a manner that both fits the issue under investigation and is process-oriented, while at all times remaining open for revisions and corrections. Doing qualitative research in community psychology is fundamentally different from doing it in the fields of education, or the psychology of gender. All researchers need to consider in the initial stages of their research what type of insight they are hoping to achieve, what basic conditions they will be confronted with in their chosen field and how they can or must proceed in order to meet the criteria as best they can. They should also need to remember the importance of ethical issues

when selecting research questions (cf. Gürtler 2003; Gahleitner 2002, 2003). It seems that the variance within the approaches of different schools is sometimes bigger than the variance between them. Coming back to the question of methodology and epistemology, the differences in the various fields of qualitative research are a rich source which can be exploited to foster the development of the field as a whole. And that is good. Other-wise, the discussion would lose its effect and the evolution would come to a halt. But this is true not only for structural questions such as preparing a design or using various kinds of methods. As can be seen from the discussion on ethics above, it is more important in relation to issues that have great impact not only on the small sections of society — scientists, even psychologists — but on people's lives in general. Taboos such as sexual abuse, sexuality in general, or death and dying, are only taboos as long as people fear the confrontation with that part of our reality. And we believe that these are fields in which qualitative research can contribute, not only to academic wisdom and achievement, but also, and more importantly, to the enhancement of life itself.

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Design in Qualitative Psychology

Mechthild Kiegelmann and Günter L. Huber

Consideration of questions about how to design a qualitative study are the general topic of this workshop. We would like to structure the discussion of these various questions by outlining typical phases in the process of a qualitative study. Particular aspects of design will be marked as characteristics of these phases. However, we should be aware that these phases do not follow a linear sequence – neither in qualitative nor in quantitative research. Rather, design activities at large usually follow a cyclic path. The specific processes of qualitative analysis are cyclic as well. In addition, during every phase a researcher may be looking back and forward, thus engaging part of the time in activities characterizing other phases of the research process. As a possible consequence, research activities may have to be adjusted, repeated, or altered.

The place of design in the research process

Usually the research process is divided into three main phases: (1) exploration of a problem, (2) explication of problem solutions, that is description of critical aspects, correlated phenomena, causes, and consequences, and (3) application of findings.
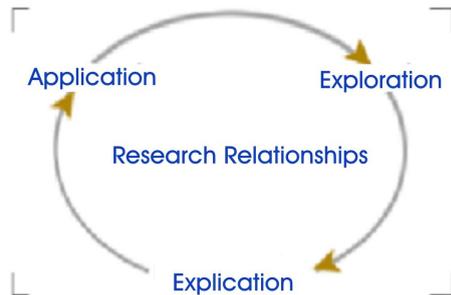

Fig. 1: *Phases of research*

The phase of exploration is concerned with detecting the problem or the question(s) worth while further research in the researcher's field of interest. Therefore, some authors write about elaborating the context of understanding a problem situation or the context of detection in this stage of the research process.

Sometimes, this phase leads "only" to a change of perspectives or a new point of view on the field of interest. However, the most important result of this phase is to clarify what we really want to find out. Only then we will be able to formulate research questions and to develop or select adequate instruments.

Unfortunately, there are no logical rules leading with absolute certainty from a general interest in a problem area to key questions and finally to the design of a study. Often researchers need to select a small section of their interests in order to design a study that is doable with the limited means and time available for a specific project. Even though focusing a general research interest into questions that are specific enough for empirical studies, there are no simple rules about how to formulate the research questions. During the last years, there were discussions about the possible contribution of abductive reasoning, as described by Charles Sander Peirce (1997; see also Bauer, 2000; Reichartz, 1999), to the explorative phase of investigations. In case of abduction, we draw a conclusion referring to a specific premise based on a given general premise and a specific case. For instance, we start from a general premise that changes in educational style will cause discipline problems in classrooms and the observation that Jane, an elementary school teacher experiences problems of discipline in her new class. According to the rule of abduction we may conclude then that the former teacher in this classroom applied a different kind of educational style.

However, we notice immediately two things: (1) Indeed, abduction produces conclusions, but (2) there is no guarantee of validity. In our example, a multitude of alternative premises come to our mind. Instead, we may conclude that abduction represents a very common form of logical reasoning under conditions of uncertainty, both in everyday situations as in scientific contexts. Its results need further explication or justification, because abductive conclusions do not offer valid insights, but – applied as a heuristic instrument – maybe promising outlooks.

Usually the phase of exploration is followed – as the arrows in the graphic on the preceding page are signaling – by the phase of explication. Depending on the depth of available studies on the problem we are interested in, we try to elaborate now first

detailed descriptions of the phenomenon under study, for instance, rich descriptions of cases, or to establish a context of explanations. In any case, by careful analysis of available data this stage leads to further insights into the problem area. At least in "applied sciences" these findings are put back into a context of application to develop approaches to a resolution of those problems, from which the study initiated.

It is at the interface of exploring the problem field and searching for explications that research design becomes the most important task to cope with:
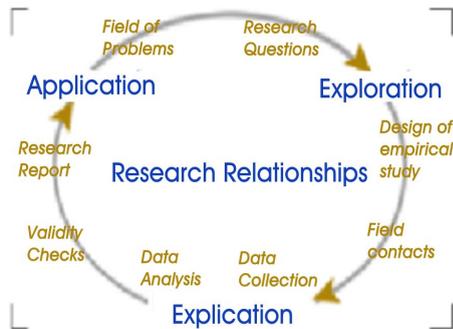
Fig. 2: *The place of design within the research process*

Designing the study means determining strategies and methods how to answer the research questions raised earlier. In qualitative research we do not ask subjects to fill in tests or mark answers in thoroughly structured questionnaires, but we often want people to give us access to routines of their daily life or to tell us about their experiences, expectations, intentions, etc. in situations or circumstances defined by our research questions. Therefore, personal relationship and trust become most critical issues in qualitative psychology. What should we do, if it is hard to establish trustful research relationships, if people are not eager to cooperate in our study?

At this point in the preparatory stage of a qualitative study it is quite usual that the movement through the cycle of phases will be reversed. No longer will we move forward, for instance, from questions to design to establishing field contacts, but we may enter a backward loop. Maybe our research questions are not of a type that is concentrated on our potential subjects' concerns. Formulated more simply: Are we going to ask the wrong

questions in the field of our research or at least questions that make not much sense for those who are expected to answer them? In this case, we should enter the phase of exploration again and mull over our own and our subjects' view of the problem situation and elaborate on alternative questions. This example demonstrates the importance of paying attention to the research relationships throughout the whole research process.

Another backward loop may be necessary from establishing field contacts to revising the design of the study. Imagine we wanted to compare particular cases of the problem under study, but run into trouble to find representatives of the one or the other critical problem configuration willing to participate in our study. Maybe we should decide then to investigate more in depth and modify our research design.

Just to continue with one more example of non-linearity in qualitative research: Data analysis may show that we would benefit highly from collecting some important information. The consequence, again, is a backward loop to data collection, in the worst case to problem exploration and re-formulation of research questions and modification of the design.

Design as the flexible structure of qualitative studies

The above examples should demonstrate that designing a qualitative study is unlike selecting and booking a packaged tour, where places and/or events of interest are selected, transportation and accommodation are organized, and "success" of the journey is guaranteed. Rather, the design of a qualitative study resembles preparations for an expedition into an unknown area. Our planning has to leave room for unexpected events and findings. We do not come with a list of sightseeing highlights and check, whether they are still where and what they are supposed to be and whether they match our expectations. Instead, we come with curiosity about what we may find during our excursion, additionally equipped with many questions, trained in finding answers, and ready to cope with emergencies. As a result, we may finally establish a list of things to see, how they are related to each other or different from each other, and a map how to find them again.

Consequently it is impossible to run a qualitative study step by step from one position to the next along the designed route. Depending on what we find at one place we have to decide in which direction we will move on. "Moving on" may often signify

to go back, have a closer look on what we have already seen, compare it to our actual impressions, and draw new conclusions.

This flexibility is necessary for putting into practice decisions about the design of a qualitative study at large. In case we are familiar with the field of research and/or can rely on well established field contacts like, for instance, a teacher who is running an observational study in classrooms, maybe not too many deviations and backward loops from the designed path will be necessary. From a concentration on some problematic aspects in the field we derive a clear research question, construct a research strategy, establish or just revive field contacts, and then we go about to collect our data. However, as soon as we enter the phase of data analysis, non-linear procedures are not only unavoidable, but represent a set of methodological standards, called "permanent comparison" by Glaser and Strauss (1965) in qualitative research.

The phase of data analysis again can be subdivided into three process stages: (1) The first phase of qualitative analysis is characterized by *reducing* the overwhelming amount of data (texts, sound or video recordings, graphic information) by identifying the content of more or less encompassing data segments. The most common form of this identification is coding, i.e. a "code" as abbreviation or name is attached to each segment. In the following, these codes are used as representatives of data segments or "units of meaning" in the data. Fundamentally, this is a process of categorization, where the categories may emerge during data interpretation or may be taken from an already existing category system. (2) In the second phase we try to *reconstruct* our research partners' (interviewees, writers of diaries, a child video-taped during play, etc.) system of subjective meaning from the units of meaning in their data. To reconstruct meaning systems we are looking for regular linkages between units of meaning in the data, which are characteristic for a person and/or her situation. (3) Finally we try to infer invariants or general communalities by *comparing* individual systems of meaning or "cases" (cf. Ragin, 1987).

It is important to keep in mind that these phases neither are strictly demarcated nor do they follow each other in a linear sequence, but they overlap and are linked to each other in circular patterns (cf. Miles & Huberman, 1984; Shelly & Sibert, 1992). During data reduction we may start to ponder about a person's implicit theory or we may permanently compare the data at hand with other data which we have analyzed earlier. Thus we may perhaps detect in person C's data an aspect of meaning which we overlooked in person A's data. As a consequence, we repeat the

process of data reduction for person A. In all of these phases it is necessary to affirm deductively the validity of our generalizations. That is, we try to infer particularities from our general findings and then return to our data and try to find evidence in form of specific information, i.e., statements in the texts or recordings, sequences of action in the video, etc.

From this point of view we should object to a common recommendation that there is only a chance to find something new within qualitative data, if we interpret small data segments. In text files, for instance, this implies to code the data more or less line by line. For sure, the higher probability to introduce new ideas by inductive reasoning is counterbalanced by greater danger to miss a general and essential aspect. Therefore, we have to combine analytic strategies. Interpretations and interpretive knowledge may have developed already inductively during specific experiences in the field or sifting through the data files, for instance in form of some very general categories (example from a study in a kindergarten: "The nursery school teacher directs the kids' attention.") or working hypotheses, which already may have influenced the formulation of research questions. Necessarily the database will be differentiated as soon as we analyze the data from different persons who were observed or who talked to us in different situations. That is, we have to check our preliminary generalizations by applying a deductive strategy. We have to move from specific interpretations to general interpretive knowledge – and back again.

Is there a qualitative vs. quantitative design?

The model of the process of research outlined above does not only describe the stages of qualitative studies, but also quantitative approaches. There is a fundamental distinction, because usually quantitative approaches to empirical research are chosen to test hypotheses, while qualitative approaches are often designed to develop well-structured hypotheses about a critical phenomenon.

However, were is the difference between qualitative and quantitative design during the first four steps in the process model of figure 2? To become aware of a phenomenon that needs further investigation and to express this "need" in terms of concise guidelines of research is not a matter of quantitative methods, but of insights of an open mind into the qualities of a particular segment of our social reality. In case we come upon relevant hypotheses, we will mostly decide to prove/falsify them with quantitative methods. If our first approximation to the

problematic field results in more specific questions than we had in the beginning, we will try to develop hypothetical answers by applying qualitative methods.

In both cases we need a map guiding us through the following steps, that is, we have to design the empirical part of our study. This is fundamentally a process of qualitative decision-making – both in qualitative and quantitative studies. There is no calculus determining the construction or selection of research instruments. At some initial point a creative mind has to decide that a particular item seems to be apt to measure a specific characteristic or that a particular question will stimulate a narration we are interested in. The same is true for gaining access to the field, whether we try to have people participate in an experiment or a test, fill in a questionnaire or give us an opportunity for an interview.

The main difference between designing a qualitative and quantitative study seems to be that qualitative researchers are reminded again and again to reveal all their considerations – first to themselves (for instance, "Why at all am I interested in this question?"; cf. Maxwell, 1996), then to their scientific community. Quantitative researchers, on the other hand, usually do not elaborate much on the various and manifold qualitative decisions they obviously made, maybe somewhere in the back of their minds. The state of the art just demands to refer to the theoretical background of the hypotheses tested, and to name the instruments, describe the sample of subjects, and outline the experimental situation. More details are expected, when data analysis is described. However, in quantitative studies it is sufficient to name a statistical calculus and maybe justify its application under the circumstances given. To understand what a qualitative researcher has achieved, we need to learn much more about the details of data interpretation. Usually, we want to know exactly how the system of analytical categories was constructed and which were the rules of application.

Thus, we may claim that readers of a study get satisfactory a insight into the process of design only in qualitative research. Readers of quantitative studies must be content with a sub-set of information: They learn how the study was conducted, but most of the underlying considerations are not even mentioned, except if some results need further discussion. We may conclude that quantitative studies follow the road-map of a standardized design procedure, whereas qualitative studies demand openness to adapt or specify a most general design to the uncertainties of research interactions with active partners.

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Designing the Move from Data to a Theory of Feeling

The Qualitative-Heuristic Approach to Theory

Gerhard Kleining

Theory development within the qualitative-heuristic methodology is a *dialectic* process. It is neither inductive nor deductive nor abductive though it may profit from those procedures. If applied as a prominent approach each of them is regarded as one-sided, and fragmentary, and too narrow in scope and effect.

The research procedure in heuristic research starts with the collection of *data*. Contrary to Karl Popper's (1934) belief it does not start with a *hypothesis* about possible results, nor with a *theory* whether self-developed or derived from other sources and regarded as sensible or valid. Heuristic research deals with a *topic*, not with a theory about the topic.

The research person of course is not free from ideas or concepts about a theme or subject and should not worry about it. All "facts" in nature or the social world or regarding our own existence are socially and individually evaluated and have to be to enable us to live in this word. To discover however what lies *behind* those self-evidences he/she should be aware that pre-conceptions exist which may be prejudices and less related to the topics than to our own conventions or needs. The best we can do, as researchers, in such a situation is to consider our ideas about a topic as flexible, as potentially (partially or totally) right or wrong thus as questionable though they may appear or considered as "normal" or plausible. That means the research person should be *open* for a change of his/he ideas about a topic or its evaluation. This change only will be necessary *in case* the data cannot be comprehended otherwise. The heuristic research approach asks the researcher to direct his/her energy towards the *topic* as directly as possible and not elaborate on his/her or other people's *ideas* about the topic. The "topic" also should be regarded as preliminary and open for a change as what it actually "is" will only be discovered after the heuristic process has been finished successfully (rules 1 and 2 of the heuristic methodology on openness of the research person and the research topic; Kleining, 2001; Kleining & Witt 2000).

To summarize the first two basic rules of the heuristic approach:

(1) Openness of the research person.
(2) Openness of the research topic.

What kind of data should be collected? Affirmative? Critical? Descriptive? Analytic? Easy to get at? Difficult to find and rare? Sensible or uncommon, predominant or marginal, deductive or inductive? Many or few? How many? The best chance to explore a topic would be, the heuristic approach claims, not to concentrate on a certain type of data, assuming its superiority but to allow *all kinds* of information to enter the data pool. The basic criterion in this respect is whether the new data shows a *different* aspect from the ones already available. The heuristic rule for data collection is to try to find *most varied* data about the subject of research. "Most varied" are those, which appear to the research person as *most different* from each other at face value. This could imply a variation of persons which are part of the investigation – their sex, age social status, character etc. – of region, situation, time, test procedure, and so on depending on the subject under study. More precisely: the differences should turn out to be basically ("structurally") different among each other (rule 3 on maximal structural variation of perspectives). The idea of additional variation may also come up during the course of the research when the researcher is closer to his/her data and would like to have a "different view" of the subject. The *number* of information in every case is a function of data *saturation*: If there are no new perspectives to achieve the sampling can be finished – unless new aspects may come up later.

Analysis starts with the first data available. All these most varied pieces of information are subjected to a *comparison* between them *to find their similarities*. The "comparative method" is basic to investigative research, not only within the social sciences. Comparisons however can be directed towards finding *differences* or towards finding *similarities*. Similarities are the opposite of differences or what puts them apart from each other. Similarities show what belongs together and in which way. Each datum of course can be regarded as different from every other datum. But if all data are related to the topic in one way or another, which has been the intention of the data collection, then all data must have similarities. The comparative method, the invention of which created the field of linguistics at the beginning of the nineteenth century, thus is defined as an attempt to find the

similarities within the differences (rule 4 on analysis toward similarities) and *not* to describe the differences among them.

Summarizing the two heuristic rules related to data collection and analysis:

(3) Maximal structural variation of perspectives.
(4) Analysis searching for the common pattern of all data.

The process of data analysis is directed by the *dialog principle*: We ask a question about the data, group it according to the same kind of "answers" we receive from parts of the material, combine it with other groups of data, ask a new question based on the information we have received so far and which brought us closer to the data, regroup again, look for and find new similarities between groups etc. This process will end when *all data* will have been covered (the "100 % rule").

Analysis might not be an easy procedure. During its course the research person may face unexpected difficulties. He/she may even experience his/her self esteem threatened when data seem to present their differences rather than their similarities. In those cases the research person may be reminded of rules 1 and 2 that a change of the researcher's preconceptions and/or a modification of the subject under study may help. Most important however is to develop the ability to see similarities between seemingly different data. If successful the process of analysis will discover in which way all data are related or similar to each other. (On the importance of similarities and analogies for the discovering process in the sciences see also Mach, 1905, pp. 220-231).

The process of searching for, finding, and defining similarities is the process of *abstraction*. Concreteness and abstraction are relative terms. The search process turns more concrete data into more abstract relations. These can be named the *structure* of the data or its *pattern*. In continuation of the process the abstract finding will be turned back to the data and will produce a better insight or a clearer understanding of its character. The process of analysis as shown in symbols (see fig. 1):
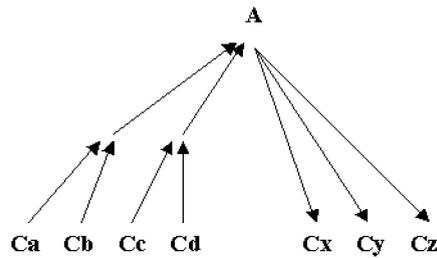
Fig. 1: *The process of analysis*

Ca, b, c, d, etc. are the various and varied perspectives of the concrete C, represented by the data. A is the abstraction from it, discovering the inner structure of the topic. This abstraction later on will develop into a "*theory*". In its first step it is a *preliminary* design. Cx, y, z shows the application of the preliminary theory turning itself back to the data and rearranging it, now showing its pattern or structure. The process in a simplified form (see fig. 2):

$$C\,(1) \Rightarrow A \Rightarrow C\,(2)$$

Fig. 2: *Process of analysis – simplified*

The concreteness of the data collected according to rule 3 – most varied structurally – here named C (1) moves to the abstract A by the process of analysis finding similarities within the data (rule 4). The abstract is the *preliminary theory*. If applied to the data it will re-arrange it and show in which way it is structured. This may be called the rearranged or new concrete C (2).

The next step will be to test the preliminary theory and by testing improve it. A better incorporation of existing data may be necessary. Further improvement will come from the incorporation of data which has not been used for the this particular development but is related to the topic under study. Also it might be advisable to collect very specific data and confront it with the theory. At this stage Popper''s falsification theorem might have its place though in heuristic research possible non integration of data will lead to a modification of a theory not a rejection. Newton's mechanics, e.g. are not "wrong" but valid within a certain area within a more general quantum and relativity theory. Incorporation of new and different data also in the humanities will enlarge the range of validity which gradually will become a *tested theory* capable of showing the structure of many different data sets.

The following graph symbolizes the process of adjusting/re-adjusting the abstract to the concrete (see fig. 3):

$$A \ (1, 2, 3..) \Leftrightarrow C \ (1, 2, 3..)$$

Fig. 3: *Process of adjusting/re-adjusting the abstract to the concrete*

The figure should indicate that the development of a theory is a *process* which will gradually improve the validity of the theory dependent on the variety of data it will include.

It is a *dialectic* process as the data will produce a preliminary theory and the theory will show new sides of the data and this in turn will improve the theory etc. At an advanced stage the theory is *a concept abstracted from a wide range of data and reflecting it.*

The theory, produced by this constant dialectic process, validates itself. This is called "*inner validity*" because a large range of seemingly unrelated data will be shown as related to the theory and confirming it. Inner validity can be tested by finding out whether all different sorts of data, used by the research person as well as new ones, have been or can be indeed incorporated into the theory.

When will this process of development of a theory be finished? Put the question differently: How can we evaluate the results of the process at each stage? There are a few rules of thumb reflected by questions to ask and to answer about the theory at each level of development:

- *How varied* are the empirical data on which the theory is based? Does it cover *all* the information collected by the research person as well as those available from other sources?
- How *consistent* is the analysis? Is the theory more applicable to some kinds of data than to other? Are there exception or conditions under which the theory will not work?
- What is the *range of validity* claimed for the theory, is it a special or more general analysis? Which are its limits?

The first two questions refer to the quality of data collection and analysis, the third to its range which in turn is dependent of the first two. The heuristic rules try to guide the research person to evaluate the theory based on the answers to those questions: maximal structural variation of data, 100 % rule for the analysis, the highest form of internal validity within the data and the range of validity as defined by the limits of the data which have been collected. Any claim of validity beyond, that is without data, is

speculative. Regarding the last question on range we have to keep in mind that within the human sciences there are *no universal theories* (they do not exist for the sciences either). The reason for the existence of "natural" boundaries of theories is that all human relations are *social* and in a process of *change*. The hope therefore in theory building in psychology and the social sciences is that a given theory may be valid for a *certain* societal, temporal, regional and/or individual situation. But of course there are theories of a wider and of a more narrow range. When a theory has been developed it is suggested to investigate its range ("testing the limits") by explorative data collection into the direction of assumed validity, e.g. regional, for other contemporary societies, historical, for former societies, situational, for different stages and functions than the ones tested etc.

A final way to evaluate a theory is to consider the *structure of the theory itself* and its relationship to similar or different structures in and of its environment. Mental constructs have what may be called their background or immanent value system, or ideology, or a societal discourse as their producing agent. Its function may be revealed by the question "cui bono?" – who may profit from the theory? This is the phase of *immanent critique*. A theory may turn out to be authoritarian, or individualistic, or conservative, or emancipatory, or utopian, or religious, etc. and be in favor of this or that idea or social group. This reflection may show a certain character of the theory and/or a certain place of its function and even indicate that its development has not yet reached its end.

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Some Questions and Answers about the Qualitative-Heuristic Approach to Theory

Leo Gürtler and Gerhard Kleining

The paper "The qualitative-heuristic approach to theory" provoked some questions by one of the editors, Leo Gürtler (Q.) and answers from the author (A.) which are reproduced here for further clarification. The form of the discussion refers to the tradition of presenting scientific questions in a dialogue, of which Galileo's "Dialoghi" are splendid examples. The conversational character of the discussion should be kept in mind.

Q.: It would be helpful to introduce the concept of theory in a context of theory of science, as "subjective theories" of may scientists diverge, some take theory as a set of assumptions, for others it is an abstract, complex pattern. This also refers to the range in which a theory is considered to be valid. You certainly don't think of the possibility of an "objective view" of the data in the sense of "data as mere data" as that would imply the data to become quasi independent from the observer.

A.: The heuristic concept of theory is *pragmatic*, that is to say it emerges from the practice or experience of searching and finding and is a condensation of the rules of how to find something. One starts with the (apparently) concrete, "apparently" because it is what the research person takes as the concrete or the "data", which is taken as preliminary – only later and with additional and varied data the relationship between parts and the whole and the status of the original data can be discovered. "Heuristic research deals with a topic, not with a theory about the topic" is synonymous and says that we start with what we think are the data and not with a theory about the data as quoted from a book for instance, which could be done of course if you have a lot of time but you will not discover anything new only evaluate the theory which already exists and is known. An "objective view" on the data at the beginning is not possible, or improbable – only gradually during the course of the research a transformation from the subjective to the intersubjective will be possible if the process of discovery is successful. Data of course are always dependent of the observer and the observational conditions, it is this subjectivity which one has to overcome applying the rules.

Q.: A critical question: Which criterion is used for "saturation?"

A.: It is the same criterion which other researchers using a methodology of discovery also suggest, Strauss and Glaser for

instance: namely if no new data could be produced by further research. Above that I put a more rigid condition, namely that there has to be a maximal structural variation of perspectives before. If under these conditions always the same kind of data will be produced further research is meaningless. We then call these data "saturated."

Q.: Is there a certain criterion? If so one could argue that a preconceived assumption would exist and therefore the whole process would depend on it. If there is no criterion given one could argue with an *a posteriori* explanation and the reproach of "circularity" could be interjected, namely that the criterion of saturation will be brought up if just fitting that is to say fitting the hypothesis what certainly should not be the case.

A.: Progressing research will proceed to a state in which no new kind of data can be evoked. That is an experience *a posteriori*, an *experience* not an argument or an idea, entering my mind after I have asked more and more different questions (and others may also have asked) without provoking any new answers – there is no theoretical assumption about the kind of similarities *a priori*.

Q.: Could a 100 % rule exit, so a possible argument, as this is not even known within physics or the natural sciences. This is why psychology and the social sciences work with statistics and probabilities, just because they cannot explain everything. Also consider a concept of theory separating *core* and *periphery* in order to introduce exceptions or conditions for all parts which cannot be explained, but which do not endanger the core concept. This also is relevant for the size of the analytical unit.

A.: If I am unable to incorporate *all* data into a general pattern I better quit as a researcher. I also do not reach for help from the core-periphery-metaphor in order to explain a bit of the data and consider the rest as not so important, peripheral. This is not honest.

Probabilities only exist in quantitative research which per se are more rigid but in psychology less reliable than qualitative data because quantifications are more abstracted from psychological or social "reality" than qualitative ones. They produce a reduced view of the topic, this is why always some data are "left over", not fitting the pattern.

Regarding generalization in the social sciences we should be glad to reach the level of classical mechanics, e.g. a body in motion will continue to move at a constant speed and direction etc. ALWAYS, or "100 %" (assuming the classical concept of space and time which turned out to be historical). This would totally cover all observations of mobile and immobile bodies under those

societal or scientific conditions. Universality however neither in the natural nor the human or social sciences can be claimed as all knowledge is societal, saying that it is limited by the borders of a given society, historically and regionally, in time and space.

The 100 % rule just claims that the excuse that there always would be exceptions of any rule and for us an approximation or probability would be sufficient because our science or topic is so complex or complicated will not be accepted. E.g.: If I find a key which I lost I will find it 100 % or not, never "80 %". Freud's "puzzle" (1952, pp. 441-442) or Einstein's scientist as "detective" (1987, p. 16) will solve the case or not, the same as a crossword puzzle.

Q.: Dependent on the "degree of explanation" different amounts of data can be covered: where and on which basis this degree of explaining research units is defined?

A.: At least not deductively, as a previously defined area but dialectic, entering a finding process with the data, searching for what fits together and discovering the whole of the parts – however extended it will become.

Q.: You say "Any claim of validity beyond, that is without data, is speculative." How do you deal with the criteria of psychological research, e g. prognosis, which Groeben describes? Isn't it true that prognosis in particular needs speculation? At the same level one could argue to criticize empirically based models of structural comparison – excuse me for a reference to quantitative models – that every LISREL model could get a good fit (adjusting the model to the data) if parameters long enough are modified. But will this model then have "power" in the sense of the test explanation to be used in a meaningful way and also predicative to provide a "surplus value?" Otherwise we end up with a "single case" pattern – highly adapted but isolated from any combinational statements. That really is a thrilling story.

A.: Well, these are many questions and considerations. Natural scientists, at least those whom I like to quote, as Galileo, Newton, Mach, Einstein, Heisenberg who found something and thought about methods of finding may say: do mental experiments an then go and try. In so far mental activities always are speculative.

Regarding adaption: Mach says science is "adaption of thoughts to facts and among each other" (1980, pp. 164-182) which would include iterative methods of quantitative research as, by the way, the difference between qualitative and quantitative research is only at the level of abstraction of the data form, not whether you find something or not.

Q.: Finally, how do you proceed in your research design? Research does have something cyclic. Which cycle would follow in your model?

A.: Research based on the methodology of discovery, or the heuristic approach will terminate itself when the topic is discovered, its structure known, that is to say the psychic and/or the social situation which produced the topic and reflects it. *Classical mechanics* are at their end, became a "closed" physical system explaining itself immanently, there will not be much more to come. But then new questions have arisen reflecting the background and the conditions of its structure and questioning its structure, not its findings (the "dialogue principle" is by its very nature critical of a previous concept). The whole system became the topic of further questions and new answers – I am referring to the "revolution" in physics at the beginning of last century.

Or take our own attempts, the present *research on feelings*: the qualitative-heuristic methodology offers the chance to bring the research beyond the stage of a mere description and of a classification of parts and bits and may capture its structure which Thomas Burkart (in the following paper) identifies as basically dialectic. If this can be accepted the next step could be research to discover structure and functions within a *personality model* including its inner psychic and its social processes – but this is a field specialists should be concerned with.

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Towards a Dialectic Theory of Feeling[1]

Thomas Burkart

The paper presents an approach to a dialectic theory of feeling, which builds on the results of an ongoing qualitative-heuristic study on emotional experience.[2] At the same time the article illustrates the process of theory development within the qualitative-heuristic methodology, which is described by Kleining (2005, pp. 27 in this volume) in general, on the basis of a concrete example, under consideration of the relations between design and research questions.

Method of research

The research question underlying this study is quite broad and open: What are the characteristics and structures of emotional experience? The subject of this study is *feeling* or *emotional experience.* It includes all subjective emotional phenomenon which are conscious to the subject as opposed to the *emotion,* a term which comprises – besides the subjective feeling – other unconscious related phenomena such as physiological processes (Otto, Euler & Mandl, 2000, pp. 13-17).

In the qualitative-heuristic methodology open questions are important for the development of the design of the study because they may help in receiving varied information about the research object. Useful questions are: What factors influence the topic of research? How can we vary the factors as much as possible?

Because the research method influences how the research topic appears in the data (Kleining, 1995, p. 237) the methods of research were varied in order to gather different data on the topic.

Initial point was a study on the experience of actual feelings in everyday life with six male subjects using the method of group-based dialogic introspection (Burkart, 2002; Kleining, 2002; Kleining & Burkart, 2001; Kleining & Witt, 2000; Qualitativ-

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[1] The author thanks Gerhard Kleining and Harald Witt for discussion and Rita Byrne – native English speaker – for proof-reading.

[2] The results concerning the phenomenology of feeling and the functions of feeling have – with the exception of some new results – already been published in Burkart(2003, a, b, c).

heuristische Sozialforschung Hamburg Introspektion, n.d.). The participants in that study – termed as *introspection study* below – observed in their everyday life a current feeling of anger and another actual feeling of choice with introspection. Shortly afterwards they took notes of what they had experienced. Some days later in a participants meeting every single participant gave – one after the other – an oral report on his or her self-observation to the group. The other group members only listened. They did not ask any questions, nor did they make any evaluations. Then a second round followed providing the opportunity to supplement reports. The oral introspective reports in the group were tape-recorded, transcribed, and individually analyzed by one person.

For varying the method and other aspects (such as gender, social status, emotional quality, mental health, up-to-dateness of feeling) other methods were used.

In a study of qualitative exploration of emotions described by psychotherapy patients – taken from my own practice and published data – descriptions of patients' feelings are gathered. These descriptions of feelings were predominantly spontaneous descriptions of feelings which were partially supported by therapeutic interviewing. One the other hand were such descriptions which are surveyed with a simple therapeutic technique of introspection: Observing one's feelings with closed eyes and reporting them immediately or afterwards. After the session I asked the patients if they would agree to my using their description of feeling in this study[3]. Presently 73 feeling descriptions of 29 persons are included in the study (21 female, 8 male, range of age between 18 and 75, $M = 43$ years).

In a further study feeling terms and descriptions generally common in our culture or in certain subcultures are gathered which presumably mirror characteristics of the emotional experience. These terms are collected in everyday life and in dictionaries (meanwhile more than 560 feeling terms and descriptions).

Furthermore some personal introspection data is included which contains a new aspect of emotional experience for me (at present 14 feeling descriptions). The methodical procedure was to take detailed notes shortly after the self-observation of a process of feeling. In addition I have included four observations of emotional expression of my four year old son.

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[3] I thank my patients for allowing me to use session protocols

Recently some feeling descriptions found in newspapers were collected which comprise new feeling phenomena not already represented in the studies (meanwhile seven newspaper articles).

As an example for the data part of a personal feeling introspection from last summer is cited (termed as *snake example* below):

> My wife called me up to tell me that our [at that time] three year old son had discovered a snake in our garden, which she also saw. It was a circa 80 cm long plain grass-green snake ... My wife told me that she was completely calm at first. She left to look for something to catch the snake with. She then lost the courage to catch the snake and asked neighboring workmen for help, trembling with fear. Only one workman offered to come with her. The snake had since disappeared. Although this man tried to calm her down she told me that she was quite alarmed and fearful.
>
> Shortly after the message I experienced fear with slight agitation, pressure in the stomach and disturbance. I needed to tell it to my colleague who told me very emotionally about an encounter with a poisonous snake in Asia which increased my agitation.
>
> Afterwards during work and on the homeward bound journey I was absorbed with the snake and hardly able to concentrate on anything else. Over and over the issue forced itself upon me. I thought about possible places of encounter, what kind of snake it might be, how we could get rid of it, as well as extreme actions like filling in the pond in the garden. Some of these considerations were accompanied by an increase of fear; e.g. if the snake perhaps could have gone into the house like the frog some years ago or the question if it was an escaped poisonous snake. Other considerations – such as snakes are shy and not aggressive animals – led to a momentary reassurance.
>
> I remembered snake experiences from my childhood, like the encounter with an adder, when I was petrified with horror, unable to move and a girl who had accompanied me had to pull me away backwards. I was amazed at the fact that I remembered the narrow pass exactly where the encounter with the snake occurred but not however the girl, who accompanied me.
>
> Having arrived at home I realized that the character of the garden had changed because there were areas which were now associated with fear. I was afraid to go there. At the same time I was annoyed about this feeling: to experience

fear in my own garden. I moved very cautiously. I searched the ground attentively for a snake, made noises to banish it. Longish, thin objects led to strong anxious excitement with a sudden tension of the upper part of the body.....

In the garden over and over again: fear with tension, exactly observing the terrain, queasy feeling because of the open shoes which I wear; at last I picked up a shovel to protect myself.

At night I looked in books and on the internet for the type of snake. Local snakes like ring snake seemed eliminable. The smooth green snake (opheodrys vernalis) native to the USA and sold in German pet shops seemed to fit from appearance. Great relief, when I read, that it is not dangerous.[4]

The data analysis is also governed by questions (see also Kleining, 2005, pp. 27 in this volume). It is a complex question-answer-dialog with questions on the data (introspection reports, description of feeling protocols, feeling terms, personal introspection data, feeling descriptions in newspapers) leading to answers which are explored for similarities resulting in new questions. In this process of analysis "local" patterns are recognized at first which refer to aspects of the research topic.

By discovering similarities in the local patterns common "global" patterns are approached gradually which have a larger coverage because they integrate more data. The goal of the analysis is to discover the structure that fits all the data. This global structure is equivalent with a theory of the topic of research (see also Kleining, 2005, pp. 27 in this volume)

Qualitative-heuristic principles of the design of the present research

In qualitative-heuristic investigations as in other forms of research the design mediates between methodology and the actual research process. But different to research following a deductive-nomological pattern the design is not a preliminary defined, fixed plan, which, based on methodological rules, transforms theoretical hypotheses into research action. Doing research in a qualitative-

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[4] This feeling episode continued for some time and faded away gradually because we saw the snake in fact in dream but never again in reality despite intensive searching. Moreover I realized with relief that I did not react with fear to the snakes in a petshop.

heuristic manner the research person, during the course of the research itself, may discover new aspects of a topic, which require methodological adjustments, e.g. to care for an adequate variation (of sample or perspectives). Also, during the research process, the assumption may emerge that the method(s) which have been selected and/or their specific adaptation to the topic of the research[5] were not sufficiently producing knowledge.

The design of qualitative-heuristic research therefore is *adaptive*. It emerges in a dialog between methodology and exploration of the topic. First tentative plans will produce data on a topic, the analysis of which may lead to a revision and/or enlargement of the research design. The design considers the following questions (see Kleining, 1999, chap. 3.1).

- Which methods may suit the research topic?
- Which factors may influence the topic and in which way should be varied?
- How could the methods be varied?
- Should the research be open or covered?
- How should the data be recorded?

The design of the project presented here has an open, adaptive character and has been developed to its present form mostly during the course of the research itself. At the beginning of the investigation merely one of the finally used methods was taken for granted. This was group-based dialogic introspection. The selection of additional methods as well as a decision on the factors to be varied, the strategy of sampling, the specific adjustment of the methods toward the topic, the kind of recording the data, all were the results of the continuous analysis process parallel to the data collection as well as of pragmatic points of view (resources of the researcher as his time budget, the availability of data, the acceptance of the research by the subjects cooperating).

As an example, the method of group-based dialogic introspection had produced rather one-sided data (description of emotions only by men, few emotional qualities, possibly reduced openness due to the group situation). Therefore I decided to collect descriptions of emotions by psychotherapy patients additionally which for me as a psychotherapist were easily accessible. Recording of the data was done in a way already familiar to my patients.

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[5] E.g. the selected open questions in a qualitative-heuristic questionnaire.

The sample strategy at the beginning of the research intended to vary qualities and intensities of feelings and the sex of the subjects. The findings of the analysis performed parallel to the data collection suggested further variations of perspectives as well the introduction of new methods or a variation of methods.

When starting the research it also became clear that reports on feelings incorporate concepts widely held in our culture which reflect significant characteristics of our emotional experience. Therefore starting to collect those typical names of feelings seemed sensible.

The criterion to add further descriptions of feelings to the data which reflected the respective stage of analysis also suggested to use further methods. Personal introspective data, observational data as well as newspaper articles were collected which presented aspects of emotional experience not yet covered by the previous research data.

An adaptive and flexible compared to a rigid design improves the chance to incorporate by structural variation essential aspects of the topic into the research and this also improves the chance to develop a substantial theory of the topic.

Results of analysis

The process of analysis is described in three steps. At first the characteristics of feeling are summarized, representing "local" patterns which refer to parts of the topic of research. Secondly functions of feeling are described which already structurally integrate large "areas" of the data.[6] Thirdly a dialectic model of feeling is presented which is a first attempt to integrate the feeling functions structurally.

Characteristics of feelings

Feelings are characterized by inevitability, reactivity, body-based experience, varying intensity and quality, personal concern, expression pressure, intentionality, integral effect, recursive

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[6] The characteristics and functions of feeling already published (Burkart, a, b, c) are summarized only shortly.

structure, process- and Gestalt-character, accentuation[7], and style of emotional experience.

Inevitability: Despite impairments of feeling like in certain forms of severe depression or in alexithymia (see Huber, n.d.; Muller, 2000), feelings more or less always exist in experience (see also Damasio, 2002, pp. 343-344). It's impossible not to feel. Feelings are constituent of all psychic phenomena, even of dreams.

Reactivity: Feelings are reactively experienced. Subjects experience themselves as overwhelmed by strong feelings, influenceable only to a limited degree e.g. by drugs, psychotropics, by avoidance or establishment of eliciting conditions of feelings, by distraction or rejection (e.g. by cutting oneself as in borderline personality disorder patients).

Body-based experience: Feelings are combined with processes like the ascent and descent of sensations, constriction (anxiety), expansion (being released or eased), tension (interest or rage), swelling (elation or exaltation).[8] This is mirrored by feeling terms like shaking with anger, gut-feeling, ear-piercing, sick with fear, blushing with shame, butterflies in ones stomach. In the snake example the rising fear is already combined with pressure in the stomach. Strong fear is accompanied by shaking and hair standing on end.

Varying intensity and quality: Feelings have a varying intensity and quality of body-based experience. Different qualities are combined with different body processes. An example from the introspection study:

> The direction of feelings is interesting for me. That I experienced somehow like ... certain feelings ... they ascend and want get out and take shape. And one has to move and jump up and down and something. And there are other feelings, they enter quasi and they move down and they compress me. Like a burden which presses on me .... And also the places of the feelings. From the stomach where the anger is spreading. The joy which is sitting here more [points in the direction of the heart] and

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[7] New is the characteristic of accentuation, which is not published in Burkart (2003 a, b, c).

[8] The body-based experience of feeling is more intense, the stronger the feeling is.

the sadness which swells in the eyes, and sits behind
them, and leads to a depressed mood.

Expression pressure: Feelings are experienced inwardly and
urge to be expressed, which is mirrored by typical terms of
feeling: to burst with curiosity, to explode, to jump out of one's
skin, emotional release.   In the snake example I experienced the
urge to communicate about the event with a colleague, my wife,
and other persons.

Personal concern:[9]   Feelings affect, captivate to varying
extents by involving the person, linking him or her to the process
of feeling and the object of feeling, as in the snake example when
I have difficulty in concentrating on other activities.

Intentionality:[10]   Feelings have a reference, an object varying
in extent (sadness over the loss of the partner versus Welt-
schmerz) and clearness (fear about the green snake versus diffuse
anxieties). The topic of feeling may be something external or
internal, a situation, an incident, a person, or an object, perceived,
remembered, or imagined. With the personal concern and the
intentionality, feelings cause a bodily experienced association
between the subject and object of feeling varying between
between fusion (e.g. to feel at one with), delimited reference (e.g.
I feel aloof), and derealisation ("all is surreal or unreal"). Thereby
one can distinguish between world- and self-reference. Whereas
the world-reference comprises a bodily experienced association
between subject and outward objects of feeling, the self-reference
denotes the kind of reference to the person himself.

Integral effect: Feelings color integrally all psychic functions.
Perception may be restricted to the feeling contents, like in the
snake example when I searched the garden for snake-like objects.
Thinking is in the snake example focused on the object of fear in
order to mentally explore possible places of encounter with the
snake or to develop remedies for the menace. Feelings release
wishes and impulses, like the impulse to flee on perceiving longish
snake-like objects.   Feelings facilitate action or complicate it
provoking an action change, like the participant of the intro-
spection study who's boredom initially hampers reading the book
on emotion and finally leads to interrupting the reading. Feelings

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[9] In Burkart (2003a, b, c) less clear named as *personal involvement.*

[10] This intentionality is mostly not a deliberate established in the sense of
classical phenomenology but an intentionality which is reactively in a sense
of Merleau-Ponty (see Hügli & Lübcke, 2000, p. 322).

may facilitate or complicate memory retrieval like in exam nerves.

Recursive structure: Because the object of feeling may also be a feeling there are feelings about feelings, like the shame of Mrs. D. when others realize her sadness, or the anger about the fear in my own garden, or the advertising slogan of a big German department store "stinginess is cool" ("Geiz ist geil"; Schade, 2003, December 13/14).

Process- and Gestalt-character: Feelings are processes with varying duration and varying complexity. They develop in a dialog with the persons's inward and outward situation (needs, goals, state of mind, and body; see also Ulich, 1992, p. 51). They may have an internal or external eliciting condition, which is perceived by the person.   Feeling processes have a Gestalt-character effecting a structuring of experience. Gestalt features are:

- • Figure-ground relationship: Feelings are in the foreground or the background of experience. In the foreground, feeling is organized in figures experienced as entities, despite manifold elements and complex dynamic (e.g. jealousy with an interchange of suspicious spying, heavy reproaches, and fear of loss).

    In the background there may be moods, ambiguous, or cursory feelings.
- • Reversable emotional figures with rapidly changing conflictive feelings, like love and hate or up to the clouds down in the dumps.

Accentuation: Feelings tend to an exaggerative accentuation of the object of feeling, increasing with the intensity of feeling. The accentuation result from an expansion, a maximization, or minimization of the range, the intensity, or the importance. Examples are "to make a mountain out of a molehill", "nobody loves me", "everything gets on my nerves", "to feel like in seventh heaven", "to take a rosy view of everything", "to paint everything black", or "to feel like nothing on earth."

Style of emotional experience: Persons develop a characteristic style of emotional experience with repeating emotional patterns, described in everyday life in typical attributes, like choleric, hot-tempered, arrogant person, cold-hearted, warm-hearted person, a man of feeling.

Functions of feelings

Feelings have three functions: the body-related evaluation, the motivation of action, and a communicative function.

Feelings as body-related evaluation.

Feelings evaluate the object of feeling integrally and body-based. This evaluation is related to current expectations, goals, needs, and the past emotional experience. The frustration of the wish to learn something interesting about emotions by reading a book on emotions causes boredom and slight anger by one member of the introspection study. The result of the appraisal based on expectations, goals, needs, and other aspects is the particular quality of feeling which is an integrally psychic and body-based, a moving experience, with a variably strong link to the process of feeling and the object of feeling. The emotional evaluation–the particular quality of feeling–comprises a more or less intense transformation of the experience of self and world, in relation to 14 dimensions of experience which can be assigned to three groups:[11]

(1) Accentuation and modulation of apperception with the dimensions:
- *Focus and extent of attention* which is related to the clarity and the breadth of the span of attention. Anxiety e.g. narrows attention. In euphoric elation perception is less accurate.
- *Comfort versus discomfort:* In joy and happiness one may feel comfort – in anger, depression, or disgust discomfort.
- *Filtration:* In euphoric elation one takes a rosy view of everything. In a depressive mood positive feelings do not pervade.
- *Experience of time:* In boredom the time experience may change and is perceived as agonizingly slow, whereas in a positive mood time seems to fly by.
- *Intensity, brilliance of colors and acoustic apperception:* In depression colors appear more flat, wan, whereas in joy or euphoria colors are experienced more intense, brilliant than in a normal condition: "I have never been so happy since then. Even the stars were shining brighter" (deceased Colum-

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[11] This grouping is not a classification in a methodical sense because the dimensions of emotional experience can be assigned partly to more than one of the three groups.

bia astronaut Laurel Clark in e-mail space borne, "Die letzte E-Mail der Astronautin an ihren Sohn," 2003, February 2).

(2) Attitude and contact to the world with the dimensions of experience:

- *Open versus uncommunicative:* In joy or in curiosity open, extrovert, in depression one feels introvert like the patient Mr. I: "It is like not being accessible anymore as if a wall is between [me and the rest of the world]."
- *Attraction versus rejection:* In revulsion disgusted in infatuation or curiosity attracted by the object of feeling.
- *Familiarity, proximity versus strangeness, distance* to other persons, objects, and situations.
- *Readiness for action:* Rage can lead to urgent action impulses. In depression or anxiety one can feel paralyzed.

(3) Experience of self with the dimensions:

- *Clarity of consciousness:* In fright or anxiety it may be impossible to keep a level head. A participant of the introspection study feels numbed by sadness, depressive patients confused.
- *Cognitive functions eased versus blocked:* In joy and happiness thinking can be eased experienced, in depression or panic against blocked (e.g. "I couldn't form a straight thought").
- *Assurance versus insecurity:* In fear or in depressive mood one can feel instable, in pride–in contrast–confident.
- *Experience of body* concerning tension, heaviness versus effortlessness, pressure, constriction, and impression of heat versus impression of cold: In rage or in anxiety one may feel strained, in joy relaxed. Depression may be combined with feelings of heaviness, with pressure on the chest. Joy may be combined with effortlessness, anxiety with constriction, shame with heat.
- *Excitation vs. calmness:* In anger, in rage, in stage fright one feels excited, while contented on the other hand calm.

Different feelings are combined with different changes in these dimensions of experience, whereas each of the dimensions of experience is not always addressed. Joy may be combined with ease of thinking, with openness and the disposition to communicate, a tendentiously rosy view with an experience of brilliant colors, an experience of effortlessness, a comfortable excitement, and an accelerated experience of time. Anxiety one the other side may be combined with a circling of thinking about the anxiety

contents, with an uncommunicative mood, with strain and constriction, and insecurity. The transformation is dynamic and varies in relation to the importance and the pressure of the object of feeling in it's intensity. Is it slight, it is hardly perceived by the individual. If it is strong in contrast the person may experience herself or himself or her or his situation as completely changed like the following patient: "If I feel good, I feel bewitched as if I am a different person."

Feelings as motivational processes.

Feelings motivate change, sustainment, or coping with the objects of feeling. In the snake example e.g. the subject is motivated to overcome the danger which evolves from the snake. The motivational effect of feelings is based on a change of the body and psychic state of the person with an focusing attention on important information, a change in thinking (e.g. ease of thinking vs. blocked thinking), a change in action readiness, and an activation of general action tendencies, like taking flight in fear or attacking in anger. The fear of the snake e.g. led to a narrowing of attention on the contents of fear, and activation of flight, or attack impulses.

The expression of feelings and the communicative effect of feeling.

Emotional expression communicates the emotional state of the person to others rapidly, although – apart from strong feelings – this is often ambiguous ("does he loves me?"), because the expression of feelings is formable.

Furthermore the expression of feeling evolves an interactive effect, like sadness of a person which can lead to sympathy and trying to comfort by other persons.

In addition the expression of feelings has the effect of relief because feelings have an aspect of energy for their motivational function. They are combined with processes like constriction, expansion, tension, swelling which force expression, like sadness which resolves in crying or the annoyed person who lets off steam.

The emotional expression is culturally determined. Children learn which emotional expression is acceptable and how to control their feelings. Result of that emotional socialization is self-control over the expression of feelings. This self-control may succeed incompletely or be lost completely, like the coach of the national soccer team who exploded after an international match when he was criticized by TV commentators who interviewed

him. This emotional behavior provoked headlines in many German newspapers because it violated social norms of feeling expression (Horeni, 2003, September 8; "Rudi Völler – darf ein Teamchef so ausrasten?" 2003, September 8; "21.25 Uhr – da wütete Völler los", 2003, September 8).

The emotional communication is formable with the restricted influenceable expression of feeling whereas in our culture one differentiates between authentic emotional communication with a correspondence between inward experience and outward expression and false, "simulated", "acted", or "feigned" expressions of feeling without this correspondence.

A dialectic model of feeling

Feelings have a dialogic character. There are dialogs within the subject with dialogic processes between feelings, thoughts, memories, and imagination. There are dialogs between the subject and the outward world with dialogic processes between feeling, apperception, and action.

In all three functions of feeling dialogs are found. The evaluative function contains dialogs between the person – his or her expectations, needs, goals – and the actual outward and inward events. The assessment of having successfully terminated the important project application led to euphoric elation by the member of the introspection group. Next morning however when he realized while clearing up his desk, that he had forgotten something which he had evaluated as important, feelings of shame, guilt, and depression arose, evolving through inward dialogs: "Self-reproach and anger about myself. Why did you just do this, how could you just do this."

The motivational function activates a dialog in which the person affects with action or mental processes on an object of feeling, to change it or cope with it. In the snake example e.g. there are "motivational dialogs." Beside mental dialogs for finding possible places of encounter with the snake and possibilities to get rid of it, there are dialogic processes concerning action, like the cautious search of the garden or the search for the type of snake on the internet.

The communicational function contains by means of the emotional expression a dialog between the person and other subjects with reciprocal influences. In arguments between two persons e.g. the expression of anger or rage of the one person, causing feelings of insult in the other, can lead to a backlash with the consequence of an escalation. The crying of the baby may elicit anxiety in the mother that something is wrong with it,

provoking worried caring which changes the feelings and the situation of the baby positively.

The dialogic connection of the three functions of feeling can also be represented by the following dialogic model of feeling (see figure 1).

The feelings of the person emerge and develop in a dialog with the person's changing outward and inward situation (needs, goals, state of mind, and body). Feelings are evoked by appraisals of inward and outward events or states based on the person's current expectations, goals, needs, her/his coping potential, and self-concept, and the past emotional experience. These appraisals are only partly conscious.
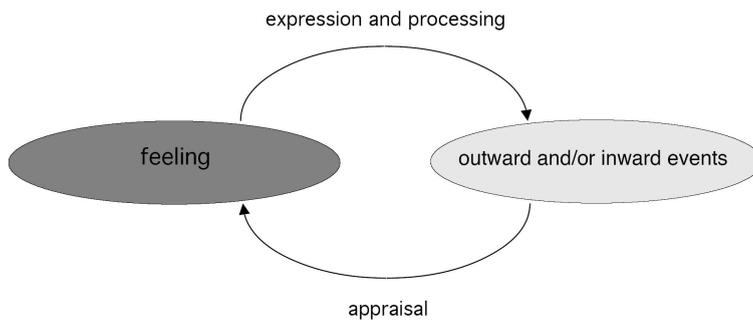

Fig. 1: *Dialogic model of feeling*

Feelings are combined with impulses for expression and processing. The processing of feeling comprises inward mental processes and/or outward actions and is directed at a changing of or coping with the object of feeling. The changed inward or outward situation, either by inward, or outward processing, or independently of the person, is emotionally appraised again, which may change the feelings and so on.

The model with it's flow which returns to the starting point is only apparently circular. It describes however a dialectic development in which either the subject and his or her feelings and his or her situation may change. Existent feelings are criticized in this process by the changing inward and outward situation of the subject. The feelings may change themselves either through their expression or their processing or independently of the individual.

The emergence of feelings

Feelings are evoked by appraisals and classifications based on relations between inward or outward event (or situation attributes) and structures of the subject. These appraisals and classifications, which occur involuntarily, are often not completely conscious for the individual and are sometimes completely nebulous ("I should really be glad"). They take place continuously depending on the following four relations:

- *Correspondence of event und situation attributes* with past emotional experience: An example is the sight of the un-opened lawyer's letter suddenly releasing fear in a patient because of a bad experience with the courts more than 20 years ago. Another example is the patient Mrs. Schl. who was angry with her sisters after her husband had spoken with them for a short time. This and many similar reactions are based on the fact that she suffered in her childhood because her father did not heed her as much as her younger sisters.
- *Correspondence/discrepancy of event und situation attributes with goals, needs, and expectations:* An example is the in-tense reaction of anger in my son when I did not allow him to view another children's film. Another example is the already mentioned successful evaluated termination of the important project application which led to euphoric elation by the member of the introspection group (see section "A dialectic model of feeling").
- *Correspondence/discrepancy of event und situation attributes with the coping potential,* like the distress of the patient Mrs. K. not being able to defend herself against her arrogant and victimizing manageress. A second example is the change between the feeling of competence ("You can do it!") and incompetence ("You cannot do it!") of Mr. B. working on a difficult task, depending on whether he is under the impression of being able to cope with the task or not.
- *Correspondence/discrepancy of event und situation attributes with the self-concept,* like the feelings of guilt and inferiority of Mrs. U. drawing a disability pension or the feelings of shame, anger, and guilt of Mrs. M. when she was not able to free herself from depressive mood.

As specified by appraisal theories (Scherer, Schorr & Johnstone, 2001) the evocation of the specific feeling quality depends on the specific relation between event and situation attributes and structures of the subject. Joy e.g. is combined with

goal approach/goal attainment, whereas the intensity of joy depends on the importance of the goal. Anger on the other side evokes if a goal which is appraised as achievable is hindered by outside influences (such as other subjects).

The processing of feeling

Feelings motivate the person to change, sustain, or cope with the objects of feeling by action and/or mental processes.

The ontogenetic primary case is direct action. Small children often act out their feelings directly as in the previously mentioned reaction of my then three year old son (see section "The emergence of feeling"), who boxed me when I refused to let him watch another film on the children's channel. Adults – by contrast – who have learned in their emotional socialization to control and form their emotional impulses to act, normally do this only when experiencing very strong feelings, such as when they lose their temper and "explode."

The mental processing of feeling which contains dialogs between feelings, thoughts, imagination, and memories can be a preparation of action, by mentally exploring the situation in order to recognize chances and risks or to plan an action to change the emotional evaluated circumstance in the desired way. In the snake example this are considerations about possible places of encounter and about possibilities to get rid of it.

Another possibility is action in fantasy as a compensation for real action which is not possible for the person, like the patient Mr. S. who was angry about a person who gave him orders about the daughter of Mr. S. He occupied himself several days with fantasizing about how he could have acted differently in the situation, simulating different alternatives with different reactions of his opponent.

The mental processing of feeling can have the purpose of changing or coping with a mental incident which is the object of feeling. Example: The person concentrates on a diffuse feeling of sadness, accepts the following memories about losses, and so contributes to their coping.

The mental processing of feeling can be a reinterpretation of the situation and of the feeling eliciting incident what is described by the patient Mrs. B. as follows: "At first you have nothing but anxiety. Then I sort it. I ask myself, how realistic is it?" This reinterpretation can be–negatively–a misrepresentation where the strained feeling will be distorted like e.g. denying ("No, I am not envious at all"). Positively–in contrast–inadequate interpretations important for a feeling are corrected, like e.g. the patient who

reacts with strong fear before and during his guitar concerts because he is afraid of playing some wrong notes which is interpreted by him as a complete disgrace. He learned in cognitive therapy to view playing some wrong notes as a more or less harmless incident which happens even to world famous stars, leading to a decrease in his fear. Another example is Mrs. M. who reported that she thinks positive when she is afraid of failing: "Yes, you will deal with it. It's not so bad."

Another, albeit destructive possibility of handling feelings is repression or numbing of feeling with drugs or surrogate activities with emotional effect, like cutting oneself to numb insufferable feelings of emptiness.

A processing of feeling can also be the release of tension, changing the agitative aspect of emotional experience by sports or intense bodily exercise (e.g. chopping wood, to relieve aggressive feelings).

Feelings as "engines" of development or restraints of development

Feelings favor the vivid dialog with the environment and the person him- or herself, by evaluating the objects of feeling such as moving, shocking, churning, or sweeping, linking him to the process of feeling and the object of feeling and changing his or her readiness for action. Feelings imply comfort or discomfort, attraction or rejection, communicative or uncommunicative evaluations and action tendencies which continuously change the attitude of the subject to him- or herself and his or her world.

Complex dialogic developments result out of the dialectic relation between feeling and situation, as well as the idiosyncrasy of feeling evaluation to accentuate it's objects (see section "Characteristics of feeling").

With the accentuation realized by exaggeration (e.g. "everything is great") a situation or an attitude towards persons becomes clearer and the action tendencies are simplified.

A consequence of the accentuation is a reversal of feelings because extreme or excessive emotional evaluations are corrected by experience. The keen infatuation with idealization of the partner soon leads to severe disappointments which at first challenge the idealization before – sometimes – transforming it into calmer affection with a more realistic view of the partner.

Feelings can favor learning or cognition, motivating actions by clear – often excessive – evaluations. Their consequences lead through new – "reversed" – feelings and thoughts combined with them, to a criticism of the primary evaluations (position, point of

view), which enable more adequate actions, as in the following example:

Mr. K. had suffered distress on the highest mountain of Corsica with his girlfriend many years ago. Mr. K. told that they had been climbing carefree, cheerful, and naively self-confident without appropriate equipment and had not informed themselves of the route on this mountain. His girlfriend collapsed during the ascent on a path a half a meter wide. They were rescued by helicopter, which was a great relief as well as being very embarrassing. Afterwards even small slopes elicited panic. He is trying to overcome this fear. Meanwhile he is able to walk on narrow paths on ascents which he is very proud of. Before a climb he often experiences fear. But he is now cautious and he informs himself carefully about the tour.

This narration shows a dialectic process with a naive self-confident starting position (climbing in a cheerful mood a difficult mountain without appropriate equipment and no information about the route) which is criticized by a traumatic, frightened, and embarrassing experience of distress leading to an acrophobia. Overcoming this fear is then a goal for several years, during which the patient and his girlfriend gave up their former life-threatening careless attitude completely.

They now engage on these climbs well informed, well-equipped, which they can handle on their particular level of alpine skills (synthesis). Controllable fears have an important action controlling function. They lead to being cautious and attentive, prevent becoming careless and overtaxing oneself.

Because of their evaluating and accentuating quality, feelings can be extremes which cause and clarify discrepancies, creating a dialectic process in which the person overcomes one-sidedness gaining differentiated positions or knowledge about himself and his world.

Feelings can lead on the other hand to the opposite a blockade of learning and a stagnation of development. This takes place when the dialogic process between feeling and the inward and outward situation runs only incompletely or rudimentarily so that neither the feeling nor the inward and outward events can develop their critical potential. One case is the avoidance of action e.g. phobic fears which are perpetuated by avoidance, not seldom with the consequence of a blockade in development.

Another possibility is the blocking of feelings, e.g. by denial with the goal to change the incriminatory feeling in a way that the subject can assimilate it.

One other example is the aggressive action, e.g. repressing a feeling of shame with aggression with the consequence of a feeling

of guilt and even stronger shame which is abreacted once more aggressively, like a violent crime of 17 year old offender who felt deeply humiliated and ashamed, when a woman refused his sexual approaches and then killed her (Hülshoff, 2001, p. 176)

Another possibility is resignation. There are no possibilities – real or assumed–to change an incriminatory situation. The reasons for these problematic processings of feeling are bad material living conditions and incriminatory emotional development conditions which are early emotional deficits, cumulated emotional stress, traumatic experiences, and strong emotional conflicts (Kruse, 1995, pp. 144-147).

Discussion

The development of theory using the qualitative-heuristic approach has been applied to a study on feeling. Theory development is facilitated by an *adaptive* research design adjusting itself to new knowledge which may emerge during the research process. Asking questions – "openly" or without a predefined range of answers – is important for an adaptive design. Questions direct data collection as well as analysis. The questions suggest the selection and the adjustment of the methods fitting for the research and the variation of factors which may influence the topic of research and will indicate the complexity of it as represented by the data. The analysis of data is guided by the search for similarities among the data and in doing this the structure of the topic will be gradually emerge.

It has been already pointed out (Burkart 2003, a, b, c) that some of the characteristics of feeling (like inevitability, reactivity, body-based experience, intentionality, personal concern) and also the core of the three feeling functions confirms the results of other researchers (see Damasio, 2002, pp. 343-344; Scherer, 1989; Ulich,1992a, pp. 49-57).

In addition to it new concepts were found, e.g. the one that the emotional evaluation represents a more or less strong transformation of self and world experience related to distinct dimensions of experience. The most important finding is the dialogic model of feeling connecting the functions of feeling to a dynamic and integral model which views feeling in the context of the other psychic functions (apperception, thinking, and acting).

The dialogic character of feeling which has been found fits well to some clinical psychological findings. In phobias e.g. the typical step-up-processes between (misinterpreted) sensations, thoughts, and feelings (see Margraf & Schneider, 1996) can be

seen as dialogic processes. Cognitive depression theories and psychotherapy treatment approaches (see Hautzinger, 1996) focus on the importance of constricted dialogs between negative thinking and feeling with reduced action.

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Questioning Burkart's Theory of Feeling

Harald Witt

Kleining (2005, pp. 27 in this volume) has described the dialectic process of developing a theory from empirical data and Burkart (2005, pp. 39 in this volume) has demonstrated how this process works in practical research. My intention is to test Burkart's theory of feeling by asking questions about it.

Some of Kleining's methodological rules are convincing in theoretical terms but they are very difficult to handle in practice, e.g. the rule of 'maximal structural variation of perspectives.' Burkart's research shows a large number of variations: he varied the form and kind of his data, the methods of data collection, the parameters of his subjects and the procedures to analyze the data. But how can one know or find out if the variations are sufficient or if further variations would be necessary or helpful? Just by trying seemingly new perspectives? Even the saturation of the collected data may be misleading.

One way to answer this question may be to conduct mental experiments with extreme variations of parameters (doing no harm to anybody), another may be the confrontation of the theory with empirical findings and well known facts by asking questions.

I am here following the second way: My questions concern those facts which everybody knows about feelings and emotions. I am trying to find out whether the theory matches well known facts, whether the theory mentions these facts at all, whether the theory is compatible with these facts, or whether it contradicts them, or – best of all – whether it explains them.

1. A well known fact is for instance the observation that emotions can arise very quickly: A strong emotion can "flood" a person in fractions of a second, e.g. an intense rage. Can Burkart's theory explain this observation (experience?)? I am afraid it can not.

   But that does not blame the theory because the problem is most difficult to solve and I did not find a single theory which would explain this fact satisfyingly.

   For instance the appraisal theories simply say that "*emotions are elicited by evaluations (appraisals) of events and situations*" (Roseman & Smith, 2001, p. 3).

But they do not say at or in what time this appraisal happens or how the evaluation can be done in a very short moment, and on which cues the evaluation is founded.

But they claim that their explanation should be better than all other explanations, for instance Watson's stimulus-response theory (1919) or Cannon's (1927) pattern of neural activity in the brain, and so on.

The problem that has to be solved is which aspect of an event or of a situation is used in what time via which physiological or other mechanisms to elicit or produce an emotion. Probably, to answer this question, we need data other than those Thomas Burkart has used, possibly neurophysiological data.. The subjects in Burkart's research could report the fact of quick arising emotions but they could not describe the process of the development of these emotions.

2. A second well known fact is the observation that the same emotion can be evoked by a range of different situations. This fact is explained by appraisal theories by the following statement: "*All situations to which the same appraisal pattern is assigned will evoke the same emotion*" (Roseman & Smith, 2001, p. 6). The authors seem to have a rather static model of emotions and here I would favor Burkart's model which assumes a dialogic process which starts with an evaluation but (is transformed into?) a dynamic circuit and interacts with individual plans and actions/activities.

3. A third well known fact is the observation that the same event or situation evokes different emotions within the same individual or in different individuals. Appraisal theories explain this by the statement: "*Emotions are differentiated by appraisals*" (Roseman & Smith, 2001, 6). Here again we have a rather static view of the emotional process. The model of Burkart would go beyond this static position assuming the possibility of feeling certain emotions in the process of an emotional development, quasi on the way from one situation-emotion-dialog to another one. In Burkart's model there are more movements and dynamics and there are no static situations tied to static individuals.

4. Despite of points two and three which emphasize the variability of emotions we observe that the variability does not lead to a random pattern of emotions. Rather, emotional responses are appropriate to the situation in which they occur. "Several [appraisal] theorists maintain *that the*

appraisal system has evolved to process information that predicts when particular emotional responses are likely to provide effective coping" (p. 7). Or "*appraisals adapt emotional responses to the individual and temporal requirements of the situations in which they occur*" (p. 7). This sounds similar to Burkart's model, but I am not sure if this adaptation is a real dynamic adaptation following a situation or if instead of it is an adaptation in the sense of learning which emotion fits best to a certain situation combined with certain internal needs and coping resources. In any case, Burkart's model has no problem to explain the appropriateness of emotions via a continuous adaptation process that is permanently checking the fitting and that is adapting both the situation and the emotion.

5. A fifth well known fact is the observation that we experience different emotions as distinct qualities, not merely as different intensities on a simple "emotional dimension." Appraisal theories argue that "these findings can not readily be accounted for by one- or two-dimensional models and raise the question of what produces the different pattern of response" (p. 4). Their answer is: "Emotions are differentiated by appraisals" (Roseman & Smith, 2001, p. 6).

    In our research group in Hamburg we are still discussing this point. We made comparisons with color perception, where we have distinct qualities of color (red, green etc.) although the physical stimulus varies only along one dimension (wavelength). In analogy we discuss the possibility that emotions vary along two or three dimensions (arousal and pleasantness for instance) and nevertheless are experienced as several distinct emotions (such as joy, sadness, fear, and anger) and that possibly these patterns are predetermined and culturally independent.

There are more questions thinkable or possible but to show the principle of this approach of testing theories by asking questions these five examples might do. This approach seems to be especially well suited to overcome the borders and the limited views of one's own scientific discipline and to think of new variations in one's empirical setting in the sense of Kleining's 'maximal variation.'

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Some Conclusions

Thomas Burkart

The most important finding on the nature of feelings is their *dialogic character*. The concept combines a number characteristics each of which can be studied and described per se but should be seen in their unity: As their immanent movement, the combination of opposing and contradicting qualities, their capacity to change its expression quickly and their tendency to influence, color or block other mental processes in an attempt to interfere with them.

Given the present status of the development of the dialectic theory of feeling some theoretical, methodological and practical consequences may be suggested.

On *theory:* The dialogic character of feelings indicates that they cannot be separated from other psychic functions (as thinking, perceiving, imagining, recalling). Those relations and their reference to the psychic structure – the personality which as a dynamic structure coins the style of experiencing – still has to be investigated more closely.

Additionally the genetic aspect has not been sufficiently explored. This is particularly true for the ontogenesis of feelings. How the structures of feeling and experiencing develop during an ontogenetic process should be explored. But also the actual genesis of feelings – their evocation in actual situations – will need a more precise observation.

Concerning *methodology* a clarification is necessary of which methods will best lead to data on emotional development – this by no means is a trivial question as small children cannot verbally inform about their experience. Qualitative experiments (see Kleining, 1986) may be considered, a method which has not yet been used in previous studies for the exploration of feelings.

There also are a number of *practical consequences* for psychotherapy and pedagogy. The dialogic character of feelings will enable personal development and change if the emotional processes have many facets, are broad and touching at inward as well as outward situations of the subject and are not one-sided and reduced. Methods in psychotherapy and pedagogy should be encouraged producing a variety of dialogic processes covering inward dialogues (like emotional imaginative or emotional memory dialogues) as well as outward dialogues (emotional actional dialogues). Questionable is a one-sided emphasis on action or behavior neglecting inner dialogues as implied by the

classical behavioral therapy and also neglecting action by putting one-sided emphasis on inner dialogues.

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The Application of a Grounded Theory-Based Research Design for Analyzing Caregiver Burden. How to Increase the Specificity of Concepts

Jeannette Bischkopf, Anna Auckenthaler,
and Christian Stiglmayr

The paper we want to present is focused on the following questions: Is a grounded theory appropriate for the phenomenon under study simply by reason of being grounded? How can a good compromise be achieved between specificity (grounding) and abstraction (concept development)? What are the possibilities and also the limits set by the grounded theory methodology itself?

Coding and presentation strategies by which the grounding of theory can be strengthened were looked at using the first author's dissertation project on caregiver burden among depressed patients' spouses (Bischkopf, 2003) as an example. We will give an introduction into this research before the specificity of the results is discussed from a meta-perspective. The original study of the "founders" of the grounded theory approach on the awareness of dying (Glaser & Strauss, 1965) will then be used for further clarification of the issue of specificity of a grounded theory.

Using a grounded theory-based research design for analysing caregiver burden and coping strategies among depressed patients' spouses

The impact of depressive disorders on the patients' spouses has been investigated in a number of studies (Jungbauer, Bischkopf & Angermeyer, 2001; Badger, 1996; Benazon & Coyne, 2000). However, the prevailing quantitative research strategies within caregiver-burden research only poorly capture the subjective meanings that lie behind the spouses' coping and action strategies. If depression is to be understood as a biopsychosocial illness, a shift in perspective towards the social side of the illness is required. Furthermore, most of the research on coping draws on the cognitive-transactional model of stress and coping by Lazarus (1985) and little is known about ways of coping apart from those measured by checklist. The checklist approach has been criticised for being grounded in too narrow a conception of coping and therefore rendering an incomplete portrait of it (Coyne & Gottlieb, 1996).

Using qualitative research, a process-oriented view of the impact of depression on the family can be adopted. The coping process has been described as family transformations consisting of several phases which can be distinguished by specific themes (Badger, 1996; Karp & Watts-Roy, 1999). Badger (1996) described three stages, which he called "acknowledging the stranger within", "fighting the battle" and "gaining a new perspective". Karp and Watts-Roy (1999) defined four interpretive junctures that mark transitions in the caregivers' commitment: "hoping and learning," "revising expectations," "assessing responsibility," and "strategies of self-preservation." Bearing in mind that these stages are associated with a definition of role identities, it has been suggested that stress researchers should incorporate the meanings individuals themselves attach to their role identities and devote greater attention to men's and women's perceptions of both the positive and negative aspects of their role involvement. For this reason, alternative approaches have been emphasized in coping research, such as longitudinal or prospective designs, focused on observations that are day-to-day, micro-analytic and in-depth, and that are compatible with a holistic outlook (Lazarus, 2000). Following the argument for considering a broader range of methods for assessing coping, including semi-structured interviews (Coyne & Gottlieb, 1996), coping strategies were investigated using a grounded theory approach. The aim was systematically to develop a grounded theory which was drawn from the experiences of the spouses during the course of their partners' depression.

The data reported here is derived from a larger study entitled "Burden of Caring for Mentally Ill Family Members- Economic and Health Aspects". This research project was conducted by Prof. Dr. med. M. C. Angermeyer at the Clinic and Outpatient Clinic for Psychiatry of the University of Leipzig. A combination of qualitative and quantitative research approaches was used for data collection and data analysis. Mental health professionals of all three psychiatric clinics and seven community mental health centres in the city of Leipzig were given information about the aim and procedure of the study and asked to inform their patients fulfilling the following criteria: age between 18 and 65, diagnosis of schizophrenia, depression or anxiety disorder according to ICD-10 (World Health Organization, 1992), absence of organic mental disorders and alcohol or drug abuse, and the existence of a partner with whom the patient shared a household.

The dissertation is based on the interviews with 54 partners of patients with a diagnosis of depression, of which 27 were male and 27 were female. 29 spouses were recruited through inpatient

treatment settings, and 25 through outpatient treatment settings. The average age of the participants was 52, the youngest participant was 21, the oldest 69. The majority of the study participants worked full-time or part-time (57.4%), 14.8% were unemployed, 20.4% were pensioners, and 7.4% were either undergoing training, reported themselves as being housewives or being unfit for work.

At the time of the baseline interviews the partners had been together for 26 years on average. The duration of the partnership ranged from 2 to 47 years. 93% of the couples had children. The depression of one of the spouses had started on average 8 years previously. However, due to the sampling in inpatient and out-patient treatment centers, most of them were experiencing problems and receiving treatment at the time of the interview.

Narrative interviews with patients' spouses were conducted in order to explore their experience of burden and aspects of their illness management (Sandelowski, 1991). The following broad data generating question was used at the beginning of the interview: "Tell me about your life since your husband / wife got mentally ill." Subsequent clarifying questions like the following were used: "What concerns you most today?" Spouses' descriptions varied greatly in length and detail, which lead to a total time of the interviews ranging from 30 minutes to more than 3 hours. Interviews were conducted by the first author, in most cases in the family home.

Each interview was tape recorded and transcribed. Immediately after the interview had been conducted, a memo was written on the global themes and topics which had been addressed in the conversation. The memo also contained additional information that had been given by the spouse but was not on the tape, as well as notes on the observations made by the interviewer concerning the interaction and the context of the interview.

Following the guidelines of the grounded theory process (Strauss & Corbin, 1990), theoretical sampling was chosen as a means of contrasting cases. However, due to the quantitative design of the overall study leading to pre-defined criteria and sample size, the sampling had to be modified slightly. Consequently, a quasi- theoretical sampling of cases was realized, in which transcribed interviews were chosen consecutively for further analysis from the total of all transcribed material. Interviews were then coded applying the thematic field analysis (Fischer-Rosenthal, 1996), and memos were written according to theoretical coding (Strauss & Corbin, 1990). The core procedure of the thematic field analysis was the sequential analysis of the text in order to work out underlying thematic fields and their

sequential emergence in the interview. Data was subjected to open coding, categorizing, linking, and reduction in order to generate hypotheses. Regular consultations with colleagues familiar with the method helped the re-examination and re-coding of sequences as well as to define criteria for choosing additional interviews for the analysis. In this way, it was attempted to validate the results of each stage in the research process.

Depressed patients' partners experience the depression as a life event with far-reaching consequences for their family relationships and daily lives (Bischkopf, Wittmund & Angermeyer, 2002). The coping mechanisms employed can be categorised under the dimensions "degree of involvement" and "exertion of influence" (Bischkopf, 2003). Adopting a caring role, for instance, indicates a high degree of involvement that is related to accepting the illness. Spouses who accept the illness, often view treatment as an effective way of coping, thus cooperate with doctors or persuade their spouse to get and adhere to treatment. Particularly, those spouses who are out of work or have recently retired, view caring for their ill partner as a demanding and time-filling job. They often put their partners' needs and wishes before their own ones and do everything they can to help them.

> "Now I'm glad that I'm at home. If my husband were to come home and there was nobody there, then it would be a lot worse. [...] It does take quite a while until one has got used to it, but now it's definitely for the best." (Interview 082, 310–334)[1]

Actions which support the ill partner in coping himself include ensuring a relaxed environment, in which it is assumed that the spouse can more easily get over the illness. For example, one spouse talked about how she tried to avoid arguments with her ill partner ("I simply left things that might have caused friction to one side") or put herself between the children and the ill partner in order to avoid conflict. By understanding her husband's depression to be comparable to physical illness, she tried to help him to overcome the situation by making sure he was in a calm and relaxed home.

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[1] The interview code 082 exceeds the total of 54 interviews with spouses of depressed patients because the coding of the interviews was consecutively done in the overall study of families of psychiatric patients including spouses of patients with anxiety disorders and schizophrenia. The other numbers indicate the lines in the interview transcript from which the quotation is taken.

Another example is a spouse who thinks that his dominant role in the marriage caused his wife's depression by stopping her acting on her own. He now tries to keep more in the background in order to help her gain more self-confidence. Often spouses try to ensure that the ill partner can always reach them in case he needs to talk to them. These spouses then buy a mobile phone and make sure they always have it with them when they aren't together with their ill partner.

In contrast, actions, where the spouse takes over full responsibility for managing her partner's depression herself include making appointments with physicians, doing all the housework or fulfilling any other commitment the ill partner had held before. Thus, the depression can temporarily, or even chronically, transform domestic roles.

Joined action in coping with depression include more activity, better communication and more time spent together.

> "Through the whole thing we've got to know each other better and actually to talk about everything more [...] so that's the experience, the positive thing if one can put it like that, [...] that's come out of this [...] that we've got somehow closer through the whole thing." (Interview 131, 120–148)

Dyadic coping strategies develop over time, thus reflecting a learning process of the couple which includes phases of joint action as well as phases of supportive action and phases of distancing from the ill partner.

Spouses mentioned aspects of their marriage which play an important role in coping with the situation. Marriage characteristics like length of the relationship, perceived cohesion, consensus, companionship, and cooperation between the partners, infidelity or ongoing conflict of interests in the course of the marriage are seen to clearly influence spouses' empathy for their ill partner and their confidence in their personal as well as dyadic coping.

However, seeing the data in the light of other research on the issue, systematic research is needed in order to fully capture the situation of patients' spouses and their efforts to cope. A qualitative approach may help to clarify the context and personal significance of depressed patients' spouses' efforts to cope. However, conclusions as to the process of coping and its consequences and outcomes are limited. Personality variables like optimism, internal locus of control, self-efficacy, hardiness, and sense of coherence, for instance, need to be associated with dyadic coping variables and their consequences in terms of aspects of the

spouses' and patients' health and the couple's marriage. Further-more, no interaction or patients' points of view have been examined and no external criteria were used to decide whether reported coping resources and strategies can be seen as effective. Considering the average 8 year duration of the illness in spite of treatment in the study sample, one has to ask whether the reported dyadic coping strategies help to stabilize the depressed state of one of the partners in the family context. Further research is needed to clarify how depression in one spouse and individual and dyadic coping behavior is related to outcome. However, analyzing coping from the point of view of the spouses suggests the idea of building consumer-oriented intervention strategies on what is perceived to be helpful by the spouses themselves.

Having discussed briefly the limitations of a purely qualitative research design compared to using a wider range of data, including quantitative variables, we would now like to turn to the issue of specificity of the concepts themselves.

A dialectic view of specificity versus generality: How to find a good compromise between specificity and abstraction

Are the concepts that have been developed in the study of de-pressed patients' spouses specific to that patient group or are they applicable to other groups? The dimensions "degree of involve-ment" and "exertion of influence" suggest such a high level of abstraction that they could fit any situation and would thus be meaningless for the phenomenon under study. However, a thorough grounding in examples and the coherence of the data-based narrative ensures that the concepts are data-driven and thus reflect an understanding of the phenomenon under study.

We were wondering if we had arrived at a dead end in our discussion in that the researcher would find him- or herself in a double bind situation struggling to fulfil the two competing expectations of theory development while still being specific:

> "The empirical grounding of a study (its grounded theory) should be judged by the range, density, linkages between, and systematic relatedness if its theoretical concepts, as well as by the theory's specificity and generality." (Denzin, 1998, 329)

In their paper on the criteria of good qualitative research, the authors make a distinction between "accomplishing general vs.

specific research tasks" (Elliott, Fischer & Rennie, 1999). In their view, a "specific research task" is a case study aimed at understanding cases, whereas a "general research task" aims at understanding a phenomenon. In both instances, the limitations of extending the findings to other contexts, situations or people have to be specified. The question remains as to how to define these limitations. The idea of grounded theory is to try and find the concept (the core category) that is at the heart of the data and helps to understand and clarify it. How do you know and find out about the boundaries when you strive for the core? The grounded theory process results in a pattern consisting of concepts and their linkages. In our understanding, identifying the generality of grounded theory does not mean applying it to other patient groups since grounded theory does not describe groups but processes. Thus, the question of generality in that case is rather: When, for whom and under what circumstances are the concepts meaningful and when do they help us to gain a deeper understanding of the social processes at work?

Instead of highlighting similarities and differences between groups, grounded theory offers a more abstract scheme that has explanatory and predictive power for the phenomenon under study. In fact, "the discovery of grounded theory is a general method of comparative analysis" (Glaser & Strauss, 1967, 1). Thus, from a purely logical point of view, the question as to whether the concepts developed in the context of studying caregiver burden and coping in depressed patients' spouses are applicable to cancer patients' spouses can only be answered in light of new data. In order to ground the answer on an empirical basis, a new study on of caregiver burden among cancer patients would be needed.

Going back to the classic study of the dying process in hospitals (Glaser & Strauss, 1965), we decided to do a thought experiment and applied the question of specificity to the concepts that were developed in that study. Glaser and Strauss introduced the concept of awareness context as a powerful explanatory variable for what happens around the dying patient. The following types of context were distinguished: closed awareness, suspected awareness, mutual pretence awareness, and open awareness. These contexts were differentiated by acknowledgement of awareness (pretence or not) and degree of awareness (aware, suspicion, unaware) of a death expectation.

We then tried to answer the question as to whether the concept of awareness context is specific to the dying process in hospitals. In order to see if it is a meaningful concept for other social situations, we imagined, instead of a death expectation, an

episode of infidelity in a couple's' relationship and tried to apply the awareness contexts: closed awareness, suspected awareness, mutual pretence awareness, and open awareness to this situation. Closed awareness would be when the unfaithful partner is unaware of being unfaithful because he or she may have a different concept of faithfulness than his partner who would not know of the episode of infidelity. In a suspected awareness context the partner would suspect that something is going on and would look for evidence which the unfaithful partner would try not to give. In the mutual pretense awareness context, the partner has found evidence but pretends not to notice, whereas in the open awareness context, both partners know what is going on and deal with it in one way or another.

Thus, the dimensions concerning acknowledgment of awareness (pretense or not) and degree of awareness (aware, suspicion, unaware) seem to apply to the spouses whose partner has been unfaithful. In our view, this is because the awareness contexts are part of a higher order theory of information control in social interaction. In fact, what Glaser and Strauss formulate is a theory of information control and its application and specification to the context of dying in a hospital. Other theorists of Glaser and Strauss' time have written about awareness and consequent interaction, e.g. Goffman about information control faced by teams in work establishments (Goffman, 1956). Goffman suggested types of person, for instance, "the informers", whereas Glaser & Strauss suggested types of situation (awareness contexts). Both concepts can be related to the higher order concept of information control. What is striking is that Strauss in an interview years later said that he wanted to go back to the original study of dying in order to reinvestigate the suspected awareness context and formulate a more general theory of deception in social interaction (Strauss, 1994).

The example clearly demonstrates how specificity and generality of concepts are intertwined and are, in fact, two sides of the same coin. The generalizability seems to have been more often attended to in the literature (Auckenthaler, 1991; Gomm, Hammersley & Foster, 2000), probably because it was the most frequently asked question by the more statistically minded researchers. Criteria for generalizability have been suggested, whereas the issue of specificity is left to the process of grounding. We believe that a less ideological view is necessary in order to decide whether a grounded theory is specific to the context in which it has been developed and we would like to argue for grounding the answer on an empirical basis.

In sum, we believe that a more rational way of seeing data as data is needed, as opposed to seeing it as an index of specific

attitudes towards people (subjects versus research participants), views to the world in general (hard vs. soft thinkers) or levels of credibility (facts vs. interpretations). In order to achieve this we would like to argue for an integration of qualitative and quantitative methods in the research process. Ideally, research groups should consist of researchers from both "methodological camps" in order that they might learn from each other. For example, a sample description would then not only include a description of the research participants and their life circumstances, but also an assessment of their level of functioning or illness severity if the research is conducted in a clinical setting (Barbour, R. S., 1999). That would situate the sample in a more complex and systematic way and would enable a better understanding and grounding of the data as well as alternative conceptualizations.

Another advantage of mixed qualitative and quantitative method designs, we believe, would be the use of theoretical and pre-existing concepts. A previous grounded theory could then, for instance, be the starting point for another grounded theory study. The model of caregiver burden and coping among depressed patients' spouses could be empirically applied to the situation of cancer patients' spouses or the concept of awareness context could be used as a guide to research other social interactions, for example infidelity in a couple's relationship. We are aware of the ongoing debates regarding the role of theory in qualitative research and the examples we used could be in conflict with the notion of data-driven qualitative research. Although the idea of "higher-order grounded theories" has already been suggested in *Discovery* (for further discussion see Strauss & Corbin, 1998), hardly any researcher attempts that, probably because of the potential danger of either being too abstract and too remote from the phenomenon or too attached to the pre-conceptualizations so that no "discovery" is possible.

However, one grounded theory study, for instance, concluded: "Replication of this study in other cultural groups or rural populations is warranted" (Tuck, 1997, 124). We do not know how this can be achieved if a grounded theory researcher is "not allowed" to replicate but tries to develop his or her own grounded theory. In our view, there is a potential danger that we will end up with a number of unrelated grounded theories if we do not overcome ideologies within our approaches and develop a more dialectical view, for example of specificity and generality. We therefore argue for an integration of approaches and perspectives and a more rational and pragmatic attitude when approaching research questions and designing research studies.

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Intercultural Training of Secondary School Teachers: Analysis of their Group Discussions

Mª. Concepción Domínguez Garrido and Antonio Medina Rivilla

Introduction

Today, Spain is a multi-cultural country because of its economic prosperity, especially in places such as Madrid, Cataluña, Valencia and Murcia, and a massive immigration, particularly from Africa to Andalusía. In fact, the majority of students is foreigner in some Spanish schools.

We believe that a multi-cultural school is an ecosystem. In this school, teachers and students enrich mutually their personal experiences, values and perspectives of their reality. Actually, the atmosphere of the multi-cultural school is based on the application of universal values and Human Rights as issued by the United Nations in 1948.

The French author Le Mètais (2002, p. 14) argues that "Interculturality is an interactive approach that demands to reconsider, adapt and adopt the ideas both of the absorbed community and the host community, so that all benefit from a cohesive and economically stable society." Le Mètais affirms that French teachers are working hard to adapt their way of teaching into an intercultural framework. As Juan Dat (2003) states, there is a similar effort in Spanish schools.

Le Mètais (2002) defines interculturality as a clarification of concepts in an atmosphere of respect. Indeed, this author states that "every individual is different" due to personal experiences and geographical situation such as local, regional and national parameters.

Hypothesis for a permanent training of teachers in Secondary schools: teachers of Geography and History

We think that the personalities, personal values, and emotions of teenagers are markedly formed during their years in high school. Nevertheless, adolescent students have personal conflicts due to their age so they constantly question themselves and their reality. Because of this, teachers of Secondary education should not only

help academically, but they also should be friends of their students. In fact, teachers of intercultural schools find new concepts and methods of teaching. These methods are teachers' self-learning and self-training among colleagues sharing experiences.

Aims of Interculturality in Secondary education

-   Interculturality reconsiders cultural and academic tradition of different communities, and it puts them in a geo-historical context.
-   Interculturality adapts personal and cultural characteristics of each individual such as language, customs, habits and socio-affective particularities.
-   Interculturality adopts the most prominent and convenient ideas, values and contributions of each student.

We believe that interculturality has to be developed in an atmosphere of solidarity, democracy and respect. Particularly, subjects like Geography and History give an epistemological and socio-anthropological background for enriching the human aspect of this interculturality.

Taylor's survey of intercultural schools in Great Britain

Taylor's national survey in Great Britain (2002, p. 74) comes to the conclusion that there is a need for experts of teaching. In fact, most of the students of the questioned schools were refugees. Teachers did not understand the customs of these students, and they did not correctly help children with special needs. Besides, Taylor suggests an atmosphere of collaboration between teachers and their students' families in order to compel racism in society.

Zabalza's analysis of teachers' aims in their training

Zabalza (2001, p.37) selects some aspects for a better formation of teachers. First of all, teachers should understand and speak correctly a foreign language. Secondly, teachers should analyze the best contents and sources of information for enriching their knowledge. Thirdly, teachers should co-operate and be tolerant to others in order to avoid injustice and discrimination. Fourthly,

teachers should know and respect aesthetic and cultural values different from theirs. They must also respect other traditions and cultural inheritance. Fifthly, teachers should teach focusing on social aspects and rules of nature such as environment, consumerism and health. Finally, teachers should incorporate physics and sports in students' personal formation.

To sum up, according to Zabalza, teachers should collaborate with each other. They also should pay attention to new linguistic and socio-cultural competence.

Teacher training: new intercultural ecosystem

Multi-cultural high schools and schools for adults are more open to a formation of teachers, because these institutions have to define their location within the new scenarios of openness, solidarity, and dedication of an intercultural society. From the many authors, who contributed to research and development in intercultural teacher formation, we want to refer particularly to the following ones:

- Le Mètais (2002) defends an interdisciplinary and continuos formation due to the changeable students´ necessities.
- Gundare's theory (2002) points out an European and University orientation with practices.
- Taylor (2002) suggests an ethical and democratic background in the way of teaching.

The model of teacher training demands of teachers to develop a great sensibility to speak about conflict topics. They should also endure their perseverance due to the possible modifications of the parameters of interculturality. Finally, teachers should co-operate with their students' families to develop civic values.

Questions about the model of teacher training

- What kind of society do we wish?
- What kind of role do educational institutions and communities have?
- Which are the implications of the principle of integration and interculturality?
- Which difficulties arise in the process of living together, which problems to accept differences of cultures?

Socio-geographical perspective in teacher training: examples from Geography and History

Domínguez and colleagues (1996), Domínguez (2003), and Cardona (2000) point out that the geographical situation is important for teachers. Actually, Estébanez (1996) as well as Domínguez and Medina (2002) say that teachers from cities teach less creatively that those from the countryside. Examples of social parameters in teaching could be found in the list of authors (see below) that we have already cited.

Model of teacher formation in Geography and History
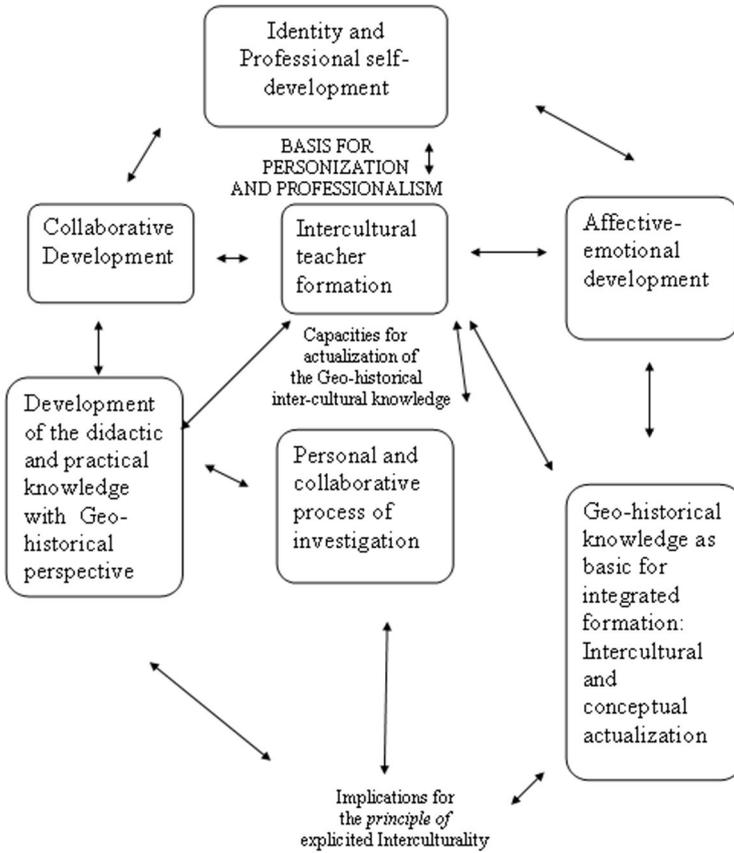
Our model (see preceeding page) has some features in common with other educational models. However, it selects and adopts ideas from other cultures in a pedagogical frame.

Professional identity and self-development of teachers

We think that teachers' professionalism is created by their personal experiences and beliefs. In fact, these teachers are more creative and innovative in a multicultural school to clarify their students' points of view. We suggest a list of possible aims for teacher training:

- Work on identity and self-training.
- Identity is not considered as an essential aspect for the training.
- Design of professional identity courses for each educational centre.
- Capacity and relation of the intercultural discourse with professional development.
- Identity and self-training are the basis for interculturality.

Collaborative development

Our model of teaching is an open collaboration among teachers and students. However, there are conflicts due to different cultural values so there must be mutual understanding and respect among teachers ands students.
   We believe that teachers should take into account the following aspects:

- Assumption of the formative process with collaboration.
- Collaboration is the basic culture for development in inter-cultural educational processes.
- New educational programmes based on intercultural know-ledge and practices.
- Collaboration as an essential key for generating intercultural processes.
- Creation of situations of real intercultural training.

   Subsequently, we enlist some quotations of teachers about interculturality and its components:

When I used interculturality between cultures and students, I have never found better results with so little means.

The seminaries of interculturality in the centres are the best proof of collaboration and closure among cultures.

The city reflects the presence of citizens such as Magrevies, Bolivian, Ecuatorian, and people from Eastern Europe that collaborate with similar cultures, and look for decent places to live.

Some of the projects of innovation are based on cultures and the shared efforts of teachers, especially from department.

We think that collaboration is the basis for interculturality and the development of Departments and centres.

Collaboration is not development as it was planned, but it should be developed as a clear principle of action.

We should promote seminaries, workshops and activities among teachers and students which lead the collaborative principle and practices, basis for interculturality.

We apply the real ideas of collaboration connected with theatre, work in groups and ways of creative exchange, reciprocity and collaboration.

Experience of formation is more technical than practical, so there is a need to be found again in classes.

We think that interculturality depends on our attitude and capacities of collaboration. Because of this, if we developped projects in common, we would makea true compromise of collaboration.

We have noticed that teachers from Argentina, Chile, Mexico and Colombia made some important remarks such as:

We think that collaboration is the basis for the education not only in social sciences, but also in all subjects.

Teachers need a constant actualisation, so an exchange of ideas among colleagues is very important due to their different points of view.

A shared work and projects in common is guarantee of people's involvement.

We focus on the enthusiastic and enjoyable work about the pollution of Panama and its effects in Panama-Paraguay of five teachers and twenty students.

This work was successfully presented in Sweden and United States. Sweden, Senegal, India, Venezuela, United States, Japan, France, Spain, etc. collaborated in this presentation as communities of leaning.

The work was continued with a study of Human Rights and violence, basis for interculturality.

There were experiences of projects among communities of learning in different centres who talk about the mass media language in the classes.

Emotional Development

As Goleman and Fullan (2001), and Hargreaves (2002)suggest, teachers' decisions and personal stability depend on their emotions.

Hargreaves (2002, p. 9) defines that "emotional geographies are spatial parameters or patterns that help create and enrich emotions and personal beliefs." Indeed, Hargreaves draws a graphic model of emotional geographies.

Hargreaves' model

Closure		Distance
←	- Socio-cultural distance.	→
	- Moral distance.	
	- Professional distance.	
	- Political distance.	
	- Physical distance.	
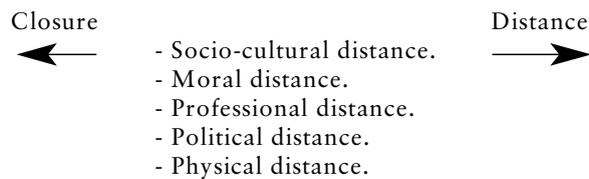
These distances are psychological so each person would measure them differently. Indeed, in multicultural schools teachers' experiences are richer because they discover the singularity and value of each culture. Emotions are an integral part of teaching and, therefore, teachers have to be aware of them, open to understand them, and strive for an optimal emotional balance. Actually, we believe teaching is related to professional, political

and physical aspects. In fact, the emotional force is the most powerful one in the human being.

Development of didactic knowledge and geo-historic practice in classrooms

Shulman and his colleagues argue that teachers of Social sciences should focus on a didactic knowledge such as subject matter and pedagogical (content) knowledge. Dewey extends the knowledge to aesthetics for a better organization. Pratt (2003) defends an epistemological knowledge whose difference to the general one is a geo-historical vision. Finally, Stoltman and De Chano (2003) underline this point of view, that is, we should remember within our field to appreciate the construction of a unique approach – called Didactics of Geography.

Teacher training should help teachers to achieve the following goals:

- Search of balance between emotional and personal development.
- Capacity for generating processes of teaching and learning in the emotional world.
- Developing sensibility and empathy to students.
- Training courses must have situations of great professional experience.
- Reflection and consciousness of the socio-emotional process, which is very important for the contact with other cultures.
- Learning about emotions and empathy.

Trends in Scientific and Educational theory as reflected in selected Publications

Scientific (Geography) Theory		*Education Theory*
		(Fairgrieve, 1926)
(Forsaith, 1932)		
		(Thralls, 1958)
	(Pattison, 1964)	
(Chorley and Haggett, 1970)		
	(Bacon, 1970)	
	(Graves, 1972)	
(Biddle and Dear, 1973)		
	(Long, 1974)	

                                                 (Marsden, 1976)
                        (Manson and Ridd, 1977)
                                          (Biddle and Gerber, 1980)
                                               (Walford, 1981)
(Sperling, 1981-84)
(Graves, 1982)
                                (Slater, 1982)
                                (Huckle, 1983)
                                (Graves, 1984)
                                          (Gerber and Lidstone, 1988)
                                (Natoli, 1988)
                                                 (Stoltman, 1990)
                                (Stoltman, 1991)
            (Geography Education Standards Project, 1994)
                                (Audigier, 1995)
(Hardwick and Holtgrieve, 1996)
                        (Boehm and Peterson, 1997)
(Frew, 1999)
                        (Gerber and Chuan, 2000)
                                                      (Kent, 2000)
                                          (Marsden, 2001)
                                          (Graves, 2001)
                            (Lambert and Machon, 2001)

Teachers' self-training

We think that teachers should investigate their ways of teaching in an atmosphere of collaboration. They should also look for new ways of teaching. Besides, these teachers must be in contact with their students' families. To sum up, we believe that teachers should collect, analyze and select the most appropriate methods of teaching.

Geo-historical knowledge: Intercultural conceptions

Barnett (2001) suggests that teachers' knowledge should be related to their lives. Indeed, we go further by saying that teachers should pay attention to the epistemological and intellectual aspect. Teachers also need Geo-historical knowledge, that includes economy, anthropology and social history, for a fluid dialogue among members of the school.

Against Schön's theory or "reasoned epistemological action," Limón (2002) affirms that concepts change so teachers should

investigate these changes. We think also that teachers should take into account their emotions and values of each culture.

## Implication for the principle of explicited Interculturality

Intercultural teaching is an understanding among different cultures enriching its members' visions. Therefore, teachers of intercultural schools create a new atmosphere of equality and responsibility in order to live in society.

Methodology of investigation

Applying the Delphi technique, we have collected and selected equally seven parameters in order to solve the problems of teacher training.

(1) Discussion groups or focal groups.

An example of discussion groups was made by Medina and Domínguez (2001, 2003)in Andalusia, Castilla La Mancha, Madrid, Galicia, La Rioja, Chile, Argentina, Mexico and Colombia from May to July 2003. Initially, the group discussed the perfect model of teacher formation by using a series of data. At the end, they discovered that their points of view were enriched by those of the others.

Medina's and Domínguez' pattern of group discussions

Presentation of data and basic questions to teachers who are free to argue → Recording and writing the process of dialogue → Transcription of data → Analysis of data globally and contextually → Application of AQD programme (an exhaustive and final analysis)
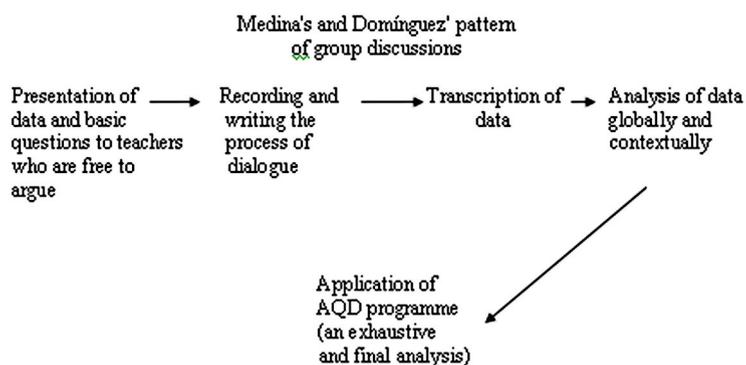
In conclusion, the discussion group finds that cultural differences are a problem to solve with professional self-development, the collaboration of colleagues, and emotional balance.

When the majority of students is foreigner, teachers should look not only for their personal experiences, but they should also share ideas with others. Montavez (2003) and Le Mètais (2002) propose this example in cultural diversity:

- Conceptual actualisation.
- Didactic Knowledge.
- Practical knowledge of teachers.
- Epistemological and disciplinary knowledge in Social Sciences.
- Coherent and systematic methodology
- High compromise and moral conscience for colleagues' collaboration.

Results of the seven components as unity of analysis

After a long discussion with colleagues, we arrived to the conclusion that teachers do not have clear ideas about interculturality and its problems. In fact, teachers criticize the poor interest of schools for interculturality. Teachers are conscious that they need practical self-training for a perfect accommodation in their personal and professional identities. Particularly, Ibero-American teachers defend a social knowledge in order to find their limitations and mistakes.

In conclusion, we think that teachers are conscious of their task for educating young people.

Collaborative Development

Long time ago, we run an intercultural seminar with students from East Europe, Colombia, Africa (Magrevies), Ecuador and Bolivia: This seminar was a series of activities such as theatre and groups of discussion. As a result of this experiment, teachers empathised with their students. In fact, teachers from Argentina, Chile, Mexico and Colombia defend an exchange of ideas among colleagues, especially from the social areas.

Another practical example was with five teachers and twenty students. We asked them about the pollution in Panama and its effects there and in Paraguay. Surprisingly, every participant co-

operate early. In fact, there was also a great acceptance of this work in places such as Sweden and the United States. Because of this success, the group of discussion was increased with people from Mexico, Chile, Colombia and Argentina. The discussion was increased with the content of Human Rights and Violence, which are basic intercultural elements.

Personal and emotional development

Our interviews with other teachers lead to a common conclusion: teachers must be sensitive and emphatic to other members of the school. Moreover, teachers will learn much about their personal and professional lives in contact with other cultures, especially South American much ones. In addition to this, some materials such as films, Internet or famous people (e.g. Ecuadorian painter Guayasami) can help teachers to fulfill their task.

Besides, teachers think that socio-emotional aspects are important for a personal and professional development. An example of this can be seen in TOBA and Aztec families, who enrich teachers' experiences because of their social problems.

Feelings and emotions are universal, so there was a mutual understanding between teachers and these aborigines

Development of the didactic and practical knowledge in Geography and History

Teachers need not only an emotional-collaborative compromise, but social sciences are also important, because in many countries the population increases by immigration.

We suggest more organization and collaboration in teacher formation. We propose also that the perspective should be more open and less western. Finally, practices can accompany the theory.

Teachers of Latin America, especially from Chile, Peru, Bolivia, Afro-Colombia, are culturally different. However, these people affirm that interdisciplinary and disciplinary perspectives are necessary for their training. They ask also for more means in order to develop their students' creativity. For an analysis of values and contents, these teachers suggest the use of television and mass media.

We believe that there must be a didactic and geo-historical knowledge due to the globalization of ideas and attitudes in crisis. We suggest the following list of aims for teacher training:

- Selection, organization and orientation of geo-historical knowledge in an intercultural frame.
- Innovative courses with new contents, methods and materials.
- Work on geo-historical perspective going further from the occidental point of view.
- Recovery of new contents and coherent perspectives with students of different countries.
- Improvement of intercultural processes and features of the content.
- Scarce intercultural aim in the training teachers´ programmes.
- Reflection and analysis of the practices with different cultures, especially Ibero-American contexts.

Training as a process of personal and collaborative investigation

Interculturality is complex, therefore it needs a reflexive investigation. This investigation is an exhaustive analysis of the practical and professional knowledge. However, reflexive investigation is scarce nowadays . In order to avoid this poverty, there must be a methodology such as the hermeneutic, the interactive-symbolic, the participant observation, the narrative or analysis of content; and some recordings on tape or written in notebooks.

Our aims are intercultural dialogue, relation among cultures, adoption of contents, design of materials, improvement of socio-relational environment in the community.

Teachers, especially from Latin America, suggest an integrative investigation. Because of this, activities should be within and out of the academic schedule. There must also be an educational knowledge of social sciences based on collaboration with teenagers.

Moreover, formation is included in social and systematic processes. In addition to this, we suggest good educational helpers such as scholarships and grants like UNAM, DF. Mexico. They do a great cultural exchange.

Finally, institutions should create an atmosphere of co-observation and qualitative methodology of analysis. In conclusion:

- Understanding the personal and collaborative investigation is basic for intercultural processes of teaching-learning.
- Training experiences should include practices of Geography and History.

- Shared investigation among teachers will be the best task for intercultural processes.
- Implemented courses do not pay attention to the improvement of investigation.
- The complexity of interculturality requires an exhaustive investigation.

Knowledge as generator of integrative formation: Interculturality and conceptual actualisation

Today, there are not many material means for improving teacher training. However, teachers think that their preparation is the most powerful weapon for their prestige and success.

We believe that professional learning and permanent actualisation of knowledge in the area of social sciences make interculturality be understood. In fact, there are innovative practices in this interculturality due to an atmosphere of discrimination and racism. Interculturality is knowledge. Disciplinary and interdisciplinary knowledge are the basis for a permanent training of teaching due to the complexity, globalization and incertainty of intercultural tasks. Actually, interculturality creates cognitive discrepancy beliefs and images.

For American teachers, practices are necessary. These teachers also suggest improving the social aspect, to look for new strategies, materials and methods. We conclude that

- Training should be implemented in an intercultural and interdisciplinar synthesis.
- Formation should integrate geo-historical knowledge.
- Interculturality as the basis for the conceptual actualisation.
- Knowledge should increase in training processes.
- Interculturality is an opportunity for conceptual actualisation due to a humanistic and creative vision.

Implications of the principle of *explicitated interculturality*

Today, teachers think that interculturality is still a utopia. However, they believe that interculturality will live in harmony among different cultures in educational centres. In opposition to different cultural differences, teachers defend peace, respect and equality in the classrooms. An example of this can be seen in schools such as in Argentina, Brazil and Paraguay. There, teachers improve their personal and professional knowledge using by new

methodologies and ways for understanding different cultures. In conclusion, we believe in

- Need of consciousness and transformation of intercultural practices.
- Development of interculturality in its integrity and inter-disciplinary.
- Intercultural value and compromise in processes of teachers´ training.
- Broadening intercultural capacity to improve teachers' and students' integral development.
- Intercultural situations based on radical opportunities of dis-course, empathy and collaboration among all participants.

Results of the contributions of the discussion groups

Professional identity and self-development

Professional identity is teachers' capacity for selecting the best contents, processes, activities and practical transformations of their own classes. Indeed, these teaches should actualize their ways of teaching in contact with other cultures in an intercultural classrooms.

Collaborative development

We think that teachers should collaborate and share ideas with other colleagues in order to improve the level of education in institutions.

Personal and emotional development

Sensibility, empathy and socio-emotional balance are basic elements for teachers´ training. In fact, teachers think that positive emphatic domains and the development of socio-emotional climes are necessary. Particularly, the bases of these components are feelings and emotions. Unfortunately, these elements are nowadays not important at schools. However, we hope that teachers´ emotional balance will increase in importance in future.

Development of didactic and practical knowledge in the areas of Geography and History

We think that teachers should focus on rationality, humanity and adequacy of contents and differences of habits in cultures. Because of this, education should be integrative, intercultural and coherent.

We also believe that teachers need practice in knowledge of geo-historical nature in order to exchange their creativity and didactic knowledge with other colleagues. However, this knowledge is still scarcely developed.

Teacher training as process of personal and collaborative investigation

For the improvement of teacher training we suggest a series of activities such as new discourses, interviews in depth and analysis of cultural values and interactions. In addition to this, reflexive investigation and its process are welcome for understanding the complexity of interculturality.

Knowledge as generator of integrative training: interculturality and conceptual actualisation

Teachers believe that interculturality transforms their thinking, beliefs and emotions because other cultures help them widen their points of view when they create contact. Besides, professional experience is developed by a conceptual attitude and a socio-emotional actualisation.

Implications of the principle of *explicited interculturality*

Kasseum (2002)and Bullough and Young (2003) suggest that teachers should study each students' case with sensibility and cohesion. We also think that teachers should co-operate and implicate themselves into the social and cultural students´ problems in order to improve their own personal and professional development.

In addition to this, we think not only that teachers should develop their academic knowledge, but also their global vision.

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Step by Step: The Significance of the Open Qualitative Research Process for Gender Research

Silke-Birgitta Gahleitner

Introduction

The difference between the sexes determines our thinking, feelings and actions, our social experiences and our culture. Thus, in research on the gender-'typical' aspects of a phenomenon there is an inherent risk of focusing too strongly on gender duality (Gildemeister & Wetterer, 1995) and consequently always a danger that we shall reproduce what we actually wanted to investigate as 'impartially' as possible. In gender research the question arises as to how we can "get behind" the binary system of gender duality (Hagemann, 1984).

Hagemann-White, 1993, 1994) proposes a dual strategy for research, consisting first in assuming the perspective of difference and then having the data recoded by two further coders to call this perspective into question. However, for this procedure the researcher must be willing and able to remain open to the research process and to react flexibly to the insights afforded by the respective perspectives.

In this article I shall present and discuss this procedure, taking as an example a study on gender-sensitive therapy and counseling after traumatic experiences in which I employed Hagemann-White's (1993, 1994) gender-sensitive procedure in combination with Mayring's (1993, 2000) qualitative content analysis.

In search of gender sensitivity in trauma therapy and counseling

Although in recent years there has been a sharp increase in the literature on psychotraumatology and psychotherapy, only certain aspects of research in these disciplines has been conducted with a gender-sensitive approach. Likewise, it has not as yet been possible to achieve a consensus on as regards the empirically supported evaluation of the efficacy of psychotherapeutic modalities employed in the treatment of traumatization, and of complex traumatization[1], in particular. While all procedures tested have pro-

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[1] The sequelae of extreme and long-lasting trauma are summarized in the diagnosis of complex post-traumatic stress disorder or 'Disorders of Extreme Stress Not Otherwise Specified (DESNOS)' (cf. Herman, 1993).

ven effective to a certain extent, there is some debate as to the reliability of the results, as they are still very inconsistent and no large-scale comparison studies have as yet been carried out (cf. Foa, Keane, & Friedman, 2000).

The results of a study I recently carried out on the gender-specific processing of sexual traumatization (Gahleitner, 2003) reveal that gender-specific aspects play an important role in coping with sexual abuse and that the way in which professionals deal with these problems is often far from fulfilling survivors' expectations. For example, the demand for professionals to have specialized knowledge of the subject and to be more person-, situation- and process-oriented in their interventions is frequently not met.

Study design

Research question and objectives

One of the main aims of clinical research is to detect and promote constructive coping processes that can be supported in psychotherapy and counseling and help individuals to lead their lives with as few symptoms as possible (Fegert, 1994). In line with this objective, the questions investigated in the present study were: to what extent can counseling and psychotherapy as seen from the client's perspective provide support in the process of coping with complex traumatization and what gender-specific aspects are involved?

Design

Results of previous study

Development of problem-centered interviews — Development of interview guide, sampling

Retrospective interviews with men and women — Data collection

Gender sensitive content analysis of interviews — Data analysis (see example: given Section 5 and Table 1)
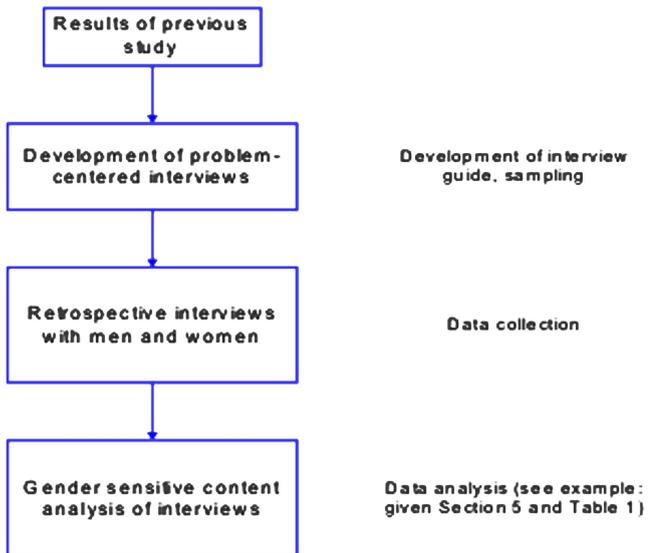
Fig. 1: *Design*

Methods

In contrast to mainstream psychotherapy research, which has a mainly quantitative orientation (cf. Orlinsky, Grawe & Parks, 1994), the present qualitative study investigated the subjective perspectives of men and women with complex traumatization. The suitability of the method for investigating the research question was first tested in two study participants selected from a larger sample of interviews on a wider issue. In a first step, problem-centered interviews with an open-ended initial question were used to gain access to the participants' experience of their coping processes in counseling and therapy. The results of a previous study on gender-specific aspects of the experience of sexual abuse were used in the development of the interview guide. Glaser & Strauss' (1967/1988) "theoretical sampling" procedure was employed, in which study participants are selected step by step in order to obtain the widest possible variations within the phenomenon of complex traumatization.

For the evaluation of the interviews Mayring's (1993, 2000) qualitative content analysis was combined with a gender-sensitive procedure developed by Hagemann-White (1993, 1994) with a view to creating a wider scope for an exploratory, inductive approach while at the same time doing justice to the gender aspects which constituted the main focus of the study.

In what follows I shall begin with a brief introduction to the method employed by Hagemann-White and then present a concrete example to show how aspects with relevance for gender can be systematically extracted from the data in the process of the content analysis. I shall show the results for the respective male and female participants side by side in a table for ease of comparison.

Taking gender-specific aspects into account in data analysis

Carol Hagemann-White (1993, 1994) draws attention to the necessity to "look twice" in order to be able to take gender-specific aspects into consideration in data analysis (Hagemann-White, 1993, p. 74). To start with, the old, gender-polarizing standpoint is retained – since this is the instrument we have used to collect the data with which we intend to broaden our perspective by breaking down the dichotomous structures. However, then, in a second step, an intersubjectively validated, third person's view is adopted by two further, independent researchers who code the data a second time. This two-step procedure serves to call once more into question researchers' and participants' assumptions and draw attention to what they take for granted.

Hagemann-White (ibid) proposes the following strategy. To begin with an inductive-deductive content-analytic method is used to develop a category system on the basis of structural dimensions in the data which are relevant to gender. These are then used to code the text in the structural content analysis. In a third step, the sources of utterances and modes of expression in selected passages from the texts are rendered unrecognizable. A second group of coders consisting of an equal number of men and women are then requested to re-code the text excerpts that have been treated in this way. Finally, the passages are re-analyzed on the basis of gender-specific criteria and in respect of their codings and respective contexts (cf. Mayring, 1993, 2000).
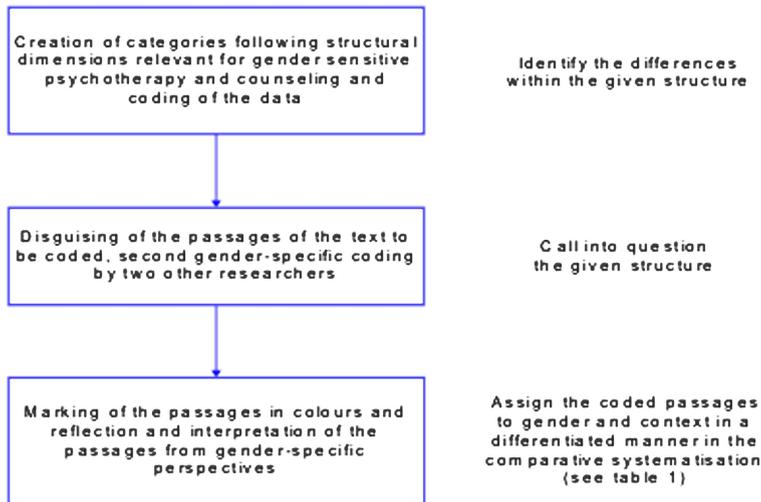
Figure 2: *Application of Hagemann-White's procedure to the subject under investigation in the present study*

In the present study this method was employed in order to create categories on the basis of structural dimensions relevant for gender-sensitive psychotherapy and counseling. Following the creation of categories and extraction of the coded data, the excerpted passages were decontextualized in such a way that it was no longer apparent whether the speaker was male or female. Two other researchers then re-coded the passages as male or female. For this procedure each passage was presented to one male and one female coder who had not previously seen it. These coders were requested to mark gender-specific sequences in accordance with the state of the art of theory and research in gender studies. The passages were then returned to me as researcher and I marked the texts in different colors and integrated my reflections on the implications of gender-specific utterances in my systematic comparisons of the data I had obtained from the men and women participating.

Using this method it is possible to identify sequences in therapy and counseling processes in which men and women describe gender-specific phenomena and change processes. Carol Hagemann-White describes this procedure as a "systematic search

for utterances that fall within the category of gender relevance"
(Hagemann-White, 1994, translation by the translator of the
present text).

Example

Mr Profeld[12] is 47 years old, used to be a bank clerk and is now a
social worker and works as a therapist with clients with substance-
related disorders. Ms Prohaska is 32 years old. She originally
trained to be an insurance broker, but is now a social worker and
a psychology undergraduate. Both were sexually abused by their
fathers in early childhood, Mr Profeld also by his step-sister. Mr
Profeld was alcohol-dependent for many years. After an at-
tempted suicide he decided to do psychotherapy. With the help
of inpatient psychotherapy and outpatient aftercare he was able to
build up a stable social network and use it to re-organize his life,
finish high school and study social work. Today he passes on his
experience to others in the field of counseling and education for
substance abusers. Ms Prohaska came to terms with her abuse
experience by her own self-reflection and talking to friends and
by undergoing several years of therapy and doing various training
courses. Today she is also a professional doing family casework.

   In response to the question as to what had been the most
helpful therapeutic intervention in his coping process, Mr Profeld
answered that it had been part of a breathing therapy session in
which he had alternately adopted the roles of perpetrator and
victim and experienced the extreme poles of the emotions
involved. He described the subsequent course of his therapy as
follows:

> " *and what I felt after this session was that I had an
> intense pressure in the pelvic area ..... and I kept choosing
> this woman .... and she then pressed on that area .....It
> was really .... you can't really express it in words .... and
> then I noticed that's where the anger is, too ... I shouted
> and shouted and shouted and that was simply, it was just
> liberating..... and so that was really the release, there were
> many, many blocks that disappeared and I notice still
> today, when I ...... this pain is still there.... but ... it simply
> isn't as important as it used to ....*"

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[2]   The names of the participants have been changed to avoid recognition
and protect confidentiality

Ms Prohaska reported a very different kind of therapeutic intervention. She described a sequence in an NLP (neuro-linguistic programming) session in which change processes were initiated that proved to be decisive for her future.

> "*There was one NLP session that really gave me a lot of food for thought. My trainer did fast phobia with me. How we did it was that he asked me to put a picture in front of me, a very large, colored picture, uhm, with good memories of before, before the abuse started, and then to put a picture in the middle that was significant for the abuse and then somehow a large colored picture, so to speak, that came after. And I can remember that I ...... an important sentence that he said to me at the time [was] life goes from good to good and in between it was a bit shitty ((laughs)), like, and that, later I realized that that generalized in me, that is, I arranged my internal images in a different order. I don't have this great block in the middle any more that overshadows everything, it's somehow ..... and round about it there are positive pictures, and that's cut it down to size for me. Since then I've had the feeling I can live .... that was really important for getting to grips with it.*"

Both interviewees described these sequences as the 'turning points' in their coping with their histories of early traumatization. They reported that the stress and symptoms had subsequently been appreciably reduced and that the experience had been easier to cope with and integrate into their daily lives. The following gender comparison between was obtained by applying Hagemann-White's gender-sensitive procedure to these interview sequences.

Table 1: Concrete example of Hagemann-White's gender comparison method

male interviewee	female interviewee
Category: gaining access to feelings – explication of the emotions – catharsis	Category: cognitive restructuring of the traumatic situation
Gender aspect: therapy sequences with female connotations	Gender aspect: therapy sequences with male connotations
Reflection in the systematic com-	Reflection in the systematic

parison: in contrast to 'typical male coping behavior,' for Mr P. it was the discovery and expression of his feelings that was central in his coping process. He described it as a step of prime importance in his therapy that he became more open to his feelings and more emotionally responsive.

comparison: in contrast to 'typical feminine coping behavior,' for Ms P. the discovery of strengths and cognitive structuring of previously overwhelming emotions were the decisive elements in regaining an overall view of her life. She experienced the cognitive restructuring-like, 'fast phobia' procedure as a decisive turning point in her coping process.

On the level of hypothesis development, as opposed to theory building, current trauma research reveals that successful coping with early trauma requires both cognitive and emotional restructuring. However, it would seem that for the male interviewee in this pilot study, who had previously neglected the emotional aspect, it was of prime importance that he discovered and expressed the feelings he had denied, while for the female interviewee it was important to structure her overwhelming feelings cognitively and to develop resoluteness and strength after a long period of being flooded with emotion. The two interviewees' confrontations with their feelings and cognitions also occurred at different points in their coping and therapy processes (cf. also Gahleitner, 2003).

If this hypothesis is correct, therapeutic interventions aimed at helping men and women to come to terms with sexual abuse should start from different assumptions and be oriented towards gender-specific solutions. To be 'successful,' for both men and women interventions may therefore need to be directed at the coping strategies which are atypical for the client's sex and which have thus previously been less actively employed. These can be integrated in the protected space of psychotherapy. This result is also consistent with existing concepts of androgyny and the results of health research according to which a combination of as functional masculine and feminine characteristics as possible is considered to be especially health-promoting (cf. for instance Antonovsky, 1997; Bem, 1975; Bilden, 2001).

Final considerations

Hagemann-White's procedure combines well with content analysis. If the computer program Atlas.ti is employed, the

method can also be applied to relatively large amounts of data, once the program has been mastered. The procedure is thus practicable. Having the data viewed and evaluated by several different persons helps to consolidate the results from a number of different perspectives. The suggestions made by external coders open up additional perspectives at various points in the data analysis, thus rendering it more complex and creating more opportunities for reflection, introspection, additions and re-visions.

One may question to what extent it is in fact possible to attain the above-mentioned goal of 'getting behind' the all-pervasive structures of the social system of gender duality in the analytic process. Both researchers and participants are always individuals who experience themselves fundamentally as women and men. They constitute and shape the research process within the existing system that polarizes the sexes. Carol Hagemann-White tried to solve this problem by coding text passages out of context so that the sex of the author is not recognizable, and by introducing a second set of coders. The input of the two second coders does in fact help to attain a greater "gender-sensitive" complexity in data analysis.

From a feminist, constructivist perspective even the practice of establishing gender-relevant categories prior to the data analysis may be viewed critically, since, unlike Grounded Theory, this procedure places restrictions on the possible results. In order to 'get behind' the system one begins by looking from within the system and is thus unable to extricate oneself completely. This criticism cannot be completely dismissed (cf. also C- Behnke & M. Meuser, 1999). On the other hand, is there in fact such a thing as an external view 'from outside of the system?'

There has been much discussion on different ways of ap-proaching the problem. I, too, consider the problem to be unavoidable, but I believe it can be dealt with by using a procedure that is closely oriented towards the research question under investigation. The inductive procedure employed in con-tent analysis also plays an important role and provides openings contextualization and complexity. This affords the researcher the opportunity to throw light on 'gender' empirically and from a wide range of different perspectives, so as to work stepwise towards its ubiquitous structure and dynamics.

The aim of gender-sensitive research and theory building is to reveal the significance of the gender system for the understanding of social phenomena and to promote reflection on the democrati-zation of gender (Brückner, 2001). That gender-specific research focuses once again on the difference between the sexes and to a

certain extent also unintentionally confirms it and contributes to its construction, remains a problem, but does not render it impossible to gain insights. If researchers pay attention to transparency and remain open to the possibility that they may find new structures and structural categories within the framework they have set themselves, a substantial potential for change can result. In my view, combining Mayring's content analysis and Hagemann-White's gender-sensitive procedure gives us a chance to detect gender-specific phenomena without having to remaining completely within previously ordained structures.

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The Axiologial Bases of a New Curricum Design

Samuel Gento Palacios, Concepción Domínguez Garrido,
and Antonio Medina Rivilla

1. Research approach: methodological bases

The *implementation of a study that would allow to define (with theoretical and empirical support) the importance degree that could be attributed to the components and elements of quality of an educational institution* asked for a basic point of departure. We initially considered a referential model of institutional quality developed through different opinions of authors considered as scientific authorities in the theme of quality (in general), quality in education (in particular), and quality in educational institutions (in the specific arena we wanted to research).

But apart from that, this model of reference (Gento, 2002) has also considered the analysis of reality through our contact with it as teachers, supervisors and teacher trainers. Other important component to set up the referential model has been formed by the opinions of the protagonists of education in institutions of this type (mainly teachers and students, but also, pedagogical advisers, supporting teachers, school heads, parents, other professionals involved in formalized educational processes, etc).

1.1 The qualitative and quantitative approach

In order to implement our research, we used a double approach: (1) to design the theoretical background and the empirical process, we mainly used the qualitative approach, and (2) to organize and exploit data obtained from the empirical research, the quantitative focus was used. It was, again, necessary to use the qualitative approach when we concentrated on interpreting and explaining the results obtained by the empirical study and when we put forward some proposals as consequences proceeding from the field analysis.

1.1.1 The initial qualitative analysis

A *qualitative analysis* was necessary to set up a working hypothesis to empirically contrast the components and elements of educational institutions quality. Intense discussions had to be implemented to reach the basic proposal of the referential model of quality.

Once such a basic model was theoretically designed, a qualitative focus had to be used to design the empirical study and to prepare the necessary methodology and instrument to receive the appropriate information proceeding from the involved protagonists and from interested people. At this stage we had to maintain contacts and intense discussions with professionals of authority who had the necessary level of critical focus and the required expertise acquired by their closeness to the authentic reality of schools functioning. People familiar with the authentic reality also participated in our debates to design our theoretical referential model and our empirical study.

Furthermore, as we wanted to integrate our proposal for quality in educational institutions into the total quality approach, participation of experts in this approach was considered highly convenient during the qualitative study of the critical analysis of such a proposal and of the empirical study design. To receive and systematize these experts' opinions, we maintained contacts and also discussions with professionals (most of them responsible for programs or departments of quality in public or private entities involved in activities related to manufactured products or to services).

1.1.2 The quantitative analysis

Once the basic referential model of institutional quality for education was designed theoretically, and once the empirical study process and the instrument to take field data were designed, it seemed convenient to use the quantitative approach. This appeared necessary in order to get the exact measure of the level of scientific guarantee of the empirical instrument (in our case, a questionnaire -scale) and the dimension of importance that was conceded to each component and element of institutional quality in education.

The questionnaire was filled in by 3500 people from different countries: a number of the respondents were from Spain; but there were some other ones, mainly from other Spanish speaking countries (such as Mexico, Costa Rica, Venezuela, Colombia,

Bolivia, Argentina, etc.), and also from Portugal, Brazil and the USA. The sample was mostly formed by teachers (42%), followed by students from different educational levels (secondary education onward: 35%); parents (13%), school principals (5%) and other professionals (5%) also formed part of the sample.

1.2 The research process

Once the research appropriately defined its object (that would consist of the definition of importance to be conceded to components and elements of quality to have an educational institution of authentic quality), and once we determined the orientation to be given to the empirical study (dedicated to pondering the importance of such components and elements through the involved and implicated people's opinions), it was necessary to define the sequence to be followed through the empirical study.

Basically, the phases to be implemented for this empirical field study would be dedicated to:

- The empirical *instrument design* (which would include the components and elements of quality in an educational institution and the possibility of pondering their importance to reach such quality);
- Validation of such instrument (to determine if its design would be useful for the put forward purpose);
- *Use of the instrument* (with representative samples of involved and implicated sectors);
- *Data collection and analysis* (through techniques of scientific research that would allow the data reception, structuring, and treatment);
- *Interpretation of results* (that would show the evidence of conclusions that, with scientific bases, could be determined to estimate the necessary importance to be conceded to each component and element of quality).

2. The axiological basis of curriculum

The critical analysis of current educational institutions is claiming for their urgent transformation, although not for their elimination. By considering this, the important question is how to conveniently clarify the basic tendency on which today's educational reform should be based. But it is becoming progressively clearer that education is a complex phenomenon and that there

are diverse components and a number of elements intervening in its implementation and results (Gento, S., 2002). We particularly considered here the need of clarifying the definition of appropriate results or, which is the same, *what is the true product of education*.

In relation to that, the report of OECD on "Schools and Quality of Teaching" sets up the following consideration: "Those who claim for a bigger attention to results should clarify if priority must be given to the specifically cognitive results, or if among the desired aims should be equally included the education wider purposes to embrace the emotional, social, aesthetic and moral learning" (OECD, 1991). Although the purposes of education enunciated by this source are not complete, it gives us an opportunity to offer arguments in favor of *our own fundamental proposal for the educational curriculum, particularly when it is related to basic education*.

We are attending today to a true watershed in education conception and, according to that, the to now relevant concern in curriculum design for giving priority to knowledge acquisition should give way to a new situation, that will concede more importance to the specific condition of human beings (who are not only mechanisms able to accumulate knowledge), as a guarantee of their essential ability to assure their survival and to guarantee their future in harmony with their environment and with their fellow people. In this sense, Professor Alvin Toffler states that "nothing must be included in a curriculum unless it will be strongly justified in terms of future" (Toffler, 1990, p. 409).

By contrary, the same author indicates that the current curriculum is a vestige of past time and it does not have meaning (Toffler, 1990, p. 410). The efforts recently made in favour of the inclusion of values in study plans or curriculum designs have inserted "*values as transversal subjects*" that must be developed through other fundamental curriculum subjects. This situation has appeared in different countries, among them Spain. Nevertheless, the increasing claim for extending training in values, as a saving table to solve the many growing problems existing in our today's societies and, frequently, in our schools, is determining a revision of this today's situation.

Revealing in themselves, in this meaning, are the words of the Mexican researcher Rolando E. Maggi Yáñez, when he expresses himself this way: "From the curricular point of view, the current tendency focuses in the increase of quality and education in values and attitudes that will be introduced according to the idea of universality (...). Although we estimate this idea pertinence, we must also consider that what has been attained till now has not

given the wished results: this has produced the existence of grave shortages in fundamental aspects of education" (Maggi, 1997, p. 230). This statement, referred to the Mexican context, should be extended to other countries.

To overcome this formative shortage in curriculum or study plans, our proposal puts upside down the essential approach: instead of considering the knowledge contents (epistemological component) as basic for curriculum design, to what it is afterwards added education in values as transversal contents, the process we propose should be the inversed one. Our approach is not to submit values to knowledge contents; by contrary, the epistemological development must be implemented by considering an axiological approach: the idea is to clarify, firstly, those values that should be developed through education (as fundamental product of this education) and to implement, then, this fundamental purpose throughout the use of cognitive elements proceeding from diverse areas or knowledge (apart from other tools).

2.1 Values as the authentic product of education

The educational product, understood as the basic entity of education or (which is the same) as the specific authentic result that education should produce, must be the *basis or ground to a curriculum reshape*. The particular educational product of an educational institution is, obviously, centered around the attainment of "education." But this general idea, involves itself a diversity of components that should be specified, explicitly stated and made operative, in order to facilitate its accountability.

Education implies a typically human process, implemented through an intentional an integrating process, in order to optimize the behavior most convenient to each individual in his/ her own environment and context, and this process is basically consisting of knowledge acquisition, automation of ways of behaving and internalization of attitudes that give him/her valuable quality in general and in his/her peculiarities.

As a consequence, we consider education as the integral promotion of a human being in all its dimensions and peculiar features. This meaning of integrality compels us to consider *education as a product in terms of global promotion*. Nevertheless, the need to understand the components of this unitary promotion forces us, first of all, to identify them; and, then, to profoundly study their content. After intensely reflecting upon them and on the essential meaning that education has, our conclusion is that

the most important and specific contribution that education makes to the human being is values promotion (Gento, 2002, p. 67-83).

After considering some studies on frame values that educational systems from different countries put forward to be developed by education (UNESCO, 1972; Marín, 1993, p. 44-57), it seems particularly revealing the synthesis of values that UNESCO offers in one of its reports (UNESCO, 1972, quoted by Marín, 1953, p. 56), and that we reproduce here (see table 1, next page). This synthesis represents a list of frame values that a number of countries – from diverse cultures and distinct basic conceptions on education – suggest to be promoted by education. In spite of their peculiarities, these countries offer revealing co-incidences in relation to values they want to be developed through education.

Table 1: *Values to be promoted by education in some different countries (UNESCO, 1972)*

Values To be implemented	South Arabia	Austria	Indonesia	Ireland	China	Great Britain	Rwanda	Russia	Zambia	Total
Physical	●			●	●	●	●	●	●	78%
Intellectual	●	●		●	●	●	●	●	●	89%
Moral /Ethical	●	●	●	●	●	●	●	●	●	100%
Social & useful	●	●	●	●	●	●			●	78%
Aesthetic / Artistic	●						●		●	22%
Religious	●	●	●	●			●			56%

We can also consider that "most of the universal values that will be necessary throughout XXI century have been inscribed, for a long period of time, in the millenary traditions of great civilizations. These ones simply reflect the moral or ethical conceptions and the ideal of life, of humanity, of beauty, of justice and of freedom defended by our ancestors and magnificently maintained in the treasures of thinking" (Delors, 1996, p. 287).

After a conceptual analysis and a comparative study of the situation, we concluded that *we must include, in an integral conception of education, values that proceed from the essential condition of human nature, as education should be centred around the human being* (Delors, 1996, p. 281). In the end, we classified values to be promoted by education considering the whole dimensions of the human being. This way, we set up the following types of education: physical, intellectual, moral or ethic, aesthetic, social, practical or useful and religious (see table 2). Those formative areas correspond to the need of satisfying the development of the *structural human dimensions: physical, spiritual, socio-relational ad transcendental.* Those last dimensions correspond to the essential needs of each average human being living in society.

As a consequence, an educational product of quality promotes values that correspond to such formative or educative areas. Nevertheless, the peculiar entity of particular people and the specific identity of each educative initiative will determine their or its own axiological profile: according to that profile, some particular values could be more or less stressed.

Table 2: *Values to be promoted by education (Gento, 2002)*

Human Dimensions	Educational Area	Values to be developed
Physical	Physical-emotional	Promotion of integrity, survival and physical-emotional functioning ability
	Intellectual	Development of knowledge and of conscience, intellectual attitudes and strategies
Spiritual	Moral/Ethical	Achievement of responsible and free behaviour
	Aesthetic	Perception, enjoyment and promotion of beauty manifestations
Socio-relational	Civic-Ecological	Respectful adjustment to the shape and ways of functioning of human collectivities in their own context and environment
	Practical or useful	Development of the ability to survive and to be integrated in diverse contexts and environments
Transcendental	Religious	Sublimating, free and responsible option to overcome the personal, social and cosmic dimension limits

In order to specify the general notion and to facilitate the analysis of different categories of values that will determine the above mentioned formative areas, we briefly describe each one of them. The value types corresponding to the different educational areas are included in basic categories. Each one of these categories must be specified in terms of competencies. This competencies will give origin to particular skills.

2.2 Values of the human physical dimension

Physical education or formation must be orientated to guarantee, in as much as possible, survival and physical development of each individual in the best possible conditions of integrity and successful functioning of faculties, mainly the ones from bodily type or derived from body functioning. Values of emotional type are also considered as part of this group, because emotional manifestations ever have an undoubtedly bodily basis.

Physical education must, then, be considered as a necessity of taking care of human physical dimension. Other contents to be considered as necessary to develop this dimension are also: psychomotor development, health education, care of physical condition, security, autonomy and traffic education. Health maintenance and care will also include preventive medicine and hygiene.

The human being is a non divisible entity and, as a consequence, it is not possible to set up separated parts that will independently function: so, physical dimension is considered as part of the whole human being. However, the need to suitably understand such dimension asks for it to be separated to facilitate its study. García Pelayo (1985) identifies it as "the magnitude related to human being's body." And ENCARTA (1997) considers it as "the importance given to bodily nature and constitution, opposite to the mental, spiritual and moral one."

The importance of physical and emotional values is clear for the African leader Nelson Mandela, when he expresses this way: "I have always believed that (physical) exercise is not only a key to physical health but to peace of mind. Many times in the old days I unleashed my anger and frustration on a punching bag rather that taking it out on a comrade or even o policeman. Exercises dissipates tension, and tension is the enemy of serenity. I found that I worked better and thought more clearly when I was in good physical condition, and so training became one of the inflexible disciplines of my life" (Mandela, 1995, p. 490).

On the other hand, Lidell (1989, p. 116) writes in relation to the importance of our physical ground: "We are three-dimensional beings, made of flesh and bones, muscles and ligaments, organs, veins and arteries. All these elements form the furniture of our internal space. Only if we are present in it and learn to perceive it this way, we shall be able to transform it."

We mention, next, axiological basic categories of physical and emotional values that must be promoted by education in order to attain an educational product of authentic quality.

2.2.1 Health

Health is included among the basic categories of the human beings' physical dimension. Perhaps all the other categories of this dimension could possibly be included into this one, as we could possibly admit that "good health implies a well-being situation that affects the physical condition of the whole human being (and this physical dimension affects all the other ones); but, for methodological reasons directed to facilitate understanding, we particularly refer here to health. We can consider it as the *bodily general condition where every one of its components and elements work perfectly well, thus determining a general feeling of physical well-being*."

2.2.2 Sensory-motive functionality

Sensory motive functionality means the appropriate functioning and coordination of sensory and motive elements of the human body. Their attainment will take to the control of situations and of personal balance that will determine the feeling of harmony. Although it is obvious that the suitable sensitivity will have effect on the health general condition, cultivation of motive abilities can, also, contribute to the development of "manual skill," whose domain can be particularly useful in some cases.

Sensory-motive functionality has an important role to play in the *relationship of each human individual with his/her environment and with other people*. On the one hand, a human being's sensory perception of the physical environment and his/her motive behavior facing such environment are true elements of an active relationship with the physical environment. But the use of sensory and motive skills are also useful to intercommunication among people, because for such intercommunication you need

message transmission and communication channels, where the sensitivity and the use of bodily motive mechanism play an important role.

The body language, whose study is the object of "kinesis", shows the possibility of setting diverse ways of communication through bodily expression: messages transmitted this way (which sometimes are in open contradiction with verbal communication) are frequently a more sincere and spontaneous way of message inter-communication. But, while Fast (1979) considers that the authentic value of bodily language is due to the fact that it involves all communication levels, Motos (1983) concludes that there are four basic expression areas in the human body, which are: head and face; trunk; arms and hands; legs and feet.

2.2.3 Personal hygiene

Personal hygiene means the necessary care of our body, for it to be in perfect conditions of functioning and not to be submitted to circumstances that will attempt against health and physical well-being. It can be included, inside this category, body general care, dental hygiene and hygiene in dressing. Suitable personal feeding, and setting up the appropriate environment conditions to a convenient bodily functioning (such as ventilation and air cleanness, suitable lighting, etc.) can also be included into personal hygiene.

2.2.4 Nutritional balance

Nutritional balance is an important provoker of health and, as a consequence, of individual physical values promotion. The nutritional balance basis is good feeding. And, in order to attain this one, a *balance diet* is necessary, which implies food suitable consumption. It is true that this balance diet will be easier when we exactly know the particular nourishing contribution of different kinds of food. The availability of kinds of food should also be considered in as much as the consumption of what, having the necessary nourishing potentiality, do not have extremely high cost in market. *Dietetics*, as the study of balanced consumption of food, whose components are necessary to health and to psycho-physical well being, should be, then, a theme to be considered in an integral education of true quality.

2.2.5 Balanced sexuality

The human being is a sexual one. But the effect that this condition has on one's general condition can be considered with double meaning: on the one hand, the strict physical or physiological dimension of one's own nature; on the other hand, the evident repercussion that one's sexual condition has on personality; on some other psychological features; and on social behavior. As a consequence, it is necessary to take care of sexual integrity, development and the right use of the physical features that are included in our sexual condition. And, furthermore, it is necessary to promote the most appropriate psychological and sociological manifestation of individual sexuality.

2.2.6 Physical and emotional stability

The physical-emotional stability is a fundamental and basic aspect for mental health, individual adaptation and general behavior (Clausse, 1967). All that will contribute to attain this stability will be, then, an excellent contribution to the personal balance and to individual integration in one's own environment and social context. Respect to one's own body will be another value to be considered in this axiological area of education: as a consequence, attention will be given to the balanced modesty, as a defense against attempts to damage one's own privacy in physical and sexual manifestations.

In order to reach this physical and emotional stability, gymnastics (as proportional physical exercise accommodated to personal possibilities and needs) and sports (physical exercises submitted to standard regulations) will be useful activities. But, in the end, physical and emotional stability means a personal condition where the body right functioning, controlled by mind and by individual will, will produce a quietness of individual spirit. This personal sovereignty of physical component will be "beneficial for a creative, integrative and enriching individual activity" (Cagigal, 1979, p. 44).

2.2.7 Self confidence

Self confidence is the favourable assessment of our own individual ability to overcome our limits: it involves right self concept; but it also involves the need of behaving in a way that the good name of

our personal condition will be save. In the end, self esteem is reinforced with self concept ant it is related to personal dignity.

It seems evident that self confidence will proceed from *self concept* or individual *self identification*, and it should be based on *self acceptance*. It is convenient that the human being will humanly and intelligently live and know one's body, with its many abilities of movement; that one should want to live it; that one will be conscious of all these things; that one will, as a person, accept one's body limitations; that one will be able to assume and integrate such limitations; and that, in as much as possible and thanks to movement, one will extend one's own limits.

Self acceptance or self esteem should be considered as the feeling of well being and satisfaction with one's own body. On this feeling, it would be convenient not to be influenced by some fashionable trends that propose stereotypes based on some unhealthy standards (as, for example, extremely slenderness and slimness). Adolescence can frequently be a stage particularly propitious to irruption of such standards of beauty that can produce some pathologies, such anorexia and bulimia.

The true bodily self acceptance and self esteem or self confidence are not necessarily determined by a particular physical aspect. It is possible to find people not absolutely pretty who move with security and even elegance; on the contrary, you can find people with a pretty or handsome body, who do not feel content with themselves. Self esteem or self confidence proceeds from one's own knowledge, acceptance and security obtained from the intelligence recognition of physical possibilities.

2.3 Values of spiritual dimension

Values of a human being's spiritual dimension refer to his/her peculiarity as a rational and intelligent being, features that distinguish him/her from other live beings of this planet. The most popular meaning of spiritual values refers to their opposition to material or physical features. But the classification of values we have set up has been made by considering such values in their relationship with human beings. Perhaps we can find out one of the best conceptual frame accommodated to values of human dimension in the Spanish philosopher Ortega y Gasset (1994) who, when he refers to spiritual values, includes the intellectual, moral and aesthetic ones within them, as we do in our proposal.

Within this basic dimension of a human being, we consider, then, types of values such as: intellectual, moral and aesthetic. Education, as an integral influence on each human person's

components, must consider all values corresponding to his/her peculiar dimensions and must, then, include all corresponding diverse types of education, every time according to an integral and global focus, as a human being is and integral and unique entity.

2.3.1 Intellectual values

The promotion of intellectual values can be summarized in the "*supreme tendency towards truth,*, through the domain of knowledge. In the area of intellectual training, a good educational product of quality means the attainment of three fundamental formative blocks, that are: knowledge acquisition (conceptual contents); the automation of procedures (habits and techniques of intellectual values), and internalization of attitudes towards knowledge. These attitudes constitute permanent dispositions to estimate, to appreciate and, as a consequence, to behave him/herself in a peculíar intelligent way (Marín, 1993, p. 64).

The consideration of values as the nuclear pillar of education takes us to propose that such values should be the essential nucleus, around which conceptual contents, skills and procedures should be developed. But, in order to promote these three blocks according to requirements of quality, their treatment must assume the three following requisites (Mortimore, 1993, p. 29): to be reached within the less possible time and effort; to be integrated with other knowledge, procedures and attitudes; and to persist the necessary time to produce relevant effects on educated people.

With a wider openness in her focus, perhaps because she is closer to the total quality paradigm in education, Sylvia Schmelkes offers us a wider vision (although not complete nor systematic) of aspects to be included in intellectual training: "The relevance (of knowledge contents) can not be understood as giving the students some "relevant" data, that will be close to what they experiment in their ordinary life outside the school. The most relevant content is the skill to understand the written language and to express oneself through writing, to reason, to solve problems, to analyze, to assess options and to get information. This implies putting stronger emphasis on skills than on knowledge contents. However, skills can be developed by contents that underline what students are, in a special way, interested in (Schmelkes,, p.1995: 121-122).

Alvin Toffler also claims for a focus in intellectual training that will not be restricted to the knowledge acquisition, when he

states: "The tomorrow's schools must teach not only data, but the way to manage them. Students must learn how to reject old ideas, how and when to substitute them. They must, in the end, learn to learn" (Toffler, 1990).

2.3.2 Moral values

The individual *ability to freely and responsibly act* – according to behavior principles that each one imposes on him/herself – should be considered as the true dynamic nucleus of moral education. The fundamental condition of moral behavior is freedom, and such behavior will be as more moral as freer it will be: what reduces freedom, also diminishes the conduct responsibility. Nevertheless, not everything that can be made is morally licit: responsibility, as the accommodation to moral principles and rules, is an impending pre-requisite to morality.

The German philosopher Immanuel Kant has set up some features of morality, which have been accepted by modern philosophy. According to Kant, the moral values should answer to characteristics such as:

- To be absolute or unconditioned, differently from other conditioned values;
- To be accommodated to a universal norm;
- To consider each person as an end, not as a way to other targets.

However, to distinguish a moral norm from other ones that are not is not ever easy: only one norm reaches the condition of a moral one when it commands or prohibits something that directly affects human personality in something as fundamental as life, honor or dignity. As a consequence, the promotion of moral values (accommodated to normal norms) through education will produce a general improvement in behavior of people who are educated in favorable personal and social environment.

As moral values are the most profound and obligatory, their treatment is wholly impending in education. In relation to *moral training*, it is important to offer an educational product that will be suitably impregnated of such values (Ministerio de Educación y Ciencia, 1994, p. 37-46). But it is necessary to respect the balance between values of social projection (such as coexistence, tolerance, respect, collaborative integration, etc.) and those of personal self-assertion (such as responsibility, self-inhibition, effort, sacrifice, etc.).

2.3.3 Aesthetical values

The diverse forms of expressing aesthetic or artistic values involve the use of different rules and elements that are combined in a peculiar way: this combination of rules and peculiar elements constitutes the "codes" or normative construct of each artistic manifestation. This normative construct can be used as point of departure to understand and to enjoy aesthetic works. Such aesthetic works will be the peculiar manifestations of beauty and of artistic creation.

But the combination of aesthetic rules and standards changes from one epoch to another one. It is, even, possible that particular individuals have their own peculiar interpretative frameworks for the same aesthetic work, or that such individuals use the artistic standards in a different way to conceive and to implement an artistic work.

As a summary, artistic interpretation and creation ask for a personal and collective contribution by human beings. So, then: "The creative use of the plastic, dramatic and musical representation means the personal and innovative creation of elements, integrating the code, which are present in the creative artistic work: this involves going further that the use other people have made of the code, and overcoming previous solutions and ways of doing."

As typical manifestations of creative artistic contributions, we can refer to the following ones:

* The *Music*, as an expression of harmony in sounds;
* The plastic expression, *or "visual arts"*, interpreted through painting, drawing, photography or sculpture;
* The bodily expression, manifested through *mime or pantomime*;
* The combined expression of diverse channels of communication, where we can consider *theatre and movies;*
* The written expression that, when it acquires the condition of beauty, transforms itself into *literature* (theatre, poetry, novel, etc.).

2.4 Values of social dimension

The values of social dimension refer to the human being's condition that helps him/herself to survive with their fellow human beings, within a specific atmosphere of relationship and

placed in a peculiar environment and context. The importance of values of social dimension appears clear in Nelson Mandela's statement (1995, p. 334): "Nothing is more de-humanizing than absence of human company."

Included in this social dimension of a human being, we can consider, on the one hand, civic and ecological values and, on the other one, the need to reach the necessary training to be able to satisfy one's goals of success: this will be attained through the development of *practical values*.

We consider, next, the basic categories of values of the social dimension.

2.4.1 Socio- ecological values

As the human being has an inevitable social dimension and as society is one's ordinary natural environment to live, values of social and ecological types should be necessarily promoted by education. On the other hand, although peculiarity of today's organizations and institutions claim for the necessary development of social and ecological education, the peculiarity of educational institutions ask for a specific treatment of such education.

Social education does not imply, per se, a moral attitude towards society; but it seems that it cannot be a perfect adjustment to the human group nor advancement of such group without a moral background to face different problems that social relationship among human beings produce. Anyway, the moral implication can also be a necessary part of any other type of education.

In general, *a human being shows an adequate social education when he/she shows respect to collective patrimony (this implying rules, symbols and uses) of a specific human group and contributes to the general progress of such group*. The respectful manifestation does not imply, per se and in theory, a moral or ethical component, although, in fact, it does proceed from a moral attitude, because it is not easy to respect a rule if you are not persuaded of its morality.

By contrary, when with legitimate interpretative rectitude one considers a social rule is not moral at all, one will be facing a grave dilemma, because the supreme respect to moral values claims for a rejection and not acceptance of such a supposedly immoral rule.

Although in some cases it can be difficult to differentiate social education from the moral one, we consider that social education, "sensu stricto," refers to an individual's operative acceptance of configuration and functioning ways of collective

entities where he/she is immersed. In the end, *this type of education involves: the assimilation of uses, habits, and rules; a balanced adaptation to them (which will not be obstacle to possible critical focuses); and a proactive attitude that will determine participation in the promotion of human groups or social entities* (these social entities can be the ones where the individual is immersed, or can be some other ones).

Within this type of socio-ecological values should, also, be included those that relate to the *physical environment attention and care*, because such physical environment is, also, a space where human beings live and maintain relationship with it: as a consequence, we cannot elude the human individual and social connection with the physical space they are immersed in. Active ecological care, as a conscious and operative attitude towards maintenance of the physical and geographical space where you live, must be part of socio-ecological education.

A successful interpersonal relationship depends on the ability to understand the reference frame of the group, in its own environment, and on the knowledge of which things must be undoubtedly accepted and which other ones must be considered out of place. As a consequence, to attain a constructive understanding of the collective patrimony "it is necessary to maintain an inclusive social dialogue, by which individuals could be able to understand diverse experiences and viewpoints of other people. This, not only asks for a generalization of education 'for' democracy (with the meaning that students need to learn typical behaviors of good citizens), but an education 'as' democracy, which means: an education that offer students the access to social understanding through de promotion of their participation in pluralistic communities, of their intercommunication, of their intervention in decision taking, and of their coming near to understanding of multiple options" (Darling-Hammond, 1997, p. 30).

A process of classroom interaction, that will produce a good relationship of the teacher with his/her students and of the students with themselves, is necessary. In order to get this interactive relationship, it seems advisable that the teacher self-assesses his/her own attitudes, mainly those related to other people's esteem, security and confidence, stimulus, recognition and respect. With this self-assessment and a favorable determination to promote interaction, it is possible to promote, within an educational institution, the socio-ecological values we put forward here.

2.4.2 Useful and practical values

Education must prepare individuals to facilitate their *survival and integration within their own specific life environment*: this means that education should, in the end, have – apart from other focuses – a practical projection for life. Within these values, we can consider structures based on "*integrated disciplines and disciplinary contents that relate themselves with life and labour situations*" (Secretary's Commission on Achieving Necessary Skills, 1991).

Individuals participating in the educational system usually look for successful academic results. An education that promotes the balanced development of practical utility values must include the creation of mechanisms and strategies that will allow students the access to levels of success also in every type of values. Some academic expectations of practical type that frequently appear are the following ones: to get favorable results (in control tests or in selection exams); academic accreditation or degrees; guarantees of access to higher levels of education; attainment of a professional degree; getting a job (in general and in the profession the student has prepared him/herself for); enjoyment with knowledge acquisition and with contact of cultural contents; development of his/her own psychological and intellectual ability (Posavac & Carey, 1989, p. 7).

Apart from legitimate wishes of obtaining outstanding results in the educational system, other personal and social expectancies must be included within education for useful and practical values, such as: appropriate technical training and the suitable use of emerging technology; to be able to help oneself live in a satisfactory way; to be able of using his/her own educational level to improve his/her own economic situation; training to live in ecologically suitable environments; etc.

Another component of usefulness that is a sub-product of education is the *behavior* of educational subjects, as individuals and as members of collective groups, societies or people. Within this behavior, the practical usefulness, as value promoted by education, must contemplate training of individuals and groups of people to prepare them for being able to live together with their fellows and citizens (which relates with social values) and to be able of contributing – with effort and preparation – to the general development of social groups they are immersed in.

The promotion of useful and practical values must also have incidence on *labor and professional arena*. But which are the values that determine success in this areas? Although it is not ever easy to find out a systematized list of such values, some of them are frequently mentioned, such as the following ones: "The

employers change, more and more, the demand of an academic qualification (even too much impregnated, according to their opinion, by the idea of material knowledge) for the demand of a competency that presents itself as a kind of "cocktail" accommodated to each individual, combining the strict academic qualification (obtained through vocational and technical training) with social behavior, ability to team working, initiative and eagerness to assuming risk" (Delors, 1996, p. 96).

In the area of useful and practical values, the proposed change for educational institutions must imply, according to Glasser (1992): "A change from a selective system (characterized by a minimal variation of learning conditions and where exists a reduced spectrum of instructive options and a limited number of possibilities of being successful) to a flexible system where the educational context can offer diverse opportunities for the success."

2.5 Values of transcendental dimension

The transcendental values refer themselves to *human being's projection further than his/her own existence and physical and temporal limitations.* In the end, the concern of the human being outside his/her own limitations produces the appearance of religious concern, although the focus on it can be different from one person to another one: in the end, the human being has freedom to decide the acceptance of reality and to approach his/her own vision according to a personal will.

The *religious feeling basically* proceeds from the human being's experience of lack of defense, of limitation, and of eagerness of eternity. Those religious values imply the acceptance of the essential limitation that the human being, as such, has to control his/her own life and destiny in the universe. The humanity has for ever wanted to relate itself with the Absolute (in the end, with God, designated in different ways), which gives reason to everything relative that surrounds us.

Of course, there are some people who deny and renounce God; but these represent a minority phenomenon, as the confessed atheists form a reduced number. On the other hand, the militant atheism of some countries has not been able to completely eliminate religion in them. Other thing is the personal acceptance of a particular religious confession.

Anyway, the acceptance of the religious feeling and, mainly, the assumption of a specific religious confession is a personal

option that each individual must freely and responsibly decide. Under such a condition, and considering that the religious dimension is a true human one, education (at least the formal one) must offer those who voluntarily wanted it, the opportunity of receiving the religious training according to their own personal option. Nevertheless, the real practice offers diverse ways of facilitating the exercise of this right of receiving religious education.

As manifestations of the evidence of the mankind's religious feeling, we can mention:

- Multitudinous demonstrations on the occasion of some religious events: for example, the John Paul II Pope's trips to different countries, some of them with minority catholic population;
- Bibliographic publications dedicated to the human being's transcendental dimension (the Bible is the most published book);
- Cultural and artistic works, such as sculpture, architecture, painting, etc. are highly impregnated with religious themes.

Although it does not seem acceptable that educational institutions prevent religious formation to those who want to receive it as part of their integral education, some people reject this possibility in public educational institutions; some other ones even affirm that religious education should be out of the curriculum of public education (particularly in countries where, according to their constitution, they declare themselves as lay).

Anyway, the educational system must, furthermore, promote respectful attitudes towards those who profess a particular religious confession, even when this will not be the official one or the one mostly spread throughout the social context where these people live. For the same reason, a public educational system must show itself respectful towards those who do not adhere themselves to a particular religious confession, towards those who profess other confessions different from the official one, and towards those who do not adhere themselves to any religious confession at all.

In any case, it seems that the religious training should bring people to a cosmo-vision according to their own belief and should produce an approximation to the big basic questions that upsurge to human beings, mostly related to their origin and their destiny in their life and after their death.

A generally spread feature of religious focus is the aspiration to reach a heroic degree in the exercise of virtues. Although the

supreme acceptance of this level of religious aspiration in sanctity degree corresponds to each individual's very personal decision, it seems that the balanced interpretation of the religious sentiment can be, in most of the religious confessions, a factor of internal stability for individuals and an ingredient to empower favourable social relationship.

Some studies implemented about teacher's stress (Park, Cohen & Herb, 1990, p. 563) demonstrated that those who were catholic members of religious institutions appeared as the ones with less stress. This can be attributed to their religious meaning associated to their teaching professionalism, which can act as an additional support to reduce stress.

3. Importance of values as basis of educational curriculum

The analysis of data of the empirical study we have implemented on the importance of components and elements of quality of an educational institution shows that the second mark in descending order corresponds to values as educational product: this mark (estimated in terms of arithmetic mean) follows very closely the first one (which corresponds to students' satisfaction. The arithmetic mean obtained for this component as quality identifier was 7,90 (in a scale whose maximum mark was 9): this implies that the involved and interested people conceded a very high importance to values, as de basic product of education.

The obtained data (see table 3) show that the questioned countries and people considered that *students' satisfaction* is the most important component to determine quality of an educational institution. This component is, besides, the one who has more uniformity in estimations, as the typical deviation is the lowest one in relation to the rest of components. The second mark, in terms of arithmetic mean very close to the first one, is given to values as educational product.

Table 3: *Importance of components of quality (all countries)*

COMPONENTS OF QUALITY	Arithmetic mean	Typical deviation	Typical error	N° Questions
Values as educational product	7.91 (2°)	1.48	.0270	3111
Students´ satisfaction	7.94 (1°)	1.41	.0258	3067
Staff´s satisfaction	7.54 (4°)	1.59	.0293	3065
Impact of educational product	7.37 (7°)	1.58	.0291	3041
Resources availability	7.38 (6°)	1.68	.0329	2657
Organisation planning	7.49 (5°)	1.68	.0303	3218
Resources management (personal, material)	7.13 (8°)	1.79	.0321	3208
Educational methodology	7.79 (3°)	1.58	.0283	3193
Leadership	6.78 (9°)	2.14	.0398	3000

As the deviation of marks given to values was also quite low (the typical deviation was of 1,48), we can conclude that, in general, most of the consulted people gave a homogenous high estimation of this component of quality. By considering consulted sectors, the school heads gave the highest punctuation, followed by parents. But very closely appear the group of others (formed, among other ones, by inspectors or supervisors, advisers, teacher's trainers, supporting teachers, non teaching personnel, etc.). They are followed by teachers and, finally, by students, who gave values the minimum mark. Anyway, the estimation from all sectors is quite homogenous and high (the minimum mean is 7,74 - corresponding to students - and the maximum one is 8,27 - corresponding to school heads).

The pondering result given to this component, of values as educational product, seems, on the one hand, surprising and, on the other hand, hopeful. Surprising is the fact that the high estimation of values as the core product of education does not correspond itself with the traditional focus of educational performance, which has considered academic results – mainly measured in terms of knowledge acquisition – as the true educational product.

To put forward that the essence of educational product is not exactly the knowledge acquisition nor even the practical use or transference of them, but the promotion of values, can be considered by some ones as a revolutionary proposal. But, apart from the empirical evidence obtained in our research, more and more authors call, in our days, the attention on the need that education will consider training in values in a more intense way.

But not all sectors conceded the same importance to values as educational product. With the purpose of having information of the intensity of importance given to each one of the quality components, we include here the arithmetic mean reached by the following sectors (see table 4): students, teachers, educational institution heads, parents, others (here including inspectors or supervisors, teacher's trainers, etc.).

Table 4: *Importance of quality components by different sectors (all countries)*

COMPONENTS OF QUALITY	Students	Teachers	Heads	Parents	Others
Values as educational product	7.74 (2°)	7.89 (1°)	8.27 (1°)	8.13 (2°)	8.08 (1°)
Students' satisfaction	8.00 (1°)	7.77 (3°)	8.09 (2°)	8.28 (1°)	7.82 (3°)
Staff's satisfaction	7.28 (7°)	7.67 (4°)	7.89 (4°)	7.56 (4°)	7.36 (5°)
Impact of educational product	7.48 (6°)	7.20 (7°)	7.83 (6°)	7.48 (6°)	6.94 (7°)
Resources availability	7.60 (4°)	7.25 (6°)	7.55 (8°)	7.53 (5°)	6.62 (9°)
Organisation planning	7.27 (8°)	7.58 (5°)	7.87 (5°)	7.44 (7°)	7.57 (4°)
Resources management (personal, material)	7.14 (9°)	7.07 (8°)	7.42 (9°)	7.13 (8°)	7.06 (6°)
Educational methodology	7.65 (3°)	7.83 (2°)	7.77 (7°)	8.02 (3°)	7.90 (2°)
Head´s pedagogical leadership	6.59 (5°)	6.82 (9°)	7,90 (3°)	6.63 (9°)	6.88 (8°)

By considering the average assessment (in terms of arithmetic mean) that the different sectors gave to values themselves, we can conclude that educational institution heads gave the highest importance to values (8,27); the following mark on descending order corresponds to parents (8,13); after them, we see the group of others (8,08); afterwards, teachers (7,89); and, finally, students (7,74). Although marks are high in all sectors (remember that the scale was from 1 to 9), it seems that educational institution heads were the sector that conceded values an importance higher then the one given by other sectors.

Even accepting the differences among the asked sectors, *values were, in general, considered highly important for the quality of educational institutions* (they occupied the second important post after students' satisfaction). But received all value types the same estimation? From the empirical study we are extracting data, we take here (see fig. 5) the arithmetic mean obtained from marks given by all sectors.

Table 5 (see next page) shows that *intellectual values* were considered the most important ones (7,84) for the quality of education imparted in formal institutions. The second important place corresponds to *moral or ethical values* (7,63). *Civic and ecological values* (7,57) closely follow in third post. Fourth place corresponds to *useful or practical values* (7,01).

The other values are themselves below the arithmetic mean of 7: *physical values* appear in fifth place (6,53); the *aesthetic ones* in sixth place (6,23); and, finally, the *religious values* (4,58) occupy the seventh and last one.

With respect to religious values, the possible reason why they appear lower than the rest of values could be found out in the fact that the nowadays predominant tendency is towards establishing lay societies and, as a consequence, lay educational systems. This directly implies putting religious education out of curriculum contents.

But, apart from accepting the importance given to values, in general, and to the specific values, in particular, we can ask ourselves if all those involved and interested in education conceded the same importance to the specific values.

Table 5: *Importance given to different value types by all sectors (all countries)*

VALUE TYPES TO BE DEVELOPED BY EDUCATION: IMPORTANCE OF EACH ONE	Arithmetic Mean	Typical deviat	Typical error	Nº Quest.
Physical	6.53 (5º)	1.88	.0325	3379
Intellectual	7.84 (1º)	1.41	.0243	3404
Moral / Ethical	7.63 (2º)	1.74	.0300	3398
Aesthetic	6.23 (6º)	1.87	.0322	3385
Civic - ecological	7.57 (3º)	1.61	.0277	3393
Practical or useful	7.01 (4º)	1.78	.0307	3389
Religious	4.85 (7º)	2.57	.0451	3266

In order to consider the assessment given by each sector, we include here the arithmetic mean of marks given by them (Table 6).

Table 6: *Importance of diverse types of values given by sectors (all countries)*

VALUES TO BE DEVELOPED BY EDUCATION	Assessment by diverse sectors				
	Teachers	Heads	Others	Parents	Students
Physical-emotional	6.49	6.84	6.18	6.85	648
Intellectual	7.81	7.95	7.95	8.04	7.77
Moral / Ethical	7.75	7.81	7.99	7.98	7.27
Aesthetic	6.39	6.49	5.46	6.33	5.94
Civic-ecological	7.71	7.67	8.01	7.53	7.35
Useful or practical	6.94	6.99	6.85	7.18	7.06
Religious	4.81	6.16	6.64	5.24	4.61

By trying to explain the data included in this table, we can conclude that parents were the sector that gave the physical-emotional values the highest mark (6,85). Intellectual values obtained the highest estimation also by parents (8,04). The moral ones received the maximum mark by others (7,95), here including inspectors and supervisors, teacher's trainers, advisers, etc. For the aesthetical values, the highest mark was conceded by institution heads (6,49); the useful or practical values received also the highest estimation from parents (7,18); finally, for the religious values the highest mark was the one from the group of others (6,64).

If we consider diverse sectors' preferences, the data show that teachers consider intellectual values as the most important ones; here they coincide with heads. Teachers and heads also coincide with parents and students. But the group of others considered moral values as the most important ones.

Related to estimation of values as the authentic educational product, we mention here Sylvia Schmelkes' statement, in which she affirms that the educational institutions most consider "the constant aspiration of parents to expect from the school a training in values" (Schmelkes, 1985, p. 82).

From our research we can conclude that most of the involved and interested people considered that education should consider values as the authentic and true educational product. Although knowledge will continue being an important component of personal and individual promotion, it should be immersed in a wider dimension of a human being, which is the "intellectual" one.

And, as a consequence of the empirical data, in order to attain a good quality of education all values should be promoted by it; but, for determining the intensity of types of values treatment, we should have to consider the pondered importance conceded to them, according to table 4, where it is showed the *possible order of importance of each one, which is: intellectual (1s.), moral / ethical (2nd.), civic-ecological (3d.), practical or useful (4th.), physical (5th.), aesthetic (6th.) and religious (7th.).*

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How Do Students Feel in Open and Direct Instruction? A Study with Mixed Methods

Michaela Gläser-Zikuda and Hanne Schuster

Introduction

Learning and achievement in the academic context are among the central topics in our society. Especially for young people, learning and achievement in school are important and thus, a main source of emotions. Various negative and positive emotions were reported by students in different school situations, mainly in connection with instruction and achievement (Pekrun, 1992, 1998). For instance, enjoyment, boredom and relief are experienced by students in instruction more often than interest, anxiety and anger. Numerous studies showed that emotions are related to students' cognitive processes and achievement (Hascher, 2004; Laukenmann, Bleicher, Fuß, Gläser-Zikuda, Mayring & Rhöneck, 2003; Pekrun, Götz, Titz & Perry, 2002), as well as to students' psychological and physiological health (Becker, 1980; Call, Riedel, Hein, McLoyd, Petersen & Kipke, 2002).

Therefore, it is an important issue for educational science and didactics to consider how emotions are influenced by instruction, especially with respect to specific instructional approaches as for example open and direct instruction. Up to now, less is known about students' emotions in specific instructional situations, as for example when they work self-regulated with specific instructional material, with a partner or in groups respectively when they listen to teachers' explanations and take their notes from the blackboard.

Most of the studies devoted to emotions in school usually apply quantitative oriented instruments, mainly questionnaires. In this chapter, a study is presented that applied quantitative as well as qualitative methods in the sense of a mixed method design.

The relation of emotions to learning and achievement

Emotions are characterized as subjective experiences and behavioral expressions with cognitive and motivational functions (Kleinginna & Kleinginna, 1981; Lazarus, 1991; Mayring, 1992; Scherer, 1984, 1993). Emotions have the function of initiation, termination, or disruption of information processing, and they

may result in selective information processing or they may organize recall (Pekrun, 1992). With respect to valance and activation, emotions may be categorized for example as positive-activating emotions (e.g. enjoyment), positive-deactivating emotions (e.g. relief), negative-activating emotions, (e.g. anxiety), and negative-deactivating emotions (e.g. boredom) (Pekrun & Jerusalem, 1996). Beyond, emotions do not only differ with regard to valence, but as well as to the point of reference (task-related vs. self-related emotions), and the temporal factor (process-oriented, prospective, and retrospective emotions) (Pekrun, et al. (2002).

Empirical studies showed that emotions are related to learning and achievement. Positive emotions predicted high achievement, whereas negative emotions predicted low achievement (Pekrun, Hochstadt & Kramer, 1996; Pekrun & Hoffmann, 1999). It may be assumed, that the effects of emotions on learning and achievement are mediated by numerous cognitive and motivational aspects, as for instance self-regulation in learning. Self-regulation of learning implies processes of planning, realizing, controlling, and evaluating one's own learning process in a flexible way. Thus, different learning strategies are adapted by the learner depending on task demands, context, individual capability and preferences (Boekarts, 1999, 2001; Boekarts, Pintrich, & Zeidner, 2000; Schunk & Zimmermann, 1998).

Because self-regulated learning requires flexible cognitive processes, it may be assumed that it is facilitated by positive emotions. In contrast, negative emotions may motivate students to rely on external guidance, mainly dependent on the teacher. Pekrun et al. (2002) showed that students' perceived self-regulation correlated significantly positive with positive emotions, whereas perceived external regulation correlated with negative emotions. Following these results, it may be supposed that positive emotions enhance self-regulation of learning. But, the reverse direction is possible, as well. Self-regulation may cause positive emotions, and external regulation may induce boredom or anxiety.

Furthermore, the experience of competence and autonomy in learning has been described as important for self-regulation (Deci & Ryan, 1985). Thus, students' emotions are related to the needs of social integration (e.g. in cooperative learning), competence (e.g. adequate performance level of tasks), and autonomy (e.g. self-regulation in learning).

Based on these results, it is a crucial question how different kind of instruction is related to students' emotions.

Emotions in direct and open instruction

Although individual dispositions and physiological processes of students are out of the control of educators and teachers, students' emotions are influenced and shaped by their individual experiences and estimations of instructional environments. Nowadays, learning is generally defined as an active, self-regulated, constructive and complex cognitive and motivational process, but emotions are still more or less out of focus (Reigeluth, 1997). One reason for neglecting emotions may be that they are seen as disturbance of learning and achievement. Looking for example at different instructional models, mainly cognitive presuppositions of students, such as intelligence, capability or talent, are considered. Emotions are not mentioned, or at the best as motivational aptitude or as affective learning result (Carroll, 1963; Fraser et al. 1987).

Furthermore, instructional models of the 60ies and 70ies differentiated aspects of quantity and quality of instruction (Bruner, 1966; Carroll, 1963; Creemer, 1994; Fraser, Walberg, Welch & Hattie, 1987). Because of the emphasize on the quantitative aspect, the time for learning, these models were called "Instructional-learning-time-models." Further development of these models shifted qualitative aspects such as quality of curriculum, teacher behavior or social differentiation more and more in the center of research interest (Creemer, 1994). With respect to quality of instruction, different instructional approaches may be characterized, e.g. direct, open, constructivist and adaptive instruction (Gruehn, 2000). The two approaches mentioned first, direct and open instruction, are the most common in German classrooms.

Main characteristics of direct instruction (Rosehine, 1979; cf. Treiber & Weinert, 1982, 265) are an intensive exploitation of instructional time in orientation to effectiveness of instruction, a highly teacher centered and control intensive regulation of instruction as well as of student' learning process, a low degree of students' freedom and possibility of choice during instruction and finally teachers' orientation towards clearly defined and simple knowledge questions with a low risk for students' of making mistakes. Typical and often applied teaching methods of direct instruction are the so called "offering" and "question-developing" instruction. The first one is seen as the most structured type of teaching, the level of students' activity is low and restricted to listening and recapitulating teachers' explanations. In general, "offering" instruction is applied to introduce a new topic to students, respectively to summarize contents and results. The

second, "question-developing" instruction, serves for analysis of specific aspects of a topic, for application and transfer of acquired knowledge to a new context as well as for control of students' knowledge and comprehension of basic concepts, as for example in physics or math. In lessons characterized by "question-developing" instruction, students' activity is not only limited to mental considerations, rather students are admonished to make their conclusions based on teachers' explanations. With regard to students' arrangement in classroom, direct instruction usually is taught having students sitting in rows. By all means, in single lessons students may work with a partner or even in a group. But their learning process is highly planed and controlled by the teacher.

Open instruction combines a variety of instructional concepts and teaching methods which were strongly influenced by the ideas of the "Reformpädagogik" focusing on education from the perspective of the child as an active learner, as for example postulated by Jean-Jacques Rousseau, Georg Kerschensteiner, Maria Montessori, and Ellen Key. Different degrees of openness of open instruction may be defined with respect to arrangement of instruction depending on learning method, learning content and material, students' arrangement in classroom, time for learning, and control of learning process (as an overview Einsiedler, 1981). Openness of the learning method implies the possibility of different ways of learning to achieve the learning goal which is obliging for all students. For instance, in German language a topic may be worked out as a presentation, collage, interview, report or a theater play. Students may work in small groups, explaining each other how to deal with the task. The effectiveness of cooperative learning was empirically proven (Slavin, 1995). Openness with respect to learning content and material allows students to be engaged in topics they are interested in and to use not only regular, but as well additional learning material (other books, real objects, pictures, films, etc.). Furthermore, such a learning material enables students to regulate their learning process in order to planning learning steps and controlling themselves. The highest degree of open instruction is characterized by realization of all aspects of openness, mentioned above. By open instruction, students' competencies of self-regulated learning may be enhanced (Boekarts et al., 2000). It may be assumed that experiences of self-regulation and competence have a positive impact on students' emotions.

Empirical studies focusing on the effectiveness of direct and open instruction revealed a superiority of direct instruction with respect to the acquisition of knowledge (as overview Brophy &

Good, 1986). Furthermore, some empirical results hint to a gain of low achievers in direct instruction (Elmeier & Good, 1979; Helmke, 1988). But it turned out that teacher centered respectively direct instruction was hindering emotional and motivational aspects of learning (Brophy & Good, 1986; Roseshine & Stevens, 1986). This may be a strength of open instruction. Student-centered instruction seemed to be more beneficial for emotional and motivational aspects of learning, especially for class climate, but not for achievement (Giaconia & Hedges, 1982).

Besides this research tradition, researchers and practitioners, mainly in the United States, criticize the still dominating cognitive understanding of learning and emphasize the importance of emotions in school and instruction. Several approaches were evolved in the last years aiming at the development of students' emotions by emotional learning contents, extra courses or curriculum. Numerous practice-oriented approaches were developed since the 1990s (for a description of diverse programs and their evaluation see Zeidner, et al., 2002). These programs were generated to show that childrens' and adolescents' socio-emotional competencies are important to foster and need to be taught in educational institutions, above all in schools (Mayer & Salovey, 1997). All these approaches are dealing with the question of what should be learned to develop students' emotions. Hardly they consider how instruction in general could be designed more emotionally oriented. Up to now, there are two approaches which explicitly focus on specific instructional strategies to influence learners' emotions (Astleitner, 2000; Gläser-Zikuda, Fuß, Laukenmann, Metz & Randler, in review). The study of Gläser-Zikuda et al. revealed that students' greater possibility of self-regulation in instructional settings in biology, German language and physics classrooms was strongly related to their achievement outcomes and also to their emotions. Although the importance of emotions for learning and achievement is often emphasized, up to now there is little known about students' emotions in instruction. Therefore, the purpose of the presented study was to describe emotions in specific instructional situations, focusing on open and direct instruction. To analyze students' emotions from multiple data sources and different perspectives we applied a mixed method design.

Mixed methods

During the past forty years many debates took place with respect to the polarization of research methods to confirm two opposing

epistemological camps or paradigms, the separateness and even incompatibility of qualitative and quantitative methods (Guba & Lincoln, 1994; Reichhardt & Rallis, 1994). The positivist paradigm underlies quantitative methods, while the constructivist paradigm underlies qualitative methods (Guba & Lincoln, 1994). Therefore, the debate between the two paradigms was called the qualitative-quantitative debate (Reichhardt & Rallis, 1994). Although this dichotomy of methodological perspectives was often emphasized in many contemporary research methods books (Bortz & Döring, 1996; Lincoln & Guba, 1985), recently there has been an reconciliation of these two groups of methods into what is known as mixed methods (Brewer & Hunter, 1989), or the mixed model approach (Tashakkori & Teddlie, 1998). This may be observed especially in specific fields, in which researchers already utilize a mixture of qualitative and quantitative techniques in their studies, for example in evaluation and health research.

Triangulation
Many researchers criticized the application of only one method in measuring constructs. They contended that if a construct was measured only by using one method it would be difficult to differentiate the construct from the definition used in the method (Cook & Campbell, 1979). Furthermore, Brewer & Hunter (1989, 16-17) argued that "a diversity of imperfection allows us to combine methods ... to compensate for their particular faults and imperfections." To assure that the variance in a research study was accounted by the trait in the study and not by the method applied, so called "multitrait-multimethod matrix" were used in experimental psychology (c.f. Tashakkori & Teddlie, 1998, 41).

Denzin (1978) introduced the term "triangulation" into the discussion on application of multiple methods. Originally, the term triangulation refers to a survey or nautical process in which two points and their angles are used to determine the unknown distance to a third point. Denzin differentiated four types of triangulation for research: First the use of multiple methods for investigation (methodological triangulation), second the use of various data sources in a study (data triangulation), third the work of different researchers (investigator triangulation), and fourth the use of multiple theoretical perspectives for the interpretation of results (theory triangulation). Tashakkori & Teddlie (1998, 41) assumed that the concept of triangulation "was the intellectual wedge that eventually broke the methodological hegemony of the monomethod purists."

Mixed method designs
In orientation to the discussion on triangulation, numerous studies using mixed method designs were conducted in the 70ies and 80ies (a review in Greene, Caracelli & Graham, 1989). Creswell (1995) noticed that mixed method designs serve purposes beyond triangulation. But for a long time, there was no consistent paradigm or theory for mixed method studies.

Tashakkori & Teddlie (1998) developed a taxonomy to organize different types of mixed method designs. First, a typology of monomethods, mixed methods and mixed model studies was proposed. Then, the authors derived a typology for mixed model designs that is based on three dimensions respectively stages in the research process: (1) type of investigation (exploratory or confirmatory; qualitative and quantitative), (2) type of data collection and operation (qualitative and quantitative), and (3) type of analysis and inference (qualitative and quantitative). An extended example of a mixed model design is a parallel mixed model study that involves mixing within at least one stage of the investigation (Tashakkori & Teddlie, 1998, 151). Based on these considerations, our study may be characterized as an exploratory and completely mixed study.

Students' emotions in direct and open instruction

As discussed, up to now less is known about students' emotions in instruction, especially in specific learning and teaching situations. Therefore, an explorative study was conducted which was part of a research project focusing on the impact of instruction on emotions and achievement on secondary school level (Gläser-Zikuda et al., in review).

The following research questions were pursued in the study presented in this chapter:
- Which characteristics of direct and open instruction are related to students' positive and negative emotions?
- How do students feel in direct and open instruction?
- What is the specific contribution of both qualitative and quantitative results to answer the research questions?

Design
The design of the study was developed in orientation to the valence of emotions (positive vs. negative emotions), the point of reference (instruction- and teacher-related emotions), and the temporal factor (process-oriented and retrospective emotions).

In this study, qualitative and quantitative data collection, data analysis, and inference processes in the sense of a completely mixed study were realized. As qualitative instruments semi-structured interviews and video-based observation were applied. Furthermore, as a quantitative instrument a short questionnaire was filled out by students after each lesson.

Table 1:

Value of emotions	Relation of emotions	Methods
positive emotions negative emotions	teacher instruction	*qualitative:* semi-structured interview video-based observation
	temporal factor (retrospective and process-oriented)	
		quantitative: questionnaire

Sample and methods

The sample of our study consisted of 23 8th grade students, all from one German language classroom of a secondary school. All students were taught by the same teacher in two different lessons.

In two lessons of a teaching unit (grammar and punctuation) in the subject German language two different instructional settings were realized. The first lesson was characterized by direct teaching methods (characteristics of "offering" and "question-developing") where the teacher explained specific problems of grammar and punctuation. The teacher introduced the topic to the students by questioning on pre-knowledge and presenting examples. Thereupon, students worked during several short phases with their seat mates on the same exercises. After each of these work-phases, the teacher controlled the results asking students like in an exam. The second lesson was also devoted to grammar and punctuation. The didactic structure of the lesson showed many aspects of open instruction: After a short intro-duction of the exercises by the teacher, (1) the students worked in small groups, (2) on different tasks, (3) with specific learning material which allowed self-regulated learning, and (4) the performance-control by the teacher was low. At the end of the lesson, all students presented the results they worked out in their group. The results were discussed, and only to some presen-

tations the teacher gave additional comments. To gain quantitative data about retrospective emotions in these instructional settings, after each of these lessons, a short questionnaire was applied based on items related to diverse positive and negative emotions (interest, well-being, anxiety, and boredom), performance control by the teacher, and students' perceived self-regulation.

For qualitative data collection of retrospective emotions, semi-structured interviews were conducted with four students focusing on their general experiences in open and direct instruction. Furthermore, to gain process-oriented data on emotions, these students were observed by video in both lessons. This approach allowed to analyze retrospective and process-oriented emotions with multiple methods and data sources.

Data analysis consisted of both quantitative and qualitative techniques. Descriptive and inference statistical analyses were conducted on the quantitative data. Qualitative content analysis (Mayring, 2000; Mayring & Gläser-Zikuda, 2004) was applied on the interview-, and video-material. In orientation to studies based on video data (Aufschnaiter, v. & Welzel, 2000), the video-data were analyzed based on the software Videograph (Rimmele, 2002). A part of the qualitative data was also analyzed in order to quantify specific aspects.

Results

First, the main qualitative results are presented to describe important conditions of positive and negative emotions in open and direct instruction. Retrospective and process-oriented emotions in two different instructional settings are presented. The second part is devoted to the quantitative results of this study.

Qualitative results

The qualitative results focus on retrospective and process-oriented emotions in direct and open instruction. Results of qualitative content analysis of the interviews with four students and the results of video-based observation of one student are presented. The analysis of the qualitative material was conducted by two researchers, the inter-coder-reliability was checked several times and revealed satisfying reliability - coefficients (.82 for the interview-material and .75 for the video-material (Krippendorff, 1980).

Retrospective emotions in direct and open instruction
The semi-structured interviews were analyzed with the technique of summarization, categories and main categories were developed with regard to the theoretical considerations. Table 2 illustrates the emotional relevant characteristics of direct instruction from students' perspective. For positive students' emotions in direct instruction were mainly relevant: the quality and adequate extend of teacher's explanations, and specific instructional aspects (tempo, quality of tasks and transparency of achievement demands). In contrast, negative emotions were reported by students in connection with an insufficient quality and extend of teacher's explanations, with an orientation towards one expected exact answer and with specific instructional aspects (high tempo, difficult tasks, repetition of well known topics, a high extend of copying from the blackboard, and lack of students' activation).

Table 2: *Characteristics of direct instruction and students' emotions (4 interviews)*

Aspect	Characteristics	Students' Emotions
Teacher	- quality of teacher's explanations - adequate extend of teacher's explanations	Enjoyment Interest Satisfaction
	- inadequate extend of teacher's explanations - teacher talks generally too much - orientation towards one exact answer of teacher's question	Anger Boredom
Instruction	- adequate instructional tempo - clearly structured tasks - clear demands for test preparation	Satisfaction Enjoyment
	- too high instructional tempo - too difficult tasks - repetition of well known topics - too much to copy from the blackboard - lack of students' activation	Anger Anxiety Boredom

Table 3 illustrates the emotional relevant characteristics of open instruction from students' perspective:

Table 3: *Characteristics of open instruction and students' emotions (4 interviews)*

Aspect	Characteristics	Students' Emotions
Teacher	- quality of teacher's explanations - advice and support by teacher - time for individual feedback	Satisfaction Enjoyment
Instruction	- quality of learning-material - quality of tasks - choice of specific tasks - possibility of self-regulation in learning - possibility of working in groups - possibility of being active	Satisfaction Enjoyment
	- difficult tasks - unclear demands for test preparation	Anger Anxiety Boredom

In comparison to direct instruction, students' experiences with open instruction hint to some further aspects. Students' positive emotions were related to teacher behavior (advice, support and time for individual feedback) as well as to instructional aspects (quality of tasks, learning material, self-regulation, cooperative ways of learning, and possibility of activity). Negative emotions were only reported for difficult tasks and unclear achievement demands.

These results show that students' positive and negative emotions are related to various instructional aspects that are important for learning and achievement, mainly teacher's explanations and support, instructional tempo, learning material and the possibility of self-regulation in learning.

Process-oriented emotions in direct and open instruction
The video-material allowed us to describe the course of the two lessons, the first characterized by direct, and the second by open instruction, as described before.

The video material was analyzed with the software Videograph (Rimmele, 2002), which supports a category development based on the analysis of two videos reproduced simultaneously on the screen. Four of the students, two boys and girls, were observed each for 45 minutes during two lesson characterized by direct instruction, and one characterized by open instruction

(Schuster, 2004). The time line was fixed for every 5 seconds for the analysis with Videograph.

Analytical techniques of qualitative content analysis were applied on these visual data defining exactly when a specific emotion had to be coded. Aspects of mimic, gestic, and verbal information was taken into account for the development of the coding agenda. For example, for interest should have been observable if a student shows a direct attention towards a task, an open bearing and widely open eyes, etc.

Figure 1a/b illustrate the Videograph codings for the process-oriented emotions of one student (male; low achiever) in (a) direct and (b) open instruction during 45 minutes. The timeline is given in minutes, distributed in sections of 10 minutes allowing codings all 5 seconds.
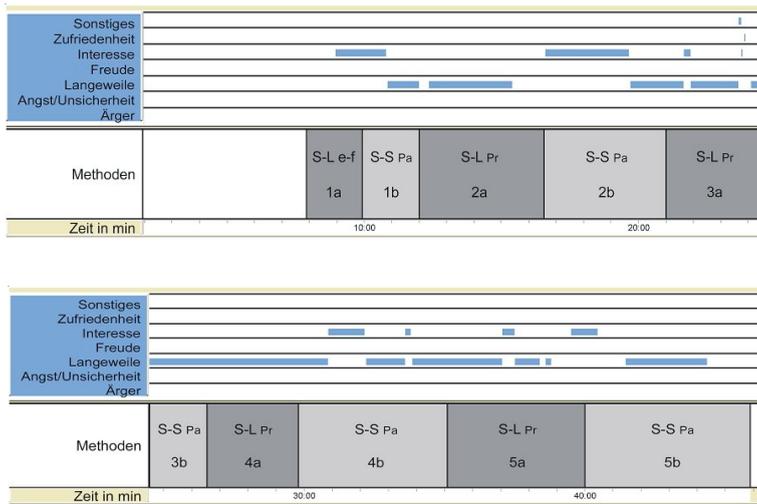
Figure 1a: Occurrence of observation codings for emotions in direct instruction
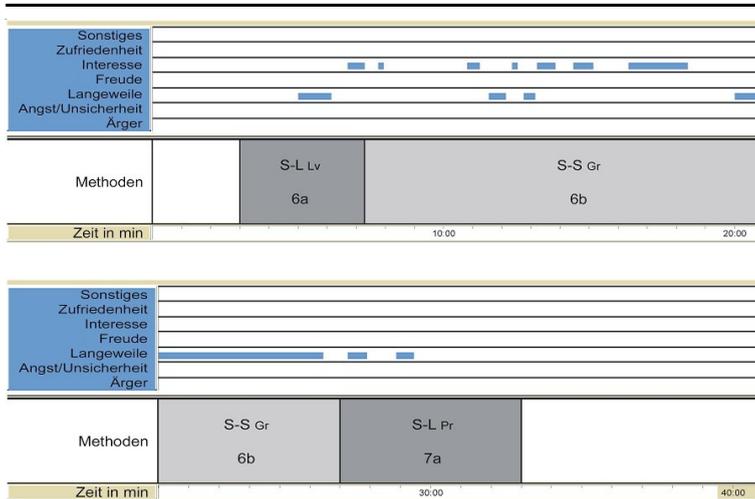
Figure 1b: Occurrence of observation codings for emotions in open instruction

On top of the timeline the instructional methods are described:

S-LPr = students interacting with teacher like in an examination;

S-LLv = students interacting with teacher during a teacher lecture;

S-Lef = students interacting with teacher during a question-developing phase;

S-SGr = students interacting with students during group work;

S-SPa = students interacting with students during partner work.

On the left, emotions we analyzed are defined (Sonstiges = other emotions; Zufriedenheit = satisfaction; Interesse = interest; Freude = enjoyment; Langeweile = boredom; Angst/Unsicherheit = anxiety/insecurity; Ärger = anger). Furthermore, Videograph allows to write down information on the observational situations in an additional transcript window which is not illustrated in figure 1.

In direct instruction, we were able to observe several emotions of the student, such as interest, pride, enjoyment and boredom. The lesson was characterized by different interaction phases between teacher and students (L-S) and students working with a partner (S-S). In our observation of the male student, we coded more often interest in the phases of partner work than in phases dominated by teacher student interaction. Boredom was

coded more often for the phases where the teacher asked or explained something to the students. Regarding the time of the lesson, it is conspicuous that boredom was observable more often in the second half of the lesson. In open instruction, only students' interest and boredom were observable. Students' interest was observed only during the group work, while boredom was observed mainly in the second phase of group work and during teacher's explanations in the beginning, and his control questions at the end of the observation period. In general, for all four students emotions such as enjoyment, pride, satisfaction, and anger were observable very seldom. In no case, we were able to observe students' anxiety.
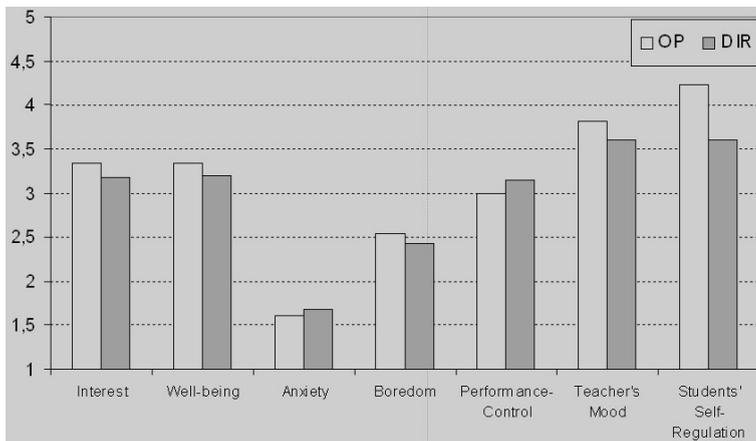
Figure 2: Students' emotions and instructional aspects in open (OP) and direct (DIR) instruction (Means on a Likert-scale; N = 23, no significant differences)

Quantitative results

The quantitative results focus on retrospective emotions in direct and open instruction. Results of the descriptive statistical analyses of one class sample are presented.

As expected, differences in students' retrospective emotions and instructional aspects after the two lessons, the first one direct and the second one open instruction, gained by data from a short questionnaire were observed. Students' positive emotions (interest and well-being) were higher in open instruction, whereas anxiety was lower. Boredom was unexpected slightly higher in open instruction. Concerning the instructional aspects in open instruction, students' rated their possibility of self-regulation higher, performance control lower, and teachers' mood higher in comparison

to direct instruction. It should be noted that these results were just trends, there were no significant differences between the ratings of the two lessons.

Discussion

In our study, we focused on process-oriented and retrospective emotions of students in direct and open instruction. The results of our study illustrate that students' emotions are related to their experiences and estimations of various aspects of direct and open instruction. As expected, differences with regard to students' emotions in direct and open instruction were observed. The application of a mixed method design allowed us to gain and to compare multiple data sources.

The qualitative results of this study showed that students' emotions are related to teacher behavior and to main characteristics of instruction. The analysis of the interviews revealed that positive retrospective emotions (enjoyment, interest and satisfaction) in direct instruction referred to the quality and extend of teacher's explanations as well as to instructional tempo, clearly structured tasks and clear achievement demands. Negative emotions (anger and boredom) were related to teachers' tendency to talk too much and to expect one exact answer to questions, what may be seen as a typical strategy in the "question-developing" method. Instructional aspects such as a high instructional tempo, difficult tasks, repetition of well known topics, a high amount of copies from the blackboard, and finally the lack of students' activation were related to anxiety, anger, or boredom. The characteristics of direct instruction as a highly teacher oriented, control intensive method which tends to a low level of students' activity are well recognizable in these results. In sum, students report on positive aspects of direct instruction with regard to clearly structured explanations and tasks. Negative aspects were related to a low level of activation and aspects of excessive respectively too low demands (Brophy & Good, 1986).

In open instruction, positive retrospective emotions (enjoyment, interest and satisfaction) referred as well to the quality of teacher's explanations. Furthermore, advice and support, and teacher's time for an individual feedback in open instruction was emphasized positively by students. Positive instructional aspects were related to the quality of tasks and learning material, as well as to activation and self-regulation in learning (choice of specific tasks and cooperative learning). Negative emotions (anger, anxiety and boredom) were reported by students only for two instructional aspects: difficult tasks and unclear achievement demands, similarly to the reports in direct instruction. The characteristics of open instruction as a student oriented method may be well recognized in these results. Generally, in both instruc-

tional settings teacher's well structured and variously offered explanations were stressed out as important for students' positive emotions. This was also true for an adequate performance level with regard to the tasks, and clear and transparent achievement demands. These criteria may be seen as basic conditions for a functioning teaching – learning – relation (Helmke, 2004). Beyond, several further aspects were relevant concerning students emotions, depending on the instructional method. It may be assumed that in open instruction students' emotions were related to the needs of social integration (e.g. in cooperative learning), competence (e.g. adequate performance level of tasks), and autonomy (e.g. self-regulation in learning) (Deci & Ryan, 1985). These needs were described as crucial conditions for the development of self-regulation in learning (Carver & Scheier 1990). Beyond, teachers' mood was ranged higher by students in open instruction than in direct instruction. We assume that this result hints to the importance of a positive teacher–student–relation that obviously may be more often experienced in open instructional settings where the role of the teacher is characterized by support and emotional allowance (Helmke, 2004).

To describe students' emotions in specific instructional situations, such as teacher – student during "question developing," and student – student interactions during group work, two different lessons were completely video-taped. The analysis of students' process-oriented emotions revealed that, besides enjoyment, pride, satisfaction, and anger, which were observed seldom, interest and boredom were the two emotions coded most often. Interest and boredom were observable more often in direct instruction than in open instruction. Interest is an emotion that shows cognitive and emotional values has been described as a crucial precondition for learning processes (Krapp, 2002). More detailed analyses of a single case showed how emotions varied in different instructional phases during one lesson. The results of this analysis illustrated that we succeeded to observe emotions like interest, pride, satisfaction, anger and boredom. One reason may be that these emotions occur more often in instruction than enjoyment and anxiety, which were not observable. In view of this, it should be taken into consideration that emotions of 14 and 15 years old students are hard to observe. In contrast to younger children, teenagers do not show their emotions frankly, rather they have learned to regulate them consciously and by controlling themselves. Finally, our analytical procedure may have had limitations with respect to distinguished definitions of the observation categories. Therefore, further development and analyses are needed to fully benefit from the potential of video observation.

The quantitative part of the study revealed that students' experiences in direct and open instruction were distinct. As expected, emotional experiences in open instruction were more positive than in direct instruction. Furthermore, the possibility of self-

regulation was ranged higher, and the performance control by the teacher was ranged lower in open than in direct instruction. It may be assumed, that open instruction was experienced in a more positive way in order to enhance students' self-regulation, autonomy and positive emotions (Giaconia & Hedges, 1982). But it should be considered that the study focused only on one German language classroom with 23 students, and that we did not found significant differences. Further studies should focus on larger samples to test these hypotheses.

As described, an approach focusing on a mixed method design is in many respects fruitful.

First, methodological limitations of one single method may be compensated by the other methods. For example, the quantitative results gave evidence of the average estimation of the emotional and instructional variables, but did not provide further information about the relevance of specific instructional aspects for students' emotion-related rating. The analysis of the interviews revealed that students' self reports are a rich and specific source of individual experiences with different kind of instruction. Thereby, information was gained about the relevant aspects of instruction concerning students' emotions. The categories developed in qualitative content analysis of the interviews may be drawn near for the interpretation of the quantitative results, and further hypotheses. Additionally, a quantification of the qualitative data allows an estimation of the relevance of these results.

Second, based on the video observation, we gained detailed information about the course and the teaching methods applied in each single lesson. The analysis of the video material allowed the description of students' emotions on the process-level. In comparison to the quantitative data which provided insight into the range of students' emotions after a whole lesson, video data were process-oriented and gave insight in situational aspects of emotional experiences in relation to specific instructional aspects like teachers' explanations or working in groups.

As illustrated, the application of a mixed method design turned out to be an appropriate approach for the exploration and description of students' emotions in different instructional settings.

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Humor in Teaching Mindfulness

Leo Gürtler

Introduction

In social situations, people laugh together when humor takes place. They share their experience on an interpersonal level. Mindfulness stands for an individual ability which is highly evaluated by everyone, but very hard to practice and to learn. It is not really a socially shared experience anymore, but rather a personal skill – although very important for social interaction. Mindfulness, in this case the teaching of the Theravada (Schumann, 2000 and 2001) meditation technique called Vipassana (Palí language, which means "to see things as they really are," Goenka, 1997a), is taught in ten day seminars in a highly standardized atmosphere with rules and regulations (Hart, 1999) that are perfectly identical throughout the world – even in prisons[1]. Each center works with the same schedule, the same instructions that come from audio tapes and the same evening discourses that are played from video. Annually, probably over 100000 people worldwide, coming from different religions, traditions, cultures, and regions, take part in these courses. Many of them learn to practice for the first time in their life, others come back to experience the deeper aspects of their mind to become mature in the technique and its application in daily life.

> In this article I will rise the question whether humor can play an important role within the teaching curriculum of mindfulness meditation.

In the following, various arguments will arise. Most of them will handle questions regarding the research design. Only parts of the results will be presented due to the limited space available and with respect to the main topic of this volume. To summarize, the main arguments are:

- Large parts of the paper will focus on questions regarding the underlying research design. The research design aims to demonstrate that qualitative as well as quantitative analyses provide useful results on the levels of content as well as structure. The term "content" describes the content of the teaching

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[1] see Vipassana for correctional facilities, http://www.prison.dhamma.org

material and the application of humor in this process. It provides access to understand the role of humor more clearly. "Structure" enables validity checks to test if the "teaching" is actually a predominant part of the discourses, i.e. how and in which ways does actual teaching cover the important parts of the evening discourses? Another question arises regarding the kind of humor that is practiced in a context which is designed to give people the possibility to learn self-autonomy, tolerance, and self-acceptance? This rises the expectation that no one should be devaluated by the use of humor. Rather, humor is meant to play an integrating role of alleviating the hard work of the practitioners without disturbing the ambitious and serious atmosphere.

- One important argument will be the interconnection between (pre-) knowledge about the research field (deductive) and doing inductive empirical research according to Glaser & Strauss' (1979) Grounded Theory. In the case of understanding humor in teaching mindfulness, an exploration of the setting is utmost necessary to reconstruct the sense of humor and its social function. I postulate that the special situation in which the students reside for almost eleven days, living like a nun or monk, has enormous influence on the rhetoric teaching style of the principal teacher S.N. Goenka. He is the actual teacher who gives all instructions and evening talks although they are played from audio and video tape. Other contextual constraints as well as a comparison with the structure of the evening discourses of different seminars for advanced students will give access to a deeper insight into humor and its consequences in such a course. In advanced courses (e.g., the special Satipatthana course or longer courses for twenty or more days), no humor at all can be found in the evening discourses. Reasons may be that for advanced students, the time table, all regulations, discipline, and most important the technique itself, is known very well to them.

- Another important issue addresses the fact of practicing a double-role as a researcher: At first, as the author of this paper I took part in several and in different types of courses of this technique in the last few years. Without these experiences, it would be hard to understand why there is so much humor in the ten day discourses and almost no humor at all in different discourses for advanced students. Secondly, if transparency about the research design and the methods of analysis is maintained, the whole research context is enriched. Not only the fact that knowing for myself the effects of humor in these settings is helpful. Doing research with the aim to understand what really happens, participating observation acts as a good starting point for theory building. And as all data are open for re-analysis by different researchers, transparency of the whole research process is maintained.

Thus, classical arguments like the lack of objectivity can be rejected by comprehensible documentation even if participating observation was introduced. Instead, the fact of taking part enables the researcher to understand better the personal subjective experiences of people taking such courses. Here, the analysis is solely committed to the evening discourses. Fortunately caused by the high standardization of the seminar and by the fact that all centers worldwide work with the same video discourses, the results can be generalized to some extent.

- My final points will try to evaluate the research design and the cited pre-knowledge in face of the results. The discussion will elaborate basic principles of the teaching in question which are constructive and helpful without distorting the original sense of humor which is open to further investigation. The paper will end with a statement of favoring humor as a social competence which is essential in teaching instead of degrading it to a common means to enhance learning performance.

Methodology, the research resign, and methods of analysis

Figure 1 (see p. 175) visualizes the process stages of the main research design. The abbreviations "MC" and "MCX" stand for metacodes as used in AQUAD 6 (Huber in Huber & Gürtler, 2004) of types "content" (= MC) and "structure" (= MCX). The research process follows two principles:

1. The pre-knowledge about the course and its structure was used to compare ten day discourses with discourses of different seminars intended for advanced students (Satipatthana course, three days course, twenty days course, etc.). Pre-knowledge also assisted to formulate hypotheses about the meaning of humor within the differing stages of the course structure. This represents the deductive part of the design.
2. The discourses were analyzed according to the principles of Grounded Theory (Glaser & Strauss, 1998). This as usual requires openness to the research material to let new findings, structures and relationships arise. This symbolizes the inductive part of the design.

On the base of the results derived from the inductive process, theoretical assumptions and hypotheses were formulated to analyze the material in multiple ways. Qualitative computer based analytical methods (AQUAD 6, Huber in Huber & Gürtler, 2004) provided the framework to construct content categories of

the teaching material as well as structural categories of the teaching itself.

The subsequent content analytical procedure was carried out by using an alteration of the structural laying technique (German: "Heidelberger Struktur-Lege-Technik (SLT)") developed by Scheele & Groeben (1984). This dialogue-hermeneutic method (Scheele & Groeben, 1988) works with content concepts and relational concepts (see for research examples e.g. Barthels, 1991 or Scheele & Kapp, 2002). The original code of practice is to reconstruct subjective theories (Groeben & Scheele 1977) into a graphical propositional structure based on argumentation. Although the method is actually meant for accomplishing exploratory research work with at least two subjects (researcher and research partner), it can quite easy be applied for carrying out content analysis. To realize this aim, concepts are written on paper cards and structured according to conjoint meaning. The method is very flexible and uncertain classifications can be varied repeatedly by relocating concepts from one category to another one. This facilitates the process of discussion and decision making of the final classification.
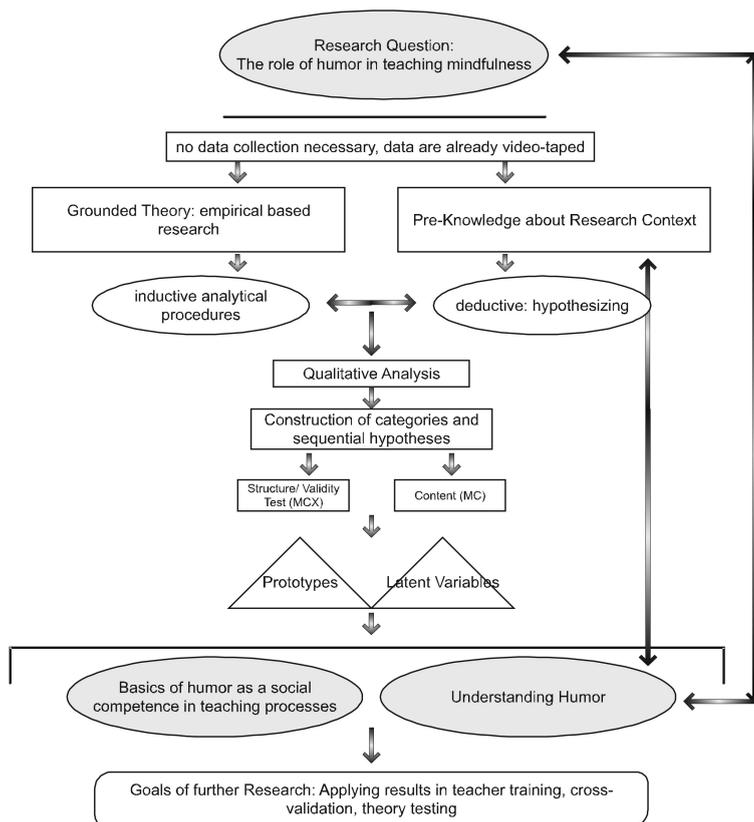
Figure 1: Research design

The method can also be understood as a variation of systemic sculpturing work (Sparrer & Kibéd, 2000) and enlightens toward a fresh perspective on the data. At last, all classifications have to be reasoned and classification rules have to be verbalized in a written form. In the case of content analysis, if relational concepts were used, they can enhance the process of drawing conclusions and hypothesizing. But for the content classes, they are not needed anymore. An alteration of the method, especially for group settings, comes from Oldenbürger (2001-2004, personal communication, see also Oldenbürger 2004). This alteration favors that subjects construct their own relational concepts instead of being confronted with predetermined relational concepts as it is common in the everyday language version (Scheele,

Groeben & Christmann, 1992) or in the classical version (Scheele & Groeben 1984, but also 1988) of the SLT which even uses mathematical symbols. Additionally, subjects can verbalize according to their everyday language which fits more appropriate to the specific context they live in.

The resulting categories can be visualized into a graphical shape. Frequency tables effectively visualizes counts of each category, separated by content and structure. Combining both types requires a methodological solution which the application of sequential hypotheses (Huber and Gürtler, 2004) offers. All sequential hypotheses are wrapped around the criterium code "*laughing of the audience.*" This code was chosen as an indication of humorous episodes. The points of interest aim at the following two questions:

- Which codes or combination of codes are prototypical configurations *prior* to the criterium of laughing ? (e.g. related to the rhetoric style of the principal teacher, codes like "*repeating*" or "*telling stories*" should appear notably before students laugh)
- Which codes or combination of codes are prototypical configurations *after* the criterium of laughing? (E.g. code "*laughing*" may lead to very important teaching material, because people are open to this due to the experience of laughing.)
- Which episodes of the discourses are prototypical and can act as representatives of all episodes? What are the unique characteristics of those episodes?

Prototypes are representatives of classes like persons, episodes or configurations of codes. The main characteristic of a prototype is the least distance to all other variables compared to the distances between all others. Technically, prototypes can be obtained by identifying the minimum of the resulting prototype vector if the rows of a distance matrix are summed up. Prototypical action sequences can be related using e.g. graph theoretical approaches. This type of analysis is also appropriate to compare interview texts.

Sequential hypotheses (Huber & Gürtler, 2004) are meant to overcome the boundaries of classical content analysis with regard to the quantitative paradigm (Fühlau 1978, 1982). But common qualitative content analysis sensu Mayring (1995) or as described in Rustemeyer (1992) can also be criticized for the same reason. If approaches are made to identify contextual determinants via categorization, sequences of classification that are dedicated to the research question are seldom analyzed in great detail. Most approaches of content analysis work with categories only and neglect the relations between them. But these relations are essential to understand the underlying processes. Fühlau (1982,

90) explicates this issue of process in content analysis by the help of the story of "*Max and Moritz*" (Busch, 1865)

> "*Werden die Körner nur als Körner ("manifester Inhalt") analysiert und gezählt, wird das Ende der Geschichte von Max und Moritz für immer unverständlich bleiben. Um die "Ausgabe" (den Text, die Zeichen) zu begreifen, sind Kenntnisse der vorausgegangenen Situation ("Eingabe") und der spezifischen Art ihrer "Verarbeitung" (Symbolisierung) nötig.*" [German original]
>
> "*If the grains are only analyzed as grains ("manifest content") and counted, the end of the story of Max and Moritz will be incomprehensible forever. To understand "output" (text, symbols), knowledge about the preceding situation ("input") as well as the specific type of "operation" (symbolization) is necessary.*" [translated by the author]

Relations between categories are the key to understand people's actions (Groeben 1986), their intentions, and (at least implicit) configurations of argumentation in a proper way. At this point, another content analysis was done to integrate already categorized concepts into second order categories (e.g. "*emotions*," "*cognitive analytical work*," "*cognitive integrating work*"). Second order categories were needed to work out theoretical based sequential hypotheses derived from another perspective. These theoretical driven procedures repeatedly stand for the deductive part of the research work. Supplementary inductive work was worked out by testing all possible combinations of propositions five seconds before and after the criterium concept (see Figure 2).
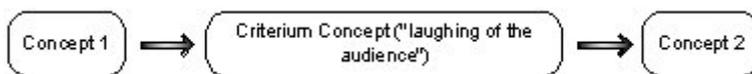
Figure 2: The basic propositional structure

Additional cross-coding of content and structural codes lead to four categories that seem to be important to understand how humor works in these discourses in relation to the criterium concept:

- Rhetoric Style of the Teacher   - metacode: MRS
- Participant Orientation   - metacode: MM
- Teaching Content   - metacode: MTC
- Actual Teaching Style   - metacode: MT

The outcomes of these different analytical methods provide the opportunity to identify:

- Prototypical action sequences (configurations) that appear in the teaching prior and after the key criterium (e.g. "*Code 1*" - "*laughing ...*" - "*Code 2*"). Two classes arise: content and structure, i.e. what is taught and how it is taught. Both can be compared with each other. They contribute together to a better understanding of humor.
- Prototypical episodes that represent the application of humor. These can be subject to further qualitative analysis in the cyclical research process (see also Huber in Huber and Gürtler, 2004).
- A humor model with latent variables to describe the teaching on a structural level (consisting of codes MRS, MM, MTC, MT, and the criterium "*laughing ...*")

The proposed model with latent variables can be subject to further analytical work by using exploratory quantitative methods of analysis based on partial least squares (Wold, 1975, Lohmöller, 1983) and/ or confirmatory models based on structural equation modeling (Jöreskog 1986, GENBLIS, see references). Of course all results have to be validated against other educational contexts and different samples. Further analyses may confront the model with statements coming from participants (new students as well as advanced students of Vipassana-Meditation). The design stops with conclusions drawn from the empirical results:

- *Application:* A proposed latent humor model can be used to deduce basics for developing a teacher training program targeting at teacher education as well as advanced teacher training. Role play, self-experience, and feedback about the consequences of personal actions can clarify and help to establish a personal humorous teaching style (see for an equivalence in therapeutical contexts Farrelly, 1988, or Höfner & Schachtner 1995, see also http://www.provocative.com). This teaching style concentrates on humor as a main benefit to the social atmosphere and only secondary - if at all - on the enhancement of learning performance.
- *Understanding humor:* The prototypes offer insight into the most important action sequences that lead to humor and that follow immediately the laughter of the audience. These findings can be set in relation to the pre-knowledge about the course structure and the special experiences of the students

that vary from day to day (e.g. some days are harder for some students than other days, see for a deeper discussion the original discourses, Goenka, 1991). These proceedings re-construct the integral role of humor within the course setting. In fact, it is more a case study which provides many valuable heuristics about action sequences of teaching with humor. It also highly depends on the personal skills of S.N. Goenka. But they provide inspiration how to apply this knowledge to other situations.

To summarize, the research design demonstrates the benefits of a combination of different methods according to the demands of the research question. The expected benefits will be a deeper understanding of meaning. Another possible profit points to the gathering of information which can be applied for practice like, e.g. teacher training. The following paragraph will explore the pre-knowledge resulting from my participating observations and personal experiences during these seminars.

Pre-knowledge and background information about ten day Vipassana-meditation courses

(Ten Day) Vipassana-Meditation courses coming from Theravada Buddhism are rooted in a long tradition to provide people the opportunity to learn such a demanding technique without distur-bances that are unavoidable in daily life. Traditionally, it was taught in seven weeks. But this is too much time for modern time structures. The main goal of those courses is to teach people to understand themselves, their actions, and the interaction of physical body and mind (Goenka, 1991). This research study exclusively focuses on courses in the tradition of the Burmese Sayagyi U Ba Khin, as taught by S.N. Goenka (see also the website http://www.dhamma.org). Courses of other traditions may vary on various levels. Thus, all empirical results are limited to the tradition of the Burmese laymen Sayagyi U Ba Khin. The curriculum consists of four parts that are highly interconnected:

- *Ethical life style* (called in Palí "Síla", which is the language of the Buddhist Canon, the Tipitaka, see U Ko Lay, 1995): Abstaining from unhealthy actions like killing, stealing, talking lies, sexual misconduct, and taking any kinds of drugs, alcohol or other intoxicants during the whole course. Síla is threefold: Not to perform that action, not to encourage others to do so and not to applaud if others break síla.
- *Concentration* (called Anapana Sati): Observation of the natural breath as it is without trying to influence the natural breath (Scholz 1992). This starts from day zero and ends at the midths of day four at the time Vipassana is taught. After

that, students are advised to practice Anapana Sati as when it is necessary to calm down the mind.

- *Insight meditation* (called Vipassana): Starting from day four on, the practice of Vipassana-Meditation lasts to the end of the course. The technique is such that all ordinary bodily physical sensations that can be experienced are observed with composure without reacting to them with craving or aversion. Sensations are observed for their inherent characteristic of change. That means a serious student observes their arising and passing away (called Anicca). This is the actual technique to establish mindfulness. It is taught that the technique of Vipassana-Meditation erases all mental impurities by purely observing them with equanimity. According to the Pali Canon, the so called Tipitaka, Vipassana is the technique the historical Buddha Siddhata Gotama discovered. It led him to enter Nibbana and to reach full enlightenment (Goenka, 1991) over 2500 years ago.

- *Sharing ones merits* (called Mettâ Bhavana): Students share their benefits they received by participating in such a course with all living beings. This is the closing part of the course (day ten and day eleven in the morning). It is helpful to develop loving kindness, tolerance, and acceptance towards others as well as oneself.

All four parts depend on each other. They are explained in detail during the evening discourses (see for a written but reduced version, Goenka, 1991). The actual teaching of the technique comes from audio tapes during each session (at the beginning and/or at the end). No humor at all can be found during these technical instructions nor I as a participant ever heard anybody laughing as a reaction to them. This leads to the hypothesis that only the explanatory, theoretical part of the seminar contains humor and not the teaching part of the technique. The mere practice of Vipassana-Meditation is to directly observe the change (arising and passing away) of body sensations and mind. This is far from being a cognitive-intellectual activity based on reasoning (see three different types of knowledge, Goenka, 1997b). In contrast, the evening discourses provide explanations based on intellectual considerations. Thus, humor seems to be directed to the cognitive-intellectual, but maybe also the emotional parts of students'.

The research question in this article reflects the issue of the appearance of humor in such a serious and ambitious setting. Can humor play an important role during that time? Is it possible to find humor in an atmosphere in which people keep perfect – called "noble" - silence for almost ten days? In fact, for nine of eleven days, people freely abstain from communicating with each other in every possible way. They try to work on their own in silence and neither verbal nor non-verbal communication between

students is allowed. But, if help is needed, the course leading teachers are always available as well as the course managers. The day begins at 4 am and lasts till 9 pm with a heavy meditation program consisting of up to twelve hours of sitting meditation (see the homepage for all regulations, http://www.dhamma.org). Thus, due to the lack of possibilities to observe daily humorous social interactions between students, the research material contains only of the evening discourses everybody listens to between 7:15 pm and 8:30 pm. These teaching lessons last for about 60 to 70 minutes and explain the daily progress and the theoretical issues of Vipassana. The discourses are shown via video-tape. Translations are played from audio-tape. These are not analyzed, because they are spoken by different speakers according to the country and language. Only video-tapes of S.N. Goenka are analyzed. But every center works with the same discourses. Fortunately for research on humor, these videos were live recorded during a ten day course in the nineties in the U.S.A. Thus, no over-dubbing or any other changes were made to the material. They are unaltered. Although the discourses are monologues of the principal teacher, S.N. Goenka, the verbal reactions (i.e. laughing) of the audience were unwillingly taped, too. Therefore, they are open to scientific analysis. Laughing of the audience was chosen as a common expression of humor and indicates humorous episodes on the videotapes.

Each day provides different experiences for the students. This is due to the fact that they learn each day another part of the technique and come deeper into their own mind. To clarify this issue, the main topics of the course will be described in conjunction with the corresponding day:

- According to Goenka (1991), students come deeper and deeper into their own mind as a consequence of the right practice of the technique. Goenka states that day two (one and a half day after Anapana is taught) and day six (two days after Vipassana is introduced) are important in the sense that "*it is difficult for a weak-minded person to cross these hurdles*" (Goenka, 1991, day six). Practicing the technique in serious manners, students have to encounter their own minds, emotional states, intellectual concepts, and thoughts. This means they are also face to face with their own negative states that arise from time to time. This leads to the hypothesis that around these days, there must be more humor (as a relief ?), especially for new students that are quite unfamiliar with the technique. This would mean that advanced students who are quite familiar with the course schedule and the technique do not need such a relief. This supports the finding of absence of humor during the cited other discourses.
- In the evening of day one, the first discourse is held. This is the first possibility for new students to listen to discourses at

all. There should be almost no humor, because time is short and at the first day there are many things to explain about the course, the discipline, the course schedule, and the meaning behind all rules and regulations. Students have to take a course seriously not only to gain benefit for themselves, but also for not disturbing the work of other students. Discipline, especially the noble silence, is essential. It does not seem to make any sense to start such a serious undertaking with some wit or a humorous remark. Instead, I anticipate that probably almost no humor at all will happen during the first evening discourse. At least, it is no entertainment show. Rather, it is hard personal work to transform the deep rooted habitual patterns of the mind.

- After the group sitting on day ten, students are allowed to communicate again with each other and to speak – of course with the advice to maintain their ethical life style they practiced for the last ten days. Out of my own experiences of day ten, spontaneous laughing comes automatically after the long and hard work full of privation. As a consequence, there should be less humor to contrast the incidents of the day during that evening discourse. Furthermore, day ten reviews the whole discourse and there is not much time for that. This also supports the hypothesis of a dramatic decline of laughing on day ten.

- There are different topics that cover each lesson. Basically, Vipassana is a technique and many technical terms are used that originate from the Tipitaka, the Buddhist Canon (U Ko Lay, 1995). One main topic is the construct of the personal "ego" called the five skhandas (Scholz, 1992). This can be a very confronting subject-matter for someone who is not much experienced with the technique. The theoretical explanations about the ego state that the root of the problem of not expe-riencing real happiness (according to the four noble truths of the Buddha, Geonka, 1991) is founded in each individual person. External causes are only consequences of past kammic actions of that person. Each person is master of ones own happiness, but also of ones misery. The present state of mind allows to control what will happen in future. On the other hand, students should not be confused too much about that, because they still do not experience this directly within the framework of their body. For most of them, it is still intellectual knowledge and not direct experience which only leads to wisdom (Goenka, 1997b). Only wisdom enables a person to turn actions for the better. In this sense, humor should play a crucial role in verbalizing important topics of the teaching like the "ego." Additionally, nobody should be harmed at all as a consequence of picking out any topic as a central subject. This requires special rhetoric qualities by the principal teacher. Reviewing humor literature (e.g. Kotthoff,

1996), it seems that women (more than men) use humor to tell funny stories about themselves (also about their misfortunes) instead of directing humor towards others or enhancing oneself. This could be a good strategy: making notes about oneself which also demands role play, and telling funny stories that introduce very serious topics. But this strategy must not inhibit the basic message of the teaching, so that everybody who really practices the technique will get some benefit or the other.

Most research on humor in educational settings concentrates on performance enhancement as a desirable outcome due to the application of humor by the teacher. That is impossible in this research context. People come to ten day courses to learn *the art of living* (Hart, 1999) and dying (Goenka, 1991). This cannot be measured in degrees or by any criterium except the actual state of mind of the practitioner. Another marking stick is the behavior a meditator expresses in dealing with other people and with life itself and especially at the time of death. Goenka (1991) states that this has to be experienced within the framework of one's own body. Thus, effects of humor must influence different levels - social communication as well as personal competence. Both support the process of self-development.

Results

Due to constraints of space, I will focus only on selected results. At first, this will be the frequency and the distribution of laughing incidents compared with the pre-knowledge that was known about the course structure. Secondly, I will focus on some proto-typical action sequences of laughing. Now, let us have a glance (see table 1) on the frequency of the key concept "*laughing of the audience:*"

Table 1:   *Code "laughing of the audience" and relations to days
              and episodes*

	Total Frequency	Length in Minutes
Days (Discourses)	11	768,69 (12,81 hours)
Episodes with laughing	95	59,26 (0,9877 hours)
Laughing	211	14,31 (0,2384 hours)
Percentage Time	**Percent (%)**	**% NOT involved with laughing**
Laughing / Length of Episodes with Laughing	10,06%	89,94%
Laughing / Days	1,86%	98,14%
Episodes / Days	18,50%	81,50%
Proportion		
Laughing per Day	19,18	
Laughing per Episode with Laughing	2,22	

Figure 3 shows how long each key code "*laughing of the audience*" lasts, Figure 4 shows the distribution of laughing episodes per day:
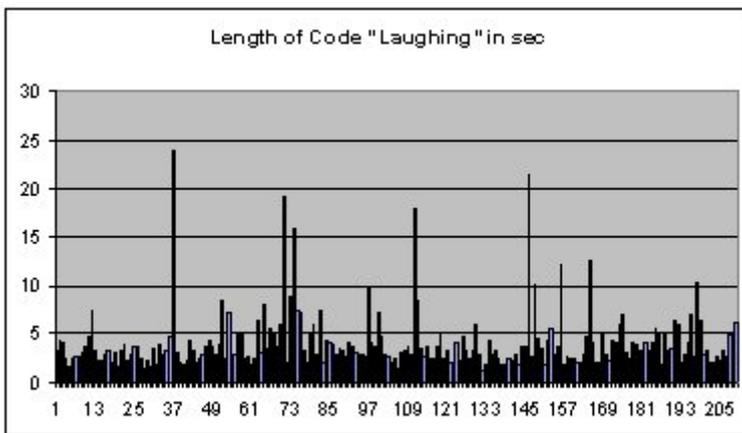
Figure 3: Length of Laughing in Seconds
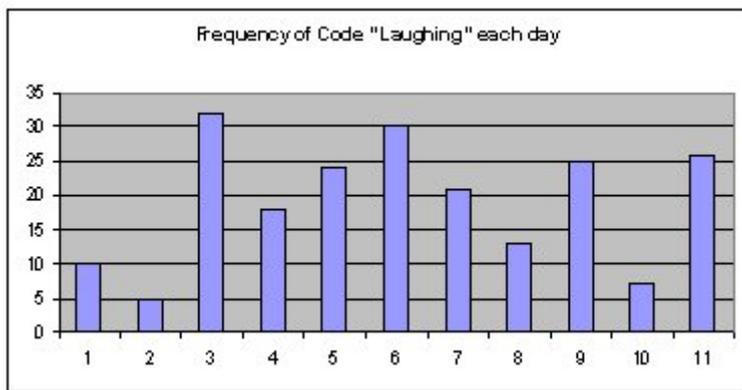
Figure 4: Frequency of Code "Laughing of the Audience" per day (Discourse), total = 212

Frequency of laughing incidents

A comparison of the two graphs and the table reveals some interesting facts. The humor literature always advices not to use too much humor during a lesson. As a good starting point, approximately 3 to 4 incidents are regarded as a enough (Ziv 1988). The humor material should always be related to the teaching material to support learning performance without the teacher making a fool of oneself (Zillman & Bryant, 1983, Ziv, 1988 and also Nevo et al., 1998). With very young children the amount of humor can be increased slightly. Then, the subject of humor can also be more independent from the teaching context. But here, during 95 episodes over 11 discourses it was possible to identify 211 times "laughing" (mean = 2,22, sd = 2,01). These are 19,2 incidents per discourse (sd = 9,28, range: min = 5, max = 32). This is very surprising. One might think this is a very funny course. But all the more, one might suspect that then the teaching suffers. But so many people (even in business, govern-ment or prison, see http://www.prison.dhamma.org) who take part in these courses each year seems to be a strong argument against such hypotheses. And they come back for special and longer courses. Some even practice seriously for their whole life. One conclusion could be that humor plays a completely different role if the teaching subject changes. In college or at the univer-sity, what really counts is intellectual knowledge - and performance. On the other hand, direct insight into the nature of ones own mind, self-dependence, and autonomy are teaching subjects of ten day Vipassana courses. This is totally different to common teaching contexts. It can be compared with thera-

peutical settings although Vipassana-Meditation is no therapy at all or any substitution for that. The cause of high frequency of laughing incidents lies not only in the special setting of living like a nun or monk. It seems that in an experiential context with strong rules filled with a heavy and strict meditation program throughout the day, both (rules and meditation) together ensure the quality of the teaching as well as the practice. Then, humor can be applied more often without losing its efficacy or having negative effects on the students. Of course this is only a case of N = 1 and other courses might show other results. Nevertheless, this course was evaluated as important enough to produce the teaching videos for all other courses worldwide and they are in use for over 12 years. This is a interesting fact.

To summarize, humor in the context of teaching mindfulness seems to be fully applicable in a higher amount than it is usual in a more traditional learning atmosphere with different teaching subjects. These courses are much more oriented towards performance.

Distribution of laughing incidents throughout the days

The distribution of the frequency of laughing incidents each day will be compared with the pre-knowledge which was explicated above. Looking on the graph two characteristics are obvious and one finding is very interesting:

- There seems to be an increase of incidents towards the middle of the course and a decline after that if day three, nine, and eleven are ignored. This characteristic has much in common with the shape of the standard deviation. But the cited days do not fit the pattern at all.
- Consequently, day three, nine, and eleven are outliers. There must be something special on these days that requires a higher "dose" of humor. This will be subject matter of the discussion below.
- Looking on day one to day three, on day one more humor happens, then a decline on day two, but then an enormous increase at day three. This enormous boost after a tendency to decline is repeated from day nine to day eleven. However, the boost from day two to day three exceeds the boost from day ten to day eleven.

If we compare the distribution of laughing incidents with the length of laughing incidents, it does not look like that the differences found in the distribution reappear in the length of those incidents. This might be an indicator that the pattern of humor is mostly of the same type throughout the course. We remember the hypothesis that on day ten less humor should

happen. This can be now confirmed strongly. It is also interesting, if we ignore some unwillingly act of humor directly at the beginning of the discourse on day ten, it takes a long time till the first "real" incident happens on day ten (42.5 min., the discourse lasts for 68.16 min.). This also supports the assumption that on day ten the time is efficiently used to review the whole course in a very concentrated manner. Another outlier, day three, can be explained by the forthcoming introduction of Vipassana on day four and appears like a relief function after three long days of observing a "monkey mind" (Goenka, 1991, day one). Day three prepares for a new perspective. This new perspective is to look from inside (within the body) on the world in contrast to the outside sensual objects people normally are attached to. The discourse on day eleven takes place early in the morning shortly before the whole seminar comes to an end. It deals with the practice and application of Vipassana in daily life and how a student should practice to benefit from the technique in her/his normal surroundings. Thus, the humor on this day may be to let the students to set off into normal life again and might help to reduce the felt discrepancies between the strict course atmosphere and what one normally is used to. The boost on day nine is more complicated to understand. The topics on day nine are *blind faith* that means acting without grounding ones actions on real inner experiences - and the good qualities of the mind called Paramitas (Goenka, 1991). Most of the humor is related to the first topic which actually is a subpart of the so called "*five hindrances*" (Goenka, 1991) that inhibit a student to make progress on the noble eightfold path the Buddha taught.

Finally, day nine is also the last day to complete the teaching curriculum, because on day ten the whole course is reviewed, and day eleven prepares for daily life.

Contrary to the assumption of almost no humor at all on day one, day one shows more humor compared to day two and day ten. As stated above, twice a pattern of decline of humor followed by a huge boost can be identified. Explanations were found for day nine to day ten. The same pattern - day two to day three - is much more complicated. Day three as the intellectual preparation for the practice of Vipassana may need much humor to introduce the idea of looking within instead on the outside sensual objects. Contrary to the formulated expectations, day one may introduce with a small amount of humor to provide a context in which especially new students feel comfortable. The decline on day two is still quite unclear and has to be researched in more detail.

Prototypes of action sequences

An analysis of sequential hypotheses is based on the data of each of the 95 episodes, results in a huge distance matrix of sequential codes. A method described by Oldenbürger (1981) was used to dichotomize this matrix. Technically, a "best cut" through a proximity matrix (in this case, a distance matrix) derived from the empirical data was computed. The analysis was done with a software module called "OptSchnPr" coming from a software collection named "Proxim" coded by Oldenbürger (2004) in R (see http://www.r-project.org). The cut procedure enables to evaluate if a code is related to another one (cell value = 1) or not (cell value = 0). The procedure is highly sensitive to the data pool underlying the distance matrix. It provides an alternative to classical hierarchical cluster analysis and provides the opportunity to be used as a a loupe or lens. The procedure aims to identify centers and concepts that are related with each other in contrast to concepts that are not, i.e. that are isolated.

Table 2: *Prototype matrix of sequential codes (generated by software), minimum relative frequency 66%* (pr: prototype)

								pr		Sequential Codes		
	1	1	1	1	1	1	1	7	& rhetoric style: roleplay	& laughing of the audience	& to give reasons/ explaining
1		1	0	1	1	0	1	5	& to give instructions	& to give instructions	& laughing of the audience
1	1		0	1	1	1	1	6	& rhetoric style: telling stories	& rhetoric style: telling stories	& laughing of the audience
1	0	0		0	0	0	0	1	& rhetoric style: roleplay	& rhetoric style: roleplay	& laughing of the audience
1	1	1	0		1	1	1	6	& to give reasons/ explaining	& to give reasons/ explaining	& laughing of the audience
1	1	1	0	1		0	0	4	& rhetoric style: repeating/ increase	& rhetoric style: repeating/ increase	& laughing of the audience
1	0	1	0	1	0		0	3	& Dhamma -the path-	& Dhamma -the path-	& laughing of the audience
1	1	1	0	1	0	0		4	& the ego / the root of the problem	& the ego / the root of the problem	laughing of the audience &

To give an example, table 2 (see previous page) contains the prototype matrix of automatically generated sequential codes with a minimum relative frequency of 66% in relation to sample size. The value of each cell provides information about an existing relationship or not between sequential codes. The order of appearance over the rows equals the order of appearance over the columns. Thus, the cells on the diagonal have no value as within the adjacence matrix, no circular structures are possible. The

column "pr" (prototype) is the sum of rows for each sequential code and acts as a prototype index. The higher this prototype index, the more codes are related to this code and the more prototypical the code is. Obviously, the elements of most of the code sequences appear twice in the sequence (e.g. "*to give instructions* ," "*to give instructions*" and only then "*laughing...*"). That means these sequence elements appear constantly over a selected period of time over different episodes. The distance which was computed in AQUAD 6 (Huber in Huber & Gürtler, 2004) represents 5 seconds between sequential codes. Interestingly, the sequential code with the highest prototype index, "*rhetoric style: roleplay*," contains roleplay by the teacher preceding the code "*laughing of the audience*" and "*to give reasons/ explaining*" afterwards. This supports strongly the hypothesis that humor is not only highly integrated into the teaching process. Humor seems also to be used as a facilitator (see last row code "*the ego/ the root of the problem*") to introduce problematic themes into the curriculum. This was possible to detect as a consequence of the research design. In detail, content related (e.g. "*the ego...*") as well as structural codes (e.g. "*rhetoric style...*") were used together to understand humor. However, due to limited space, further discussions on prototypes as well as a deeper exploration of the episodes en detail cannot be discussed here.

Discussion

Basically, my main aim was to present an understanding of humor in teaching mindfulness. Secondly, pre-knowledge and self-experience of training in mindfulness are valuable resources for doing research in this area. They result in many different types of data to enable a complex research design. They also allow to draw meaningful conclusions on the data. Reviewing the research design, the combination of content and structure coding turned out to be powerful to understand the period preceding and after to humor incidents. This was indicated by the code "*laughing of the audience*." The double role of taking part in ten day courses as well as doing research on the evening discourses is surely problematic. But possible restrictions can be solved sufficiently by transparence of the design, the methods of analysis, the results obtained, and the conclusions one draws upon. Then, this double role switches from being problematic to an important and valuable resource during the whole research process. This dual view offers access to heuristics and hypotheses of a deeper stage to reconstruct the sense of humor. This sense might not appear without much knowledge of the research field. The combination of multiple methods coming from the quantitative as well as the qualitative paradigm supports the newly trend to use mixed methods (e.g. Tashakkori & Teddlie, 2003; Mayring, 2001) that

are strictly oriented upon the research question. This ignores school differences and clashes of both types. Thus, analogous to dialectics, both ways of looking on the data supply a different view. These approaches are highly intertwined and integrating them leads to new and deeper insights into teaching processes. As a consequence, future research should also calculate tests to justify the conclusions drawn from the frequency tables of laughing incidents. This was not done due to the exploratory nature of the study.

In the study presented here it can be said that humor plays an important role, although one assumption remains: All humor that was found depends to a substantial amount on the unique personality and the rhetoric abilities of the principal teacher, S.N. Goenka. It can not be generalized to everyone and every situation. This favors many results of humor research (see for findings on personality, Ruch, 1992, 1999). But this is not the point of discussion. What really turns out to be important is the opportunity to use these discourses as role models of how an integration of humor into the teaching can look like. It also demonstrates clearly how to address problematic topics like the ego or personal attachment that both are crucial parts of the teaching of the Buddha. Then, teacher training can surely be enriched by these findings. Additionally, a good humor style can not be copied one-to-one (Höfner & Schachtner, 1995). However, teachers can learn from it, if they are able to be open up towards transformation and if they let go of their mental models of what they think is "good teaching and what is not." They can give humor a chance to explore themselves and their hidden potentials. If humor is combined with didactic and other teaching qualities, the social communication in the classroom can surely develop to the better without negative effects on the level of learning outcomes. At last, humor is not primarily a means focused solely on performance. Instead, the main aim of humor is social communication and social atmosphere. But its application requires self-development and self-experience from the practitioners – the teachers.

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Qualitative Analysis "cis transcriptionae": Direct Processing of Sound and Video Data

Günter L. Huber

Steps in the analysis of qualitative data

As typical phases of an analysis of qualitative data we can distinguish the reduction of the original data base, the reconstruction of linkages, and the comparison of findings. Especially in psychological studies researchers often are interested in inferring inductively from *one* subject's data regularities in this person's experiences and behaviors. Whether data of several persons have something in common is interesting, too, but only during a later stage of investigation.
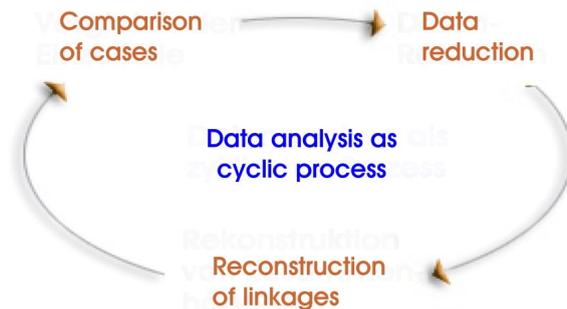
Fig. 1: The cycle of data analysis

- The first phase of qualitative analysis (see figure 1 above) is characterized by *reducing* the overwhelming amount of data (texts, sound or video recordings, graphic files) by identifying or categorizing the content of more or less encompassing data segments. A "code" as abbreviation or name of a category is attached to each segment. In the following, these codes are used as representatives of data segments or "units of meaning" in the data. Fundamentally, this is a process of categorization, where the categories may emerge during data interpretation or may be taken from an already existing category system – depending on the researcher's epistemological orientation.

- During the second phase researchers try to *reconstruct* the data producer's subjective meaning system from the units of meaning in their data. By "data producer" we refer to the researcher's interview partners, to writers of diaries, to observers who took field notes in a setting, the child playing with an object in a video, etc. In order to reconstruct meaning systems we are looking for regular linkages between units of meaning in the data, which are characteristic for a person and/or her situation.
- In the third phase finally researchers try to infer invariants or general regularities by *comparing* individual systems of meaning or "cases" (see Ragin, 1987).

The decisive step is the first one: Whether we reduce the initial data to a set of categories as described above or we pack the meaning of verbose materials into paraphrases, as suggested by Mayring (1988), inadequate or misleading interpretations endanger all the following steps. Cycles of "permanent comparisons" (Glaser & Strauss, 1967) will make us aware of such flaws: When we compare data segments attributed to the same category within a single data set or later data segments and categories of several cases, we may notice unsystematic applications of categories, overlaps or even contradictions. These findings open at least part of a new cycle through the steps of data analysis, in which we have to modify initial interpretations. That is, at these points in the process of data analysis we have to leave the level of reduction, return to the initial data base, and mull over our interpretative activities up to now. Whether we succeed in clarifying any deformities in our system of categories or flaws in its application and finally in resolving these problems depends to a great deal on the possibilities of access to our original data.

The role of transcriptions in qualitative analysis

"If data have been recorded using technical media, their transcription is a necessary step on the way to their interpretation" (Flick, 1998, p. 173). The same is true for handwritten field notes and memos written down after some field contact. "So we are focusing on *words* as the basic medium, and are assuming that the words involved have been *refined* from raw notes or tape recordings into a text that is clear to the reader or analyst" (Miles & Huberman, 1994, p. 51).

The degree of necessary "refinement" at the same time is the central problem of handling qualitative data. How much changing and adapting, for instance, from the local dialect of a speaker to standard language is necessary to make the text understandable? From which point on will "polishing" a text invite to misleading interpretations? Miles and Huberman (1994, p. 51)

warn us "that this text may be reduced and simplified considerably from the raw events."

Although no standardized procedures exist for transcribing textual data, manifold advice and examples are available in the literature on qualitative methodology (see, for example, Mayring 1988). In a summary of basic principles of transcription O'Connell and Kowal (1996) conclude that we should not try to find the one and only correct approach to transcribe spoken discourse, but use rules of transcriptions tuned to the purposes of our study.

There is general agreement that all transcriptions must represent as precisely as possible the words spoken. However, a closer look reveals great variety in how seriously this criterion is taken. Should grammatical errors or just sloppy pronunciation of a speaker be corrected or not? Should all the "äh," hm," "uhm," etc. utterances be represented in a transcription? What about general use of dialect or some local expressions within an otherwise standard language text? And finally: Should other elements of a discourse than words also be included in a transcription? O'Connell and Kowal (1996, p. 94) give a simple example with nevertheless far reaching consequences: "... a greeting might be transcribed simply with the *verbal* component 'hello.' Whether it was said loudly (*prosodics*), laughingly (*paralinguistics*) or with an accompanying gesture (*extralinguistics*) might or might not be included in the transcript."

In any case, even a parsimonious transcription takes a lot of time – and extra money, if you have to hire people for this task. Concluding from our own experiences with transcriptions, we count with a factor 10, that is, we estimate for one hour, for instance, of a tape recorded interview 10 hours until we have a proof-read and well checked transcription available.

The requirements of time, money, and personal energy rise dramatically, if not only sound recordings, but film or video recordings have to be analyzed. Fürst (1999) describes the preparation of recordings of small cooperative groups in classrooms by a differentiated notation of various types of events in form of a score like representing a musical arrangement. To transform the raw data into this form, teams of two transcribers each needed on the average two hours for one minute raw data on a tape. That is, here we are confronted with a factor of 120 (or 240, if we consider that always two people worked together). Only then, based on these transcriptions, the real work of a qualitative process analysis could begin.

If we take into account all these problems, that is, reductions by focusing on words only, purposive omissions and refinements, necessary time and financial resources, and finally the ultimate requirement of retrieving the exact raw data in the original recording in case of any doubts, we recommend to forget about transcriptions as data base of qualitative analysis. Instead, a much

more adequate role of transcriptions would be just to include relevant samples of data via transcription in the study report. Thus, the readers of our report have easy access to essential selections of the initial data.

Data analysis should be performed with the original data – in the field of qualitative data, too. Considering the possibilities of recent improvements in computer technology and software development, no longer do we need intermediate transcriptions, but are able to work directly with digitized sound recordings, video tapes, drawings, and photos from the field.

Direct processing of digitized data in AQUAD 6

The software AQUAD

The first version of AQUAD (**A**nalysis of **Qual**itative **D**ata) was developed in 1987 to compensate for a shortage in manpower in a research project. At this time several programs for qualitative analysis had been in existence for a few years. Simpler types of software tools were using the search function of available word processors or database programs. Some were already designed for the special demands of qualitative analysis, although they did not offer more than simple counting and retrieval functions. A much higher level of functionality was realized just by one program, the American software package Qualog written by Anne Shelly and Ernest Sibert (1985) for a mainframe computer. This program made use of the rich potential of so called "logical programming", and it was the stimulus and model for AQUAD.

A particular goal in developing AQUAD was to support the reconstruction of linkages of meaning within the data base as described, for instance, by methodological approaches like "grounded theory" (Glaser & Strauss, 1967). In addition, AQUAD tries to incorporate methodological ideas for text analysis like Miles and Huberman's table or matrix analysis (Miles & Huberman, 1994) and Ragin's comparsion of configurations of meaning (Ragin, 1987). The more elementary functions of other programs like managing code entries and retrieving coded text segments are of course available in AQUAD, too.

The actual version 6 of AQUAD (Huber, 2004) allows for the first time to analyze qualitative data without costly and time consuming transcription of the initial data base. Of course, AQUAD still offers rich possibilities to analyze written texts. Altogether, the following types of data files can be imported into the program and analyzed directly:

- Texts formatted as *.txt (plain ANSI format) or *.rtf;
- audio recordings as sound files formatted as *.wav or *mp3;
- video recordings formatted as *.avi (in various compressions);
- graphic files (pictures, drawings, photos, etc.) formatted as *.jpg.

We will outline here only how to work with original data directly using a sample of video recordings. Thus, we can show at least some illustrating screen shots, whereas we could not demonstrate sound examples in a book ... Principally the procedures available for data reduction (coding), reconstruction of linkages, and analysis of types are the same for any type of data.

How to code digitized data

The video appears directly on the screen, and we can code it right there (the same is true for texts, sound or graphic data). AQUAD allows to begin and then resume our coding at any time, just in case we are interrupted during one work session, or we come up with new ideas later and want to add to or modify our previous codes. Here is the main window for coding (see figure 2, next page); the following explanations will refer to its components:

On the left side in the screen shot you see the columns, where the codifications are listed:

- "M" stands for "memos" (wee see only "0" entries, there are no memos yet),
- "from" - "to" contain locations of coded segments within the file, and finally we see the
- column for code names.

The unit for numeric entries into the location columns is the number of pictures or "frames" in our video. The screen shot shows the end of a short data segment of 0.6 seconds length, beginning with frame no. 2600 and ending at frame no. 2615. These frames were marked as "position 1" by pushing the button "Pos1" below the video display, and later as "position 2" by clicking on "Pos2." The actual position of the player is visible between these two buttons.

As to the content: The baby inspects a ring of keys at the beginning of the selected video sequence, holding it in her left hand. The date sequence shows how the baby tries to grasp the keys with the right hand. However, handing over the keys to the right hand fails, she grasps to slow (indicated in the code entry by the "– " character. The code entries on the left reduce these events to the following information (see figure 2):

2600	2615	grasping
2615	2615	right hand
2615	2679	handing over to right hand –

Fig. 2: Coding of video data

At the very bottom of the panel of coding facilities you see a green bar with the familiar symbols of video players (see figure 3 below). You use it to start the recording ("Play"), to pause, to stop, and to jump to the beginning or the end of the recording. Marked data segments will be repeated whenever you click the button "*Loop*", that is the data segment between positions 1 and 2 (as shown in figure 1) will be played again. Fine tuning of positions is possible with the arrow keys "Up" and "Down" on the keyboard.

Fig. 3: Video control panel

How do we mark selected video segments with codes? Clicking on the button "*Coding*" between the two slots for numerical information about beginning and end of a data segment will open an additional window for entering codes (see figure 4):
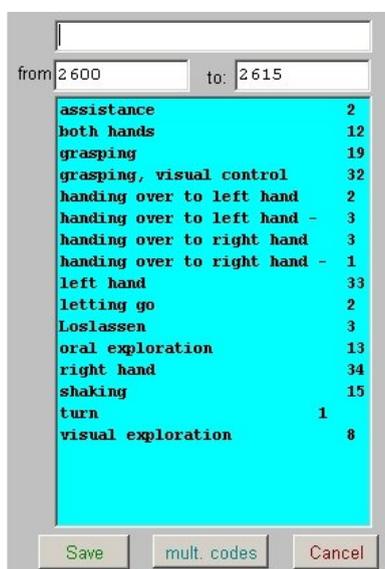
Fig. 4: Window for coding

If we apply a code for the first time, we have to write it into the entry slot for codes above in figure 4 (see previous page). Afterwards, we can select this code again and again just by double clicking on it in the "master code list" shown below in figure 4.

Retrieving original data

The frame numbers connect the codes to the digitized video stored on your PC's hard disk. Within the code function as well as from various retrieval and analytic functions AQUAD allows to view coded data segments immediately. Mostly you need only to click on a result listing on the screen – and you see again what you interpreted as representing a particular category. Figure 5 gives an overview on available functions in AQUAD's main menu.
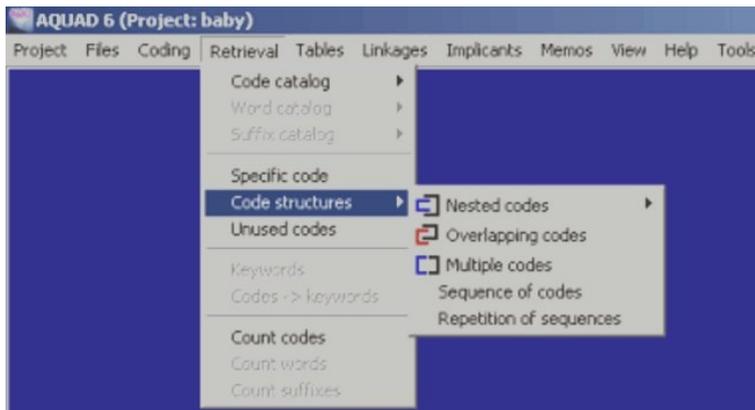
Fig. 5: AQUAD's main menu

If you are interested in more details you find a demo version of the software and the complete manual (in one file and separate files for each chapter) on the author's Internet site

www.aquad.de

This contribution cannot introduce to computer assisted analysis of qualitative data. Hopefully, however, it could illustrate the claim that transcriptions were yesterday the base of yesterday qualitative analysis, while nowadays we have direct access to recorded events.

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Qualitative Methods in Evaluation –
the Example of WESA

Günter L. Huber

Evaluation studies are particularly good examples both to demonstrate the importance of qualitative approaches in psychology and to put a special focus on design. Social institutions like schools invest many resources – from money to lifetime of students – to reach their complex goals. Therefore it is highly important to assure that the processes used to approach these goals are effective and efficient. The very nature of many of these social goals demands that qualitative data are collected. This point will be illustrated in a moment by describing the evaluation of a school program, we recently became involved in. As regards design, Kromrey (2001, p. 106 f.) affirms that "evaluation" means in empirical methodology "the *design* of a specific type of social research that is concentrated on collecting information on process and results of a 'program' (of actions and activities) with explicit goals and instruments."

Subsequently, we will describe the problem that made evaluation necessary and outline the main research questions. To answer them, we have to establish research relationships with various persons. Finally we will conclude, which methods and instruments should be applied to collect which type of data.

The problem situation

Early in 2003, the Oberschulamt Tübingen (one of four administrative centers of the Ministry of Education in the German state Baden-Württemberg) published a program called "WESA: Weiterentwicklung schulischer Abschlußprüfungen." It was introduced already in 2001 to promote further development of final examinations in schools. The WESA program was developed and implemented because curricular innovations began to show effects in classrooms:

" ... mere transmission of information is complemented by more and more efforts to achieve educational goals beyond subject specific knowledge such as autonomy, team capability, personal competence, etc. Applying new forms of achievement evaluation is absolutely necessary, if we want to move from transmission of contents to construction of competence." (Oberschulamt Tübingen, 2003, p. 3)

Several problems soon became obvious: Firstly, these changes did not occur on a broad scale in all classrooms. As long as school

examinations – above all final examinations – do not contain tasks that can only be solved, if students have successfully developed these competencies, they will be irrelevant both for teachers and students. In many classrooms, particularly if critical examinations are approaching, teachers and students concentrate on those parts of the curriculum that count for grades. Why should they waist time for teaching and learning contents that will *not* be examined?

Secondly, the curriculum may list many valuable competencies as educational goals, but as long as there are no adequate examinations, school certificates cannot express to which degree a student has mastered the one or the other competence. Schools have to promote these competencies, but they also have to care for certification. But how do you measure, for instance, to which degree a student has a personal competence like "reflection" to his/her disposal?

The difference to usual evaluations of school achievements will create many problems for teachers. A reflective student would be able to evaluate critically own actions, even the own person. A necessity to apply this competencies arises whenever one's actions cause problems, that is they may lead into dead alleys, create negative side effects, or may simply be ineffective.

Thirdly, there were no experiences, how modified certificates would be accepted and/or interpreted by parents and by potential employers. How to evaluate, for instance, competence for autonomous learning? By grades like math achievements or by verbal descriptions – and how do you describe higher vs. lower progress in the development of personal competencies?

Finally, although some schools had already introduced new forms of final examinations, for instance "project examinations," there were some doubts, whether the competencies necessary for these activities were systematically fostered in school - or just evaluated. Let us return to the example of the educational goal of competence for reflection. We can imagine that teachers select a number of critical situations in classrooms and develop observation techniques to evaluate their students' reflectivity. But will they find approaches to promote reflection in addition to their subject-specific teaching load?

Fortunately, there are possibilities that can be realized in any classroom, where active learning of students is promoted at all. Zuckerman (2003) demonstrated in a study at 250 Russian schools with more than 6000 8th grade students that reflectivity is promoted by opportunities to learn cooperatively, by exercises in self-evaluation (determining evaluative criteria and relative weight of various achievements), and by serving as teacher for younger peers.

Research questions

Since educational programs in general and curricular innovations in particular are defined by goals and goal-directed activities, we can easily deduce research questions. In the case of WESA, two goal areas were considered (see Oberschulamt Tübingen, 2003):

> (1) The quality of teaching shall be increased by integrating general competencies into the catalog of learning goals for each subject matter area.
> (2) All competencies taught in schools shall be evaluated and the results shall be documented in new forms of certificates.

Based on an additional paper differentiating and reformulating these goals, details and available experiences were discussed in a joint meeting of representatives of school administration, head-masters and teachers of participating schools, and educational scientists. In the discussion a sequence of tasks and related research questions were formulated:

- Final examinations have to be modified so that they meet actual demands of society, i.e., that they both assess specific knowledge and general competencies.
- Learning situations have to be implemented that promote these new, complementary learning goals.
- Adequate forms of assessment and certification have to be developed and implemented in schools.
- The results, i.e. additional evaluations/certifications must be fed back into the teaching/learning system.

Questions referring to these task areas differed depending on the participants' particular responsibilities. Therefore, we will list questions, that must be answered in the evaluation study of WESA separately for the team of the WESA developers and for schools participating in this first step of implementation (see table 1).

Tab. 1: *Program goals and research questions*

Participants Goal domain	Project developers	Schools
Correspondence between examinations and demands of society	• How do schools conceive of actual demands of society? • Do goals of potential employers match the selection of competencies documented in certificates?	• Do the new goals in the domains of work and social behavior make sense? • Which model of human beings are the new forms of evaluation based on?
Teaching (Promotion of competencies)	• How do schools translate new demands into competencies they have to foster?	• To which degree is it possible to promote general competencies beyond subject-matter specific skills?
Examinations (Development of matching forms of examination)	• Do new forms of examination match the competencies as defined by schools?	• How we evaluate general competencies?
Feedback (Development of teaching/learning situations)	• Is it possible for students to learn systematically the necessary competencies in their classrooms?	• What does the new certificate mean for parents and employers? • How does the new certificate influence students' chances of employment? • What does the new certificate mean for students? • Do we attain the official standards of education?

Two facts become quite obvious from this list of questions: (1) The design of our study has to take into account much more encompassing research relationships than initially expected. (2) The questions address effects of implementation that cannot be quantified in more or less sophisticated ways, but afford qualitative methods of access to information.

Research relationships

Let us follow the goal domains listed in table 1 and see, which field contacts will be necessary to find answers to the questions related to these domains. The various segments of the field of evaluation, where we have to establish contacts, is summarized below in figure 1.

To answer general questions referring to the correspondence between demands of society and new forms of final examinations we have to talk with experts in education, political organization, and business administration. They will have to give us their opinions on whether the additional focus on general competencies promises to fulfill what is expected of emancipated young people, citizens, employees. We also want to learn from these experts what they think about the translations of curricular formulations into concrete activities on the level of classrooms.

Questions referring to the promotion of competencies will be addressed at those people who are really in charge of the intended modifications: teachers and students. If we want to find out about possibilities to promote competencies beyond teaching of subject matter – as was explicitly asked for by schools (see tab. 1) – we need a "pre-post" design. That is, we have to find out how teachers and students prepare for the challenge of teaching/learning general competencies within the limits of a subject-matter based school organization. However, if we want to get valid answers to questions about how both teachers and students deal with competence teaching/learning, we need also a peri-actional perspective, that is we have to get access to what is really going in classrooms.

This will also help to answer questions referring to the feedback of results of the new evaluations. From this perspective and regarding the development of matching forms of examinations, it is absolutely necessary that our study follows a design pattern of formative evaluation. We cannot wait until the school year ends, but we have to get from the very beginning samples of teacher-made observation protocols and examinations and information about students' results. Thus, we can discuss advantages and perils of competence probes applied in the classrooms – and we can try to modify together with the teachers sub-optimal approaches. A formative approach to evaluation, opposite to summative evaluation, can only be realized in long-term and trustful research relationships.

Finally, when considering possibilities to give feedback and possible unexpected effects of feedback, we should not forget to learn how parents and potential employers – we will evaluate final examinations – react to the contents of the new certificates.

Teachers asked how they should assess and evaluate general competencies (see table 1). To give them advice and assist them in overcoming most probable errors will be possible only, if we

succeed in establishing close contacts. Let us consider, for instance, the evaluation/certification of students' work behavior. It is common, to label behavior on trait dimensions by adjectives like thorough vs. superficial, rapid vs. slow, or active vs. passive. We cannot elaborate here on the consequences of labeling 15-16 years olds in a final examination in this way. Instead, we suggest to develop descriptions of behavior that can really be observed, for instance: "The student completes tasks within the intended time limits." To cooperate with teachers toward this end, again stable relationships are necessary.
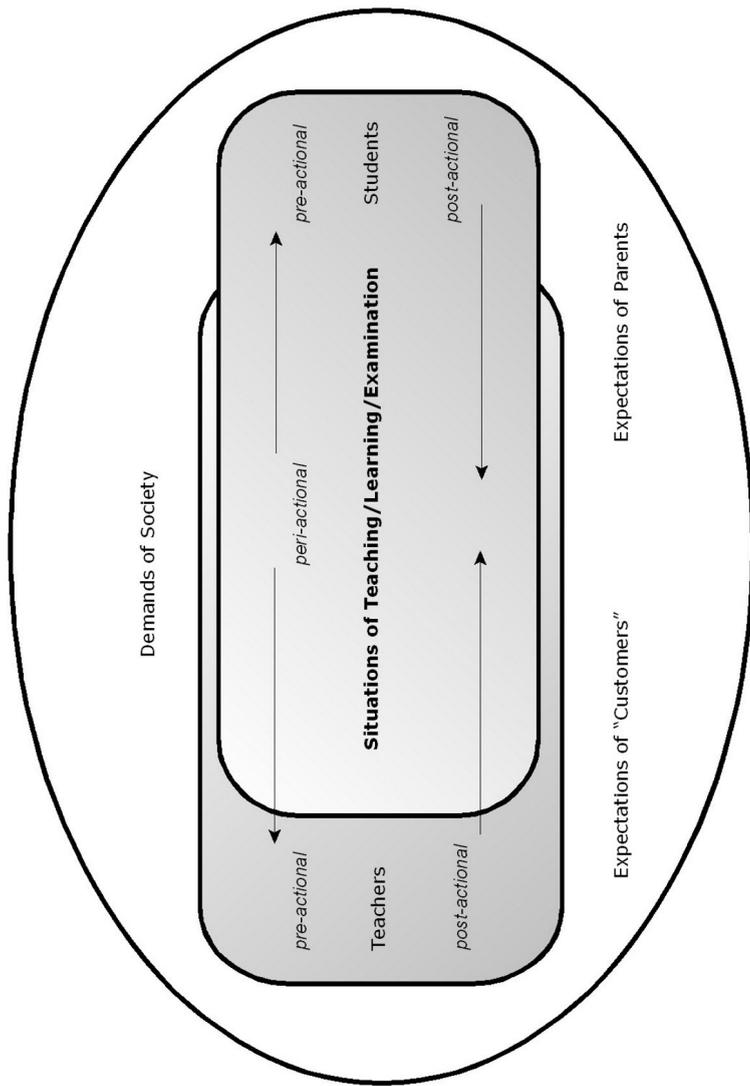
Fig. 1: Segments of evaluation

Research instruments and data collection

Finally, we have to decide about methods and instruments of data collection. In table 2, suggestions are listed according to the segments (see fig. 1) of the evaluation area of WESA.

Tab. 2: *Methods and instruments*

Segment	Method of access
Demands of society	Analysis of documents: Curriculae Interviews with representatives of school administration
Perspective of "customers"	Interviews with - representatives of chambers of commerce and trade corporations; - selected employers;
Perspective of parents	Interviews with parents Group discussions of parents' representatives in the school council Rating scale for evaluation of the certificate
Teachers' pre-actional perspective	Content analysis of examination tasks Content analysis of lesson preparations Thinking aloud during planning of lessons and examinations
Teachers' post-actional perspective	Interviews on process/results of planned activities and necessary modifications
Students' pre-actional perspective	Group discussions on preparations (lesoon, examination)
Students' post-actional perspective	Content analysis of examination documents, for instance portfolios Group discussions on learning process/results and necessary modifications
Teachers and students during teaching, learning, and examinations	Observation with pre-structured protocol sheets Video-taping of lessons/examinations

Information from different persons' viewpoints, different points in time, and based on different methods of data collection and analysis promise interesting possibilities of triangulation. In addition, quantitative data describing the sample (for instance, data on age or former achievement scores) are available and will allow to realize a mixed methods approach to evaluation.

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Contribution of a Modified Global Analysis
to a Qualitative Heuristic Analysis

Karin Jeschke

Introduction

This paper introduces an adaptation of "Global Analysis" (Böhm, et al., 1992) developed in the context of a "Bundesmodellprojekt" working on "Dealing with sexual self-determination and sexualized violence in residential institutions for young people with a mental disability". A form of "Global Analysis" modified with "Grounded Theory" and the "Ecological Model" was chosen as a first step of data analysis in order to gain a topical overview of the interview data collected. This method of data analysis is used first to get a rough overview over the data and an input into the practice materials developed as well as preparing the data for a qualitative-heuristic analysis (Kleining, 1995) as a second step.

The research project

The research project "Dealing with sexual self determination and sexualized violence in residential institutions for young people with a mental disability" was sponsored by the German Ministry of Family, Senior Citizens, Women and Youth from November 1999 to November 2003. The project goal was to develop research-based materials for practice how to deal with sexual self determination and sexualized violence.

People with a mental disability living in residential institutions as well as staff should receive guidelines on how to notice and what concrete steps to take in order to prevent sexualized violence in the daily life in these institutions. Two volumes were created – one with materials and sex education and empowering stories and information for people with a mental disability and one research reader for staff presenting the results of the research project.

In order to capture a wide variety of factors relevant to the research topic the research project cooperated with two agencies: One in West Berlin and one in Rostock, East Germany. These model institutions cover a wider array of conditions relevant to the dealing with the research topic.

Due to the complexity of the research question in a field where only few German empirical studies exist so far, an exploratory, qualitative design concerning both data collection and data analysis was chosen. In addition to 50 semi-structured interviews and group discussion with residents and staff focus groups with ten sessions each for staff and residents of both institutions separately and expert interviews with experts from

USA/Canada and Germany were done. Cooperation between research and practice, an integration of different perspectives, affinity to daily life, an emphasis on processes and a search for new, relevant questions were the central motives of the research project.

As the project did research on sexualized violence, it was seen as important for ethical reasons to offer counseling/psychotherapy in order to account for potential side-effects of the research and to contribute to the development of adequate measures against sexualized violence in residential institutions.

The research team was accompanied through the research process in topical, methodological and ethical questions by a scientific advisory board with researchers and practitioners.

Original "Globalanalyse" by Böhm, Legewie and Muhr

As a first step in "Globalanalyse" the analyst is requested to reflect upon prior knowledge of the field and her or his own epistemo-logical interests/orientations as well as the context where the text was created are captured. A first brief reading of the text provides an overview and a rough partitioning of the text into "natural units", if necessary due to length of text additionally into "units of analysis" (Böhm et al., 1992, 24).

A subsequent review of the text serves to capture and assess the content. At this point the topic, intentions of the speakers and relevance for the research question are the focus." *Connections of form and contents, hints towards the roles and motives of the producers of the text (...), abrupt changes of subject*" (Böhm, et al., 1992), are meaningful, particularly in transcribed communication. Important passages are marked, references to the communication situation are marked and catchwords should be noted down. The authors recommend an attention not focused on specific research questions for the time being.

The initial stages help to search for and identify topics of interest; if more then five topics are seen as important in 50 lines, the authors recommend to take down sub-topics and to summarize them under more general topic headings. Each topic is assigned a catchword that captures it with a relevant quotation. Throughout the process of analysis the researcher is asked to shift concentration between the level of themes/content and the ways in which they are communicated. For later work on the text all topics of interest should be retrievable by catchwords assigned at this point. The creation of a table of contents is the result of the previous steps through the creation of lists of catchwords, themes and memos.

When summarizing and assessing the text and its meaning both the context of its origin as well as the communication situation between interviewer and interviewee must be judged.

Moreover, it should be evaluated in terms of comprehensibility, truth and completeness. Potential gaps, biases and deceptions must be pointed out. The final evaluation should note the main topics of the text and estimate its overall relevance as – central, moderate or peripheral. At this point, a key theme ("motto") of the analysis is picked out which captures the specific character of the text.

The "Paradigm Model" and the "Ecological Model"

The experience of the research project described above showed the advantage of providing a broad, time-efficient analysis of the data was accompanied by the disadvantage of lengthy new texts. As the focus of the research project was sexual self- determination and sexual violence it there was an obvious need to narrow the analysis to these topics and to establish a structure for the immense amount of catchwords, themes and memos that would allow for analysis.

The dual goals of producing a handbook for self- help of people with mental disabilities and the staff working with them in institutional settings and a research-based reader for practitioners and researchers in the field lead to the need for an integration of information relevant for clinical practice as well as a higher level of abstraction, or, in other words, a more deductive and a more inductive, exploratory component.

The increased search for specific topics potentially relevant for both project products was achieved by excluding topics that were only indirectly connected to the research topic from more intensive analysis. The need for a deductive component in the analysis was established through the development of categories of analysis wherein the catchwords, memos etc. were to be sorted. These categories did not emerge from the data but applied the Paradigm Model by Strauss and Corbin (1996). The coding scheme developed in Sociology gives structure for the detailed description of social phenomena and interaction. It systemizes the reflection and presentation of qualitative data and complex relationships by linking the subcategories, in case of "Global Analysis" subcategories, with the main categories. In adaptation of the "Paradigm Model" the following categories were used: For the central phenomenon "sexual self-determination, sexuality and sexualized violence" the description of the phenomenon itself and conditions determining, sustaining the phenomenon and potential strategies of action and interaction were differentiated. Goals and wishes in reference to the phenomena of interest were added to the paradigm model in order to collect relevant points for the handbook. "Causal conditions" as the last category of the "Coding Paradigm" were not included as they are not transferable to the qualitative data and if relevant could be included in "context."

The categories of the "Paradigm Model" offer some information about the way sexual self-determination and sexualized violence are negotiated by staff and people with a disability. Points of interest include whether the interviewer or the interviewee exclusively talked on the level of the phenomenon or whether intervening conditions, consequences etc. were named. A more complex view might be an indicator of a higher level of reflection.

1. Modification of the Paradigm Model

What might be crucial to the way (sexual) self-determination and sexual violence are handled?

Intervening conditions

Context
Research diary and qualitative questionnaires

Phenomenon

How are (sexual) self-determination and sexualized violence handled in the institution? Two levels are distinguished: real vs fantasized

Consequences

Goals: How could / should one handle sexual "self-determination"?

Action/ interactional Strategies

Strategies: What concrete suggestions are made for an improvement of current practice?

Within the categories of the "Coding Paradigm" a second level of subdivisions was created for further structure according to the "Ecological Model" by Bronfenbrenner (1979). The four interlocking systems described in this model were adapted to the research project. The "microsystem" describes interpersonal relationships such as family, friends, school, etc. The "macrosystem" in the ecological model describes the interaction between "microsystems" directly affecting the person such as relationships between parental home, school and friends. The "exosystem" describes the societal context wherein the "microsystem" and the "macrosystem" interact and where a person is not an active part, such as the workplace of parents, cinema, etc. The "macrosystem" describes the formal similarity of the preceding systems which are culturally specific (a part of the culture with its underlying worldviews and ideologies, e.g. the typical of the relationship of family and school ("mesosystem") which is different in different countries).

The diagram shows the adaptation of the ecological model (Bronfenbrenner, 1979) for the project. The main changes to the model were made to reflect the input of people with disabilities. So the first aspect/component in the project assessed the individual's disability, including the extent of ability, ability to articulate her or his needs and to begin and maintain social relationships. This was of interest for the exploratory, qualitative research perspective of the project. Then the "macrosystem" was changed to the institutional setting including ideology, concepts, equipment, organization, staff and atmosphere. The "exosystem" was replaced by sociocultural factors that reach out beyond the institution such as cultural, social, legal and scientific beliefs. Finally, hypotheses about interaction between these levels (analogy of the "mesoystem" in the original ecological model) were coded in memo form.

These two subdivision levels can be compared to a chest of drawers with large compartments and smaller dividers within these. Beyond providing a basic system of order for all catchwords and memos this system differentiated according to our research question: For example, to what extent is sexual harassment of a female client in a group home by a social worker of the institution negotiated- more towards a personalizing view at the "microsystem" level blaming the victim for provocation, with an exclusion of the other levels or more towards seeing dependency as a central category of living in an institution. Where is the focus of each stakeholder in the system (People with a mental disability, staff, program managers)?

More Changes and the creation of a form for the modified "Global analysis"

Further changes made were that different priority levels of topics in the table of contents were marked. Bold letters were used for topics directly relevant for the research question, in italics for self determination in general and for all other passages normal writing.

The key word list was supplemented by comments, memos and quotations. Instead of three different lists this integrated version was helpful in securing the key words, comments and quotations and it facilitated the writing of the final report. The example shows first the key word with source in [ ], followed by the memo comment in < > and the quotation in " ".

Code of Silence [Bln-BmE/ 584-588]:
Members of staff in residential institutions develop their own *Code of Silence*, wherewith they one another against the risk of certain things being detected or disclosed <VERY INTERESTING- NOT SIMPLY SILENCE BUT SILENCE WITH A VERBAL CODE>
"Lee: [...] And we were talking about, you know, in institutions people develop their own little code of silence, where if we work together we cover up."

Given the exploratory nature of the project on a topic still such a taboo one goal was to collect stories of "cases" of how sexuality and sexual self determination are experienced and fostered. The theme of sexual violence was also explored, particularly in the context of residential institutions. It was part of the analysis to assign a keyword and to collect these narrative episodes. They were later analyzed or used for illustration purposes in the handbook for clinical practice.

In order to sensitize the team of analysts to topics of specific interest and capture their ideas and concerns about these topics, the last part of the modified global analysis included a short text on the following topics:
- Summary of the interview covering main topics and general findings
- Distinctive features of the communication between interviewer and interviewee
- Important points concerning gender
- Important points concerning sexual orientation
- Reflection of what is important: hypotheses, links to other interviews or literature
- Important points about the background of the researcher or analyst in order to understand the subjective analysis of the interview, e.g. somebody worked in this context

      before, has a family member with disability, etc. or relevant persuasions (e.g. feminist ideas, empowerment)
- Evaluation of the relevance and quality of the interview- how relevant is it for different aspects of the research topic and why?

The last section aimed at working towards the criterium of merit of "intersubjective comprehensibility" (Steinke, 1999) and allowed a second person from the research team to add comments about the analysis. Therewith, the limitation to one perspective was extended to a second perspective.

Résumé

The adaptation of "Global Analysis" introduced some major and minor changes in the original approach to analysis of qualitative data. These changes offered more profound, specific and complete analysis which went beyond "preparing texts for their actual analysis" (Flick 2000,216). However, this first step of analysis can be supplemented by more profound analysis at points of particular interest, e.g. by using the "qualitative-heuristic approach" of Kleining. The modification of "Global Analysis" introduced here is suitable for handling large amounts of qualitative data with several analysts and limited time resources. It is an appropriate combination of an inductive and a more deductive approach for an "action research" project. The more deductive components offered the opportunity to work toward developing a handbook for practice, whereas the more inductive aspects where important in creating space for the exploratory and sensitive character of the research topic. It was a central effort of the modified version to pursue the criteria of merit for qualitative approaches in order to ensure relevance, extensive documentation, reflection on subjectivity (Steinke, 1999).

2. Modification of the Ecological Model

2 Ideology, concepts, equipment, organization, staff, atmosphere, etc

1 Extent of disability, ability to articulate one's needs, to make friends, etc.

3. Socio-cultural Level

2. Institution Level

1. Subject Level

3 Social environment beyond the Institution; cultural, social legal and scientific beliefs

4 Memos: Interaction dynamics between the three systems
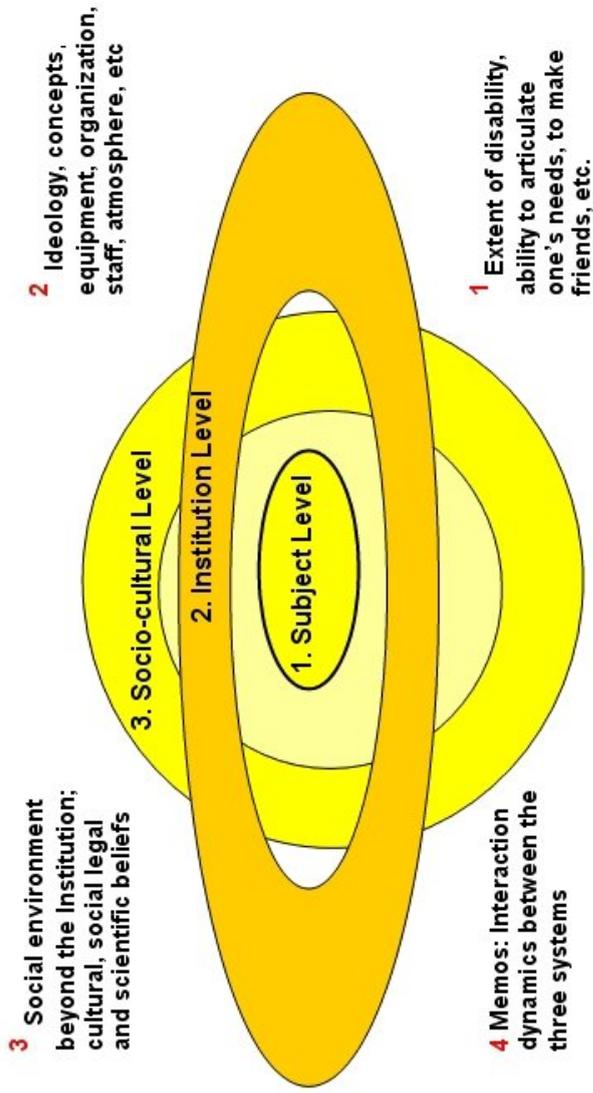
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Living with Persons with Disabilities: Perspectives of L'Arche Assistants

Levan Lim and Annette Ullrich

Introduction

L'Arche communities are an international confederation of communities around the world where people with and without disabilities intentionally live together. L'Arche was founded by Jean Vanier in 1964 and has grown to over 125 communities across 29 countries. The philosophy of L'Arche revolves around a shared system of beliefs about the value of persons with disabilities, the importance of relationships, and a sense of community. The term "assistants" within L'Arche refers to individuals who choose to share their lives, for a variety of reasons and motivations, with people with disabilities. Assistants in L'Arche play a vital role to help create a sense of community and belonging for persons with disabilities as well as for themselves.

Many assistants join L'Arche when they are relatively young and are experiencing some sort of transitional change or growth in their lives (Hrynick, 2001). There are many informal anecdotal stories of assistants describing their personal growth and transformation as result of living in L'Arche (the second author was an assistant in a L'Arche community in Montreal, Canada). These stories of assistants usually involve an intensified self-awareness and a greater acceptance of themselves, their own strengths, and vulnerabilities.

The current literature base on L'Arche has been largely limited to descriptions of L'Arche in terms of its philosophy, history, ideology, and activities (e.g., Dunne, 1986; Harris, 1987; Sumarah, 1983, 1987a, 1987b). There is, however, an emerging body of literature in recent years that has begun to reveal insider perspectives of L'Arche members regarding core issues such as friendship and community (e.g., Porter, 1998). More research though is needed to provide a deeper understanding of L'Arche members' (e.g., assistants) views on issues such as community building, spirituality, disability, personal growth and transformation, and relationships. Understanding these issues can better help explain why L'Arche communities have been successful in expanding across continents in the past few decades as well as consider important implications for staff training and professional development in the field of disability and special education.

Our study builds upon previous research we have done (Lim & Annette, 2003) on the perspectives of individuals who chose to join a community to begin a L'Arche home in Brisbane, Australia. Many of these individuals had never been assistants but had heard

about L'Arche before joining the Brisbane community and a few of them had been assistants before. Based on the findings of this previous research with this particular community, we decided to extend our line of research into investigating the perspectives of assistants in established L'arche communities across Australia. We were interested in documenting the personal stories and testimonies of assistants, many of whom experienced an unexpected richness and personal change in living and learning in relationship with persons with disabilities.

Purpose of the study

The purpose of this study was to investigate the perspectives and experiences of assistants, living in L'Arche communities across Australia, regarding their reasons for joining L'Arche and their growth and personal transformation through relationships with persons with disabilities. Specifically, our study investigated the personal perspectives and experiences of assistants to gain an understanding of: i) the reasons, motivations, and expectations that led assistants to join an intentional community like L'Arche; ii) particular experiences of growth, awakening, and/or healing through relationships with persons with disabilities; and iii) how relationships and experiences in L'Arche have influenced and impacted the assistants' lives.

Link to previous research

Our previous study (Lim & Ullrich, 2003) sought to explore the values and beliefs of individuals who joined the pre-L'Arche Brisbane community (pre-L'Arche denoting the community before it became formalized as a L'Arche community) for the purpose of establishing a L'Arche home for persons with disabilities. In addition, this study also sought to identify how a sense of community evolved around the intention to welcome persons with disabilities and to clarify the link between spirituality and disability. The central theme that emerged from this study was the reciprocal relationships between action, reflection, and spirituality as practiced by the various members of the community according to the vision and values of L'Arche, which, in turn, became liberating as well as transformative of individual lives.

This initial study suggested a more in-depth study of the processes of personal change and transformation of individuals already living in community with persons with disabilities. The members of the Brisbane community in its pre-L'Arche days, though part of the community, were not living with persons with disabilities but were somehow convicted to commit their time and energy towards setting up a L'Arche home in Brisbane. Based on

our own personal experiences in living with people with disabilities (especially the second author who was a former assistant), we became increasingly interested in how living with individuals with disabilities impacted and transformed the lives of people. Interviewing assistants in already established L'Arche communities was the next step in our line of research.

We embarked upon our next research for other reasons. First, the study of relationships between people with and without disabilities and how individuals change as a result of these relationships is a significant area for further research in the fields of special education and disability studies. Studying relationships and its transformative impact can help in the understanding of how a sense of community and acceptance can be achieved for people with disabilities within society. It is through transformative relational experiences that people's attitudes and worldviews change, greater acceptance is engendered, and inclusion facilitated.

We also wanted to explore insider perspectives on how processes of personal transformation occur in living with persons with disabilities. More research evidence is needed to illuminate the processes of personal transformation and change that occur within communities of practice (Wells, 1999) that intentionally seek to include people with disabilities. Understanding the individual experiences of assistants can provide clearer insights into such processes, which, in turn, can be used to inform the perennial issue of how best to educate and support professionals who work with people with disabilities for better engagement in quality relationships with them.

Research methodology

Twelve assistant members of L'Arche communities in Australia participated in interviews for the study. These assistants were from the L'Arche communities in Hobart, Canberra, and Sydney. The duration of the interviews with each of the assistant took between one and two hours. The interviewed assistants were from both genders (six males and six females), varying ages, length of service, and cultural backgrounds (e. g., Australians, Indians, Germans and Americans). A semi-structured set of questions framed around personal experiences and reasons for living in L'Arche guided the interviews. The semi-structured nature of the questions allowed sufficient room for assistants to reveal and discuss emergent and potentially relevant concepts and ideas related to their own experiences living in L'Arche communities.

The questions basically enquired about the assistants' experiences of personally transforming relationships with persons with disabilities. The list of semi-structured questions is attached

to the appendix of this chapter. In interviewing and listening carefully to the narratives of the assistants, the intent was to understand particular experiences of change. According to the aims of the study, the research drew upon the methodological approaches of qualitative interviewing and participant observation. These two sources of data collection assisted in the triangulation of data through cross-checking obtained information. The analysis of interview data was performed as it was being collected. The interview data and the ensuing interpretations were also checked with the participants for accuracy and validity. Since the researcher (the second author) stayed in the L'Arche communities of the interviewed assistants, she was able to also participate and observe the daily lives of the assistants. Note taking of significant observations and insights by this researcher followed after these participant-observation periods.

With respect to data coding and analysis, we were concerned with employing a methodology which was sensitive and capable enough not only to capture the 'truth' but also to respect and empower the assistants who were interviewed. We used the following data coding and analysis methods and procedures.

The first method used to code the data was Bogdan and Biklen's (1992) emergent theme analysis. To build grounded theory from our data, the constant comparative method described by Glaser and Strauss (Glaser, 1992; Glaser & Strauss, 1967; Strauss & Corbin, 1990) was employed. This inductive approach codes incidents, comments and opinions in order to derive a set of themes and categories that classify the data. As in our previous study (Lim & Ullrich, 2003), we also utilized the principles of Voice-Centered Listening (Brown & Gilligan, 1992; Kiegelmann, 2000) for our analysis of data because of its strong emphasis on the research process as a relational process. This method, strongly shaped by concerns with the relationship between researcher and research participants, is particularly sensitive to the varied and subtle nuances in making sense of the world of relationships – with oneself, others, and the world.

According to Voice-Centered Listening, recognizing the differential impact of gender and paying attention to the roles that people play (which are influenced by gender and gender relations) is a central concern within research activities. Steeped in feminist concerns and awareness of the existence of power in relationships between individuals, researchers using Voice-Centered Listening are cautioned to be sensitive and careful about the issue of power in interview relationships. In fact, these feminist concerns have moved the field of qualitative research towards a greater commitment to speak out and act against any kind of oppression and social structures that promote or tolerate oppression, exploitation, and exclusion (Kiegelmann, 2000).

To facilitate the process of coding and analysing the data, AQUAD 6 was used. AQUAD 6 is a computer software designed

for analysis of verbal and non-verbal types of qualitative data, for example text, audio, and video (Fielding & Lee, 1998; G. Huber, 1992, 2004; G. L. Huber & Garcia, 1992; Kelle, 1995; Lissmann, 2001; Ragin, 1987; Tesch, 1990). In addition to elementary functions like managing code entries and retrieving coded text segments, this software also facilitates the process of making data reduction transparent as well as the process of discerning common themes or patterns in the data text by extracting and collating material relevant for a particular phenomenon or a certain aspect of a research project. Therefore, this software supports the theoretical approach of grounded theory (Glaser & Strauss, 1967); for example, the reconstruction of linkages in the data base.

The programme also incorporates methodological ideas for text analysis like Miles and Huberman's table or matrix analysis (Miles & Hubermann, 2000) as well as Ragin (1987)'s comparison of configurations. AQUAD is not only useful in assembling the data for each category, but also allows the drawing of conclusions by relating categories to each other; for example, by exploring the occurrence of typical and repeated configurations of category representations in the data. Another benefit in working with AQUAD consists of the possibility of systematically surveying the data to test hypotheses (Miles & Hubermann, 2000; Shelly & Sibert, 1992) in order to support a certain hypothesis; for example, the claim that particular combinations of statements (e.g., particular relational experience with a person with a disability, influence on personal vocation, spirituality, self-acceptance, or personal growth) appear in the transcripts in a systematically combined form.

In postulating causal relations, AQUAD, in particular, serves as an essential tool in applying the "Boolean method of qualitative comparison" by Ragin (1987). This qualitative comparative method integrates features of experimental and interpretational design by treating the existence of a certain "condition" in a set of data as a dichotomous categorical variable. Thus, AQUAD is a means of developing "conclusions that are based on as rigorous a verification process as possible" (p. 9), thereby increasing objectivity, reliability, and validity (Silverman, 1998).

Findings

The findings represent a discussion of 'voice-clusters' emerging from the data analysis. They indicate that people with and without disabilities can become more whole in their cognitive, affective, and spiritual capacities. Many assistants, including those interviewed for this study, as well as core members (the persons with disabilities who live in L'Arche communities), come to L'Arche wounded by personal losses, rejection, and pains of the

past and present. Many core members not only experience support from others within L'Arche to (re)claim their lives and dignity, but they have also offered support for assistants to do likewise. The following is a summary of the preliminary analysis of our data in terms of how assistants in our study have experienced personal transformation while living with persons with disabilities in L'Arche communities. These findings first describe assistants' reasons for joining L'Arche and then focus on their transformational experiences in living with persons with disabilities.

Reasons for Joining L'Arche

The assistants joined the L'Arche communities for a variety of reasons. An important point of attraction to many assistants is the emphasis on relationships in L'Arche. Many responses of the assistants to explain their commitment revealed their pervasive view of relationships as key to their own lives and as safeguards for the lives of people with disabilities.

Some assistants were led to L'Arche through their own loneliness in being different. They describe some sort of change in their lives that motivated them in their search for community that offers hope and encouragement. The insecurity that comes with change pushed them to discover something new, outside of the norm.

The spirituality of L'Arche was another important reason for why the individuals interviewed became assistants. The assistants stated that they were seeking to deepen their spiritual life and to understand their personal vocation. They are looking for a deeper meaning in life and an alternative to the extreme individualism in mainstream society. Often the assistants mentioned the need to share their ideas, difficulties, hopes and dreams. They expressed a need for guidance and discernment concerning the meaning of their lives. In addition, they said that they appreciated the emphasis on dialogue and reflection within L'Arche as important to their path to inner growth.

One assistant describes her initial motivation to join a L'Arche community after a year of travel as one of giving "a year of service." She said:

"My travels had reinforced for me that I'd really had a privileged life. Privileged in the sense that..., not in a sense that I came from a wealthy family or anything like that, but privileged in the sense that I had never gone to bed hungry. I've always had a roof over my head, I've had an education and I've lived in a society where as a woman I've had the freedom to choose my life. And I have seen enough in my travels to know that that made me in-

credibly privileged and so I felt that I could give a year of service in response to the fact that I was privileged."

This assistant also described how her motivation was based on a deeper and more radical understanding of the relationship between individual freedom and social equality. She remembers what she wrote in a letter to a friend before coming to L'Arche thirty-five years ago:

"I said, if we believe that all men are created equal, which is from the Declaration of Independence, then the touchstone of that belief is our readiness to put our lives alongside the lives of people who are treated as less than equal. So if I really believe that about equality, I have to be prepared to put my life next to people that are not treated equally."

Transforming Experiences

Living in community with persons with disabilities can awaken capacities for love, care, and compassion, but also implies the experience of vulnerability and woundedness, which can block the capacity for love and self-giving. Many of the assistants reported that this process of awakening to greater love and vulnerability led to more freedom in terms of a deeper acceptance of themselves, others, and God. We have coined the term "awakening" to describe three different aspects of transforming experiences that emerged in the interview data that were key to processes of personal transformation within the assistants.

Discovery of capacity to give and to receive love

The first awakening evident in the narratives of the assistants is the revelation of their own capacity to give and receive love. Adam, for example, reports about the friendship between Ben, a core member in a L'Arche home, and Helen, a young German assistant who came to live in the community for a year:

"There's a woman, Helen, who Ben was really close to. And I mean she was this 19 year old gothic woman, sort of really depressed, with her hair like this and she had such a poor opinion of herself, you know? But she and Ben just formed this amazing relationship there and they loved each other so much, it was extraordinary to see it. You know, this woman blossomed, just her grief when leaving, it was just amazing."

Powerful relational experiences like this and the capacity for genuine relationships with people with disability are frequently reported. Jeremy, another assistant, describes how important it was for him to be welcomed, supported, and celebrated for who he is. He says:

> "being accepted for who I was, that I wasn't perfect but that was ok and you know, people recognised that I was on a journey, too, that I hadn't yet reached the destination, but that was accepted. That was very important for me."

Once assistants discover that they are accepted and loved, they open up to others and learn to respect the mystery of their own uniqueness. When the question was put to Adam as to why L'Arche has been important to him, he replies:

> "I have never ever been so loved, so loved and so unconditionally and spontaneously and presently, you know like loved in the present as I am, you know? And that's extraordinary, 'cause it's a love that is so pure. They don't love me for what I do or whether I give them there tablets or cook them dinner. They're just really able just to be open to me."

In their relationships with persons with disabilities, the assistants experienced a shift in the sense of their identity and self-worth. It is a movement from an identity and self-worth grounded in cultural norms and expectations to a sense of deeper freedom and authenticity based on relationships with others who can accept them unconditionally. The assistants described that this validation of themselves through accepting relationships frees them to be more themselves and that this discovery leads to a deeper confidence and trust in themselves and others. A few of the assistants spoke of how they experienced that human personhood is not rooted in the ability to think, understand, judge, or act, but in the capacity for presence and communion with others. In remembering particular moments of mutuality in their relationships with people with disabilities, John, an assistant, says the following about Eric (a core member):

> "I lived a break-up of a relationship last year and just to be able to sit with him (Eric) and just to cry and you know, for him to be able to comfort me and to be able to really go to him and talk to him about that. He can't understand the words, but he understood the feelings."

Another assistant, Carol, speaks about Anne (a core member) and her "real gift to be in tune with people emotionally." She says:

"she can't always verbalize it really clearly like you and I would maybe say, 'hey, you're looking down, is everything ok?'. She senses it and she just has a way of, you know, coming up, giving you a hug. And she would say something like, 'it's gonna be ok, you know?' - 'It'll be alright' is the words she uses. You know, she really has sensed that something has bothered you even though you haven't said it. About a year ago I was having a particularly hard time, was particularly stressed and ... I sort of came ... to the table, rushed and you know, all horrible, and she immediately got up from the table and she came around and she poured my glass of water for me and she went, 'oh, you haven't got a napkin' and she went and got a napkin. She was really caring for me, and she said 'it's gonna be alright'."

In a world where it is common to find people building walls or defences to protect themselves and their vulnerability, and seek to prove their worth to others often through personal effort and successes, shared experiences of mutuality and vulnerability reveal our common humanity. The assistants surmised that within L'Arche it is not important who you know or what you know but who you are. They also described that the mutual sense of shared humanity and vulnerability with others within their communities deepens relationships, and these relationships of mutual trust permit growth in inner peace and freedom.

The following experience, as recalled by an assistant, illustrates an "awakening" moment of trusting a person with a disability (in this situation, a person with down syndrome and hearing impairment) during a swimming and canoeing activity.

"And before you can go in a canoe, you have to know what to do when you fall out of the canoe. So we were in the swimming pool and I was towing him across the water, sort of how I would rescue him when he fell out of the canoe. Then the instructor said, "change places!" And I thought -, I knew he could swim, but I thought, ok, I'm going to help him save me. So I made these gestures to say we were now going to change places. And he looked at me and he made a sign, just with quite an authority, that just kind of said, turn around. And so I turned around and he put his hand under my chin like this and started to pull me back into the water and just with such confidence. .. So I had this experience of being towed across the swimming-pool by this man with down syndrome who couldn't hear, who didn't speak and it was like -, when we fall out of the canoe, I can put my life into his hands! That was a profound moment for me. He knew what to do."

This story about the capacity of a man with a disability to awaken trust, respect, and mutuality in a relationship that could otherwise be an asymmetrical one, highlights an experience of personal change through mutual and trusting relationships with people with disabilities.

Discovery of common humanity

A second awakening occurs in the confrontation with the darker and shadowy sides of self (e.g., anger, impatience, jealousy and fatigue) and with deeper sources of anguish within the self. To discover our common humanity implies also to look at our darker sides in ourselves, the brokenness in our own hearts and in our culture. The power of the 'cry' of a person with a disability can awaken capacities of tenderness and compassion as well as inner pain and even violence. While living with persons with disabilities, their inappropriate and/or violent behavior and pain can reflect our own experiences of pain and rejection from the past. Joseph, an assistant, relates the following story about Jack, a person with a disability, whom he has lived with for thirteen months:

> "Jack was being violent to me. He was swearing and shouting at me and hitting me. And I felt humiliated and that humiliation uh, reminded me of when I was a child and the problems I had with my father. And it was a big problem. Bill had become like my father and I felt uh -, humiliated, weak and very angry. .. And uh, – (in a lower voice) how did I get over it? (Laughs.) I don't know how I got through it, but it was a very tough period, yeah."

When reflecting on his relationship with Lilian, another core-member, Joseph states:

> "She sort of challenges you: Do you love me? I'm gonna do something to really annoy you, can you still love me or are you gonna shout at me, and are you gonna make me feel terrible? She can make you very angry, ... it's because ... she has had bad experiences with people in the past, she wants to know, are you, can you, are you going to be bad to me or do you love me, you know? And for her -, if I respond badly, if I don't think of her and if I just shout at her or something, then that makes her more upset. .. So it's like punishing her and you don't wanna do that, so if you love her then you don't -, I, I know, that if I love her I shouldn't do that, I'm not going to shout at her or get angry because then she will just feel upset and start crying ..., and she pushes me to see if I can -, if I care about her, then I can step back."

Both these experiences set forth a process of transformation on the part of the assistant involved. The capacity "to step back" requires facing the resistance within the self that prevents the human person from growing in sensitivity and compassion. This movement of awakening to one's own inner darkness seems to be a necessary experience on the journey towards personal growth and maturity.

Discovery of one's own limitations

The emphasis on mutuality, forgiveness, and acceptance of persons with disabilities ultimately mediates an experience of peace and self-acceptance on the part of the assistants. In accepting others, many of the assistants described being accepted and accepting themselves more, and becoming transformed in the process. Our data also revealed that the assistants experienced personal transformation most when they acknowledged a deeper acceptance of their own limitations and weaknesses. This experience of personal acceptance of limitations gave the assistants the awareness and courage to go through personal pain and struggle with the support of others, and to take responsibility for their own lives and their vocation. This "awakening" allowed them to discover who they really are.

A crucial consequence of such transformative experiences is often gaining the freedom to forgive. When assistants experience their limitations and "express their not-so-good side" as described by one of the interviewed assistants, it is often the capacity of a person with a disability (a core member) to forgive that brings them back on the path to affirming the powerful lesson of forgiveness:

"you know, sometimes we get angry with each other and, there are misunderstandings and having to forgive each other can be difficult also, you know, when you think, I'm right! (Laughs.) Yeah, but the way of reconciliation is such a healing experience. And to see that after a few days or after a few -, an hour or so an incident is forgotten and that's nice. Sometimes I want to hold a grudge, sometimes I want to remain angry but the people with disabilities don't want to remain angry, you know, that's -, they bring me back, ja, hmm."

Jonathan, an assistant, also describes how he has learned about forgiveness from a core member in his community:

"You know, in my role as community leader there are also times when I have to talk to Alan about things that are not so good. You know, occasionally, sometimes I have to say things that are difficult and he's upset by some

things that I have to -, that I say, but the next day we are
friends again and we start again. And I've seen the way
he forgives people, you know, that he has a huge, kind of
a HUGE argument with somebody and then at prayer or
at the breakfast table, he can come to that person and
give them a kiss and say, I'm sorry, you know, I'm sorry.
That's -, I know that that's helped me to say sorry to my
children when I've been grumpy and short-tempered and
when I reacted in a bad way. And it's a model, I think it's
a model to me of how to love and how to say sorry."

Discussion

The narratives of the assistants of their personal growth and
transformation are a powerful testimony to the value of being in
relationship with people who are often under-valued by society –
in this case, people with disabilities. Not only did our findings in-
crease our understanding of how acceptance, change, and
inclusion can take place at the intra- and interpersonal levels of
individuals, they also offer realistic scenarios of what happens in
L'Arche for people interested in intentional ways of living in
relationships with people with disabilities and building
community. In addition, our findings highlight different aspects
of how personal transformation can occur in the context of being
in relationship with persons with disabilities within L'Arche where
spiritual/religious development is an explicit and significant
component of personal and community growth.

Transformation has become a catch phrase that seeks to
describe the dynamics of personal and social change in a variety of
different contexts. In the context of this study where spiri-
tual/religious development is part of L'Arche's values, the term
'personal transformation' is synonymous with the terms 'personal
change', 'inner growth' and also denotes religious conversion. In
the context of practical theological discourse, human trans-
formation in faith has traditionally been referred to as "con-
version" (W. Conn, 1986; Gillespie, 1979; Helminiak, 1987).
This term has been employed to distinguish between processes of
development involving cognitive operations of meaning-making in
faith and processes of transformation in imagination, feeling,
valuation and will (Fowler, 1991). In particular, Fowler offers
important insights into the nature of conversion and its relation-
ship to development in terms of a theology of vocation (Fowler,
1996). Fowler's account of the dynamics of conversion raises
important questions concerning the relationship between healing
(Linn, 1985, 1994) and conversion of the self (Fiand, 1999).
Secondly, it raises the question of how 'faithful change' (Fowler,
1996) is mediated through relationships with persons with a
disability within L'Arche communities. Our study aimed at a

deeper understanding of this connection between personal change and being in relationship with people with disabilities that can be likened to a conversion experience which results in the transformation of self through "awakening" moments and experiences.

To fully understand personal transformation within community and relationships, it is important to embrace a holistic model of transformation that includes all the dimensions of the psychological, affective, cognitive, as well as the spiritual, all of which are mediated through relationships with others. However, not all models of transformation include the spiritual. For example, James Loder's work on "transformational logic" (Loder, 1980, 1989) illuminates some of the core dynamics of affective conversion. In his account of the movement from negation to love, a relational matrix of this transformation is assumed, but it lacks a precise description of the mediation of this experience through relationships with others in community (Tropman, 2002).

In another model of transformation, Cranton (1996) combines the notion of individual responsibility with the desire to challenge one's own views, to question oneself, and to seek new perspectives in an effort to facilitate change. According to this author, transformational learning occurs when underlying beliefs, expectations and assumptions are critically revised. This approach refers only to the social and cognitive dimensions of transformation without sufficient exploration of the psychological, emotional, and spiritual dimensions. In these approaches to understanding transformation, what remains unclear is how community and relationships influence processes of personal transformation.

Living in L'Arche communities, as highlighted in this study, illustrates that transformative experiences and personal growth can occur within individuals who choose to be in relationships with persons with disabilities. The emphases within L'Arche on the value of people with disabilities, the importance of relationships, a sense of community, and a strong link between spirituality and personal growth, have been affirmed through our previous study (Lim & Ullrich, 2003). These emphases or features of L'Arche reveal a context for personal and community change that encompasses a holistic model of transformation that includes the various dimensions of being human: the psychological, cognitive, affective, physical, and the spiritual.

This study on assistants' perspectives and experiences on personal transformation and change within L'Arche further corroborates our previous study in suggesting that a model of personal transformation is implicit within L'Arche that has strong implications for the development and training of professionals who work with persons with disabilities or those who are in positions that manage services for persons with disabilities. Relating to persons with disabilities or to professionals who work with

persons with disabilities is, in essence, about affirming and understanding people and helping them to grow towards greater self-acceptance, acceptance of others, and inner freedom, within the context of mutual and caring relationships. This requires listening to and communicating with each other, staying open and vulnerable to each other as well as sometimes entering into conflicts. In L'Arche, assistants are called to live gently and responsibly, and are encouraged to have confidence in themselves, in the meaning of their lives, and their capacity for love.

Conclusion

L'Arche communities are places where the inclusion of people with disabilities becomes a reality because they are "both physically within our communities and psychologically within our worldviews" (Swinton, 2001, p. 44). he strong idealism and values inherent in the philosophy of L'Arche appear to be countercultural to the wider society. Nevertheless, L'Arche communities can serve as a model of how personal and social change can be initiated, of how to create inclusive communities in society, and how to envision a different society that is welcoming of people with disabilities.

Appendix

I would like to understand how a person changes through living with persons with a disability.
1. Could you introduce yourself shortly, like what your name is, how old you are, what you did before you came to L'Arche, for how long you have been living here and for how long you intend to continue..?
2. How did you first find out about L'Arche and what attracted you?
3. Can you think of significant experiences in your life that paved the way for your interest in L'Arche?
4. Is there a person in your home you feel especially connected with? Somebody who really touches your heart?
5.   If you think of her/ him, how is it to live with this person?
6. What attitude or quality is it that you appreciate most in that person?
7. What effect has that on you?
8. What about the other members in the house? Is there something you learn from them?
9. Can you remember a particular experience within L'Arche where you would have observed an affective or spiritual change within yourself?

10. Is there a connection between the experience of vulnerability and the experience of mutuality?
11. Can you think of challenging experiences in L'Arche?
12. What meaning does your experience in L'Arche have for your (spiritual) life?
13. Do you think that your perspective on life has changed or your values and plans, your attitudes, your spirituality?
14. How does living in community and transformation relate to you in L'Arche?
15. Is there something you would like to add in talking about personal transformation through living with persons with disabilities in L'Arche?

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Collaboration in Computer Assisted Qualitative Research

Gunârs Strods, Liesma Ose, Tamâra Skoromka, and
Irîna Maslo

Abstract

In this article, the authors analyze one of the innovative projects in Latvian education, presenting a research project on the efficiency of the Open School Project of the Soros Foundation Latvia (SFL). Monitoring instruments for a micro level analysis were created by a group of doctoral students, including the authors of this paper. This research reflects upon the process of creation of a methodology for an educational reform project evaluation. It is completed by the researchers' teamwork in computer assisted qualitative data analysis. The project evaluates aspects of the students' socio-cultural experience, classroom organization and the students' socio-cultural learning context. The influence of formal and in-formal learning environment to the students' socio-cultural experience is also examined.

There was a holistic view developed on the monitoring elaboration resulted in a systemic objectives and planned results to offer the set of research instruments and data samples for complete evaluation of the efficiency of the project of Open School progress with the emphasis on socio-cultural experience expanding of students.

Introduction

The beginning of the 21st century is marked with a new paradigm in pedagogical research – to traditional quantitative research methods we can add an increasing number of qualitative possibilities. Research projects done by doctoral students of Institute of Pedagogy and Psychology of the University of Latvia (IPPUL) are full of different qualitative methods: questionnaires, interviews, video – recordings and their transcripts; coding systems. In 2001, several doctoral students and their professors within the social pedagogic research group at IPPUL decided to use a collaborative data collection process. Thus from 2001 on several doctoral students worked together to elaborate a single large scale of mixed methods data bank for use in their individual doctoral theses. Bachelor and master students participated in this project as well. The main objective was to initiate a longitudinal research project to observe the dynamics of socio–cultural learning. According to a voluntary participation principle, teachers from 14 schools took part in this research. Among them

were both those who work in monolingual and those who work in bilingual environments.

In the framework of the project we elaborated several variables of metacodes and then proceeded to a detailed coding system for qualitative data analysis.

The idea of researching of students' socio-cultural learning experience in SFL's Open School' project was kindly supported by the grant organization Soros foundation Latvia. All educational stakeholders involved – teachers, school administrators, Ministry of Education and Science (MoES) officials- were interested in taking part in this research, appreciating both the significance and deepness of computer assisted qualitative data analysis. The research presented here helped spark widespread discussion in Latvian society about teachers' instruction styles and teaching models, students' active involvement in the study process expanding their experience of learning, collaboration, and communication. The project was successfully carried out with kind and appreciated support from Tübingen University; we are especially thankful for the great support we received from professor G. L. Huber, who, with great care and skill, led workshops on computer assisted data analysis for our doctoral students. This two – day long workshop was a cornerstone for a new collaboration period in research methodology that was started last summer. In this paper we are eager to share our experience gained in this collaboration project.

SFL "Open School" project research as a part of national level monitoring of minority schools and longitudinal qualitative research project

The creation of a national educational monitoring system offers the possibility for cooperation among the state, local governments, and schools in the implementation of educational reforms. The process of monitoring includes: leadership; management; supervision, control, observation, documentation, analysis of process dynamics etc. We can split it into three levels: macro – level (State and local politics), mezzo – level (educational institutions – schools, educational NGOs); micro – level (class, group) and individual level (student and teacher as individuals). We do this in order to obtain new research instruments and methods, which will turn the planned monitoring into reality.

The subjects of the project are the following: 3rd class students, their parents, and teachers from the schools that participated in the "Open School" project. Also, teachers, students, and parents from schools not involved with the "Open School" form a control group. Each respondent was given information about the objectives of the project, deciding individually whether to participate, and signing consent forms. Parents gave consent for their children in the research.

The Main task of the research was to offer a set of research instruments and data samples for a complete evaluation of the

project. The following objectives were designed to reach this goal:

1. To pilot the questionnaire towards a more standardized set of questions and standardize the analysis by providing detailed instructions about how it was or should be done.
2. To define criteria for lesson analysis and indicators for lesson analysis in the framework of the pilot project, as well as to create lesson observation checklists and checklists for analysis according to monitoring

In order to identify socio-cultural learning experience, we collected both quantitative (questionnaires) and qualitative (video-transcriptions) data. There were several phases involved in data gathering and evaluation:

1. Questionnaire development and field -testing.
2. Videotaping of teaching/learning processes in the classrooms.
3. Identification of the socio-cultural background of the students and parents through analysis of the questionnaire and the transcripts of the videotapes.
4. Interviews with the selected teachers, students, and parents as well as coding of interviews.
5. Analysis of codified data using the program AQUAD 5 and interpretation of the results.

Quantitative data are obtained through the questionnaires. Respondents are the teachers who are working in selected classroom, as well as students' parents and students. Parents were supposed to fulfill the students' questionnaire. A professional re-searcher, who fulfils this instrumentation according to the respon-dents' replies in order to obtain realistic data, provides questioning. After piloting the questionnaire with a group of teachers, we threw out or changed questions that were unclear due to the teachers' difficulties with Latvian language. Such pro-cedure gives researcher a possibility to make notes and supportive observations from the first moment of contact with a respondent.

The purpose of the quantitative research was to identify the socio-demographic data, material conditions, family situation, variety of schools (Latvian, Russian, another minority, two – streams [Latvian – Russian]); with different models of bilingual teaching, urban, and rural schools) of the students.

After analyzing questionnaire data from a selected third class in 8 "Open School" project schools and 8 control schools, we selected a theoretical sample of students with varying socio-cultural learning experiences for specific interviews. The inter-views focused on specifics of socio-cultural experience acquisition during formal and non-formal learning.

Qualitative data (interviews, transcripts of lessons) was obtained from all the teachers included in the teaching process of each class, as well as from students' parents (Held 2000). The purpose of the qualitative data was to identify differences among socio-cultural learning experiences of children who have the same age, but different socio-demographic characteristics, different schools, and different socio-cultural backgrounds. Thus we can identify the significance of formal and non–formal learning conditions.

Steps in the research process

The main idea of researchers was to involve as many schools as possible, in order to accentuate regional variation. Thanks to the support from schools' faculty, we found several binary oppositions to obtain more valid results: for instance, Riga and regional schools, city and countryside schools, "Open School" senior and junior schools (under the year of involvement into the project – 1999 or 2000); Latvian or Russian schools; schools with different bilingual education models, mono- and bilingual schools and mono- and bilingual classes. As a result, 16 schools participated in the research. The main success was the ensured feedback from schools because the schools' staffs were interested and active participants in the research process.

The first step of the research included an investigation of the socio-cultural context of students and teachers – general questionnaires were used for both target groups. This was planned to obtain information on language skills and use, family settlement and material conditions (living in a countryside house, private ownership in a town, apartment? Does the family own a new TV set, video camera, mobile phone, and/or computer with/or without Internet connection?); place of settlement (How long has each been in his/her current place – since birth?); learning world and interests (friends, media, favorite movies, computer games etc.). There were some cases of misunderstandings; some students signed two places of settlement instead of one. We concluded the changes in language use because some students have mentioned two and more languages of use. After collaboration with sociologists from Baltic Institute of Social Science (BISS), we designed a new questionnaire, which also included new tendencies: growing mobility, globalization and integration. In the same time questions were elaborated for the closing period of the research meant for detailed evaluation of learning biographies data, teaching/learning processes and non-formal learning experiences.

The second step was carried out together with participants from schools – teachers, parents, and students from 3rd class. As a result, video-recording of lessons in 14 schools were carried out, concurrent with the interviewing and questionnaire distribution.

Data obtained was analyzed and selected for qualitative research. The process was finished with school portraits.

The third step was characterized by data analysis to elaborate the interaction between students' socio-cultural learning experience and instruction models of teachers.

During the fourth period we are planning:

1. To do partially - open interview based on an analysis of data obtained before;
2. To carry out narrative interviews to identify of socio - cultural learning experience sources and components of teachers, parents, and children.

During the entire research procedure, only one acceptable researcher - respondent relation was identified: the *subject - subject* relation. This was because of specifics of qualitative research procedure, which researchers are supposedly interested in, and in-depth dedication to problem solving. It took hard preparatory work: first of all, in selecting the interviewers, we looked for qualities like tolerance, open - mindedness towards the respondents' feelings, and a willingness to answer all the respondent's questions. Those who interviewed teachers, for example, had to have experience working in schools in order to understand the context of teachers' work. Interviewers of children had to be experienced in dealing with children's world, including the world of socio-cultural learning. For the purpose of parents' interviews, researchers having children of approximately the same age and family situation were selected.

Obtaining quantitative and qualitative data in the context of socio-culture

This research method required simultaneous use of quantitative and qualitative methods of investigation. The questions of the inquiry on social demographic information have been designed in correspondence with qualitative research and the conclusions that have been drawn from observations and interviews. Part of the inquiry questions are intended to be fully answered in the interviews. The research aims at obtaining information about knowledge and use of languages, material provision, and interests and concepts of getting familiar with social culture. Therefore the research questions have been obtained with help from a variety of sources, including standardized questions designed by "Baltic Data House," and questions that have been approved due to being used in interviews and pilot testing.

Particular students are carefully chosen for the interviews in correspondence with the information that has been extracted from research information such as inquiries and video recordings

of the school classes. Interview data can provide a more compre-
hensive, thorough interpretation of the information that has been
previously obtained from inquiries and transcriptions.

Interviews were additionally used in preparing and improving
content and formulation of the questions that would appear in the
interviews. Moreover, the first inquiries were made within a pre-
pared, identifiable group of respondents. Therefore the inquiry in
the period of its pilot testing can be referred to as both qualitative
and quantitative research method.

The whole research has gradually increased awareness of the
relativity of separation between quantitative and qualitative
research methods. Due to this fact, even though the main em-
phasis is being made on the process of obtaining quantitative data,
qualitative research methods will be examined as well.

The questions included in the questionnaires and interviews
of teachers, parents and students are similar in order to enable a
deeper analysis and comparison between the three groups:

*The first questions of the inquiry focus on the region where the
school is located.* These questions are vital in recognizing the
school attended by the student and specifying the location of the
school (establishment, rate of inhabitancy). These details are
crucial to enable drawing comparisons with results of similar
inquiries abroad. In addition, these questions contribute to the
possibility of comparing different regions of Latvia and more
detailed research on the specific socio-cultural experience in these
regions.

The questions intended to define characteristics of socio-
cultural situation are grouped in the following categories:
1. Education and occupation;
2. Place of residence;
3. Material provision;
4. Knowledge and use of languages;
5. Use of the sources of information available;
6. Personal interests.

The next group of questions consists of questions on education and
is intended to find out details about the education process of
teachers, parents and students – which schools they have attended
previously, and the type and location of the previous schools.

The main aim of these questions is to ascertain the social
group that the student belongs to, the previously obtained
experience, and the socio-cultural group that the student belongs
to.

*Another research question focusing on the schools previously
attended by the respondent* (if it is one or several schools, or
several schools at the same time – for example, a simultaneous
education at elementary and music school) is included in order to

obtain information on the specific conditions of acquiring socio-cultural identity. Teachers, on the other hand, are asked about their attendance at further education courses and workshops, which is a crucial question to find out what specific types of further education teachers prefer and the main sources of providing this education (state institutions, schools, particular projects). Another important purpose of this question is to become familiar with the materials and strategies that teachers are most eager to utilize in the classrooms.

Finally, the parents of the students are questioned about how preparation for school is being carried out both in preschool educational institutions and in families. An important factor for the research is the differences in the preparation process resulting from whether the parents aim to send their children to bilingual classes, to classes with Russian as the language of instruction, to have them learn a second language from a babysitter, or to teach them two or more languages within the family.

The purpose of the questions concerning parents' education and occupation is to identify vital differences in their socio-economic status.

The questions connected to the place of residence help the researchers know whether each respondent resides in urban or rural areas, and the time periods that the resident has spent in various places of residence. Another detail covered by these questions is the specific living conditions of the respondent- whether he/she resides in a private house (in an urban area or the countryside), or apartment; that the resident lives with.

The surrounding environment, both cultural and social, contributes to creating a special learning environment and influence socio-cultural experience and competence. Additional experience is obtained from the people that the respondent lives with, which is why it is important to know with whom the respondent shares living quarters. Teachers and parents are additionally asked about their family state – whether they are married (if so, if it is their first marriage), divorced, widowed, living in a civil marriage or single.

Questions about the respondent's material provision aim at obtaining information on these details:
- Income per family member;
- If the family owns a TV set purchased in the last 5 years, a video camera, a car purchased in the last 5 years, a telephone, mobile telephone, a summer house, a computer (with/ without internet connection).

These questions are useful in identifying interconnections between material provision and possibilities to access information. During the trial period of the inquiry, these questions were the

ones causing most problems- they were either unanswered, or the replies given did not correspond to the real material conditions of the respondent.

Questions on language skills and usage covered these details:
- The first language of the respondent;
- The first languages of respondent's parents;
- Languages used to communicate with relatives, friends, strangers;
- Respondent's self-evaluation of ability to communicate and perceive information in foreign languages.

The main priority of these questions is to determine links between the language used to communicate within the family and at school, and a student's socio-linguistic competence.   These questions are covered more in-depth as the interview proceeds using the patterns and guidelines set for these purposes (Saville-Troike, 1978).

Questions concerning usage of different sources of information:
- Which particular sources of information are used and how often;
- The language used in the sources;
- Personal hobbies – currently and at school time;
- Current important events in the world, Latvia and personal life.

These questions are useful in specifying the respondent's socio-cultural background, which has a notable influence on socio-cultural learning experience. Questions on hobbies help to obtain information on socio-cultural learning, showing the significance of informal learning. A more detailed emphasis on these questions is being made at the interview.

A question item regarding respondent's sex and date of birth enables the researchers to analyze differences in socio-cultural learning influenced by age and gender.

The summary of the results of the survey shows the most widespread and common types of students: judging from if the student improves his knowledge solely at school, learns both in school and outside it, or has studied abroad. The classes that have been videotaped will enable to distinguish between the different activity levels of these student types.

Secondly, the inquiry results and taped lessons will give a chance to identify the most widespread types of teachers and interconnections between their teaching strategies and socio-cultural experience.

The taped interviews are coded and processed with the program AQUAD 5 (Huber 1997). It is vital to choose the right codes in this stage of the research in order to enable to summarize the information obtained from the survey, video monitoring and

interviews. This also makes it possible to compare the statistics with ones obtained in other countries.

In addition, comparisons can be made between different regions of Latvia and the specific models of socio-cultural experience characteristic to these areas.

Establishing a coding system for the qualitative analysis of transcription of classes

Choosing the right codes was vital for the research in order to be able to effectively summarize the information gained on existing interconnections from the survey, video monitoring, observations, and interviews. There were three stages in the process of molding an appropriate system of codes:

- Code system for particular schools and grades;
- Specifying between categories "teacher" and "student;"
- Selection of criteria for the processes of teachers' socio-cultural learning, which became the basis for establishing the system of meta-codes.

We have decided to refrain from observations and divisions of teachers' working styles and standards (authoritative, liberal, democratic). Still, there was a different classification of those styles that we found useful in determining students' opportunities in sociocultural learning. This was the division between auto-cratic and socially integrating teaching models according to the specifics of socially integrating teaching defined by Tausch and Tausch (1968).

Of course, this constitutes a very traditional view on teaching styles with clearly defined borders between opposite styles. However, each teacher has both positive and negative characteristics, and a strict division like this one therefore does not give enough merits for the teachers to ensure a possibility to evaluate their teaching style's contributions to students' socio-cultural learning experience, and we supported this statement in our research. We used the second approach to modeling teachers' actions, based on the symbolic-interaction theory.

At the same time, special attention is being paid to primary socio-cultural experience that has been available to students from their first interactions. As we discussed earlier, the partners in these first interactions are relatives- parents, grandparents, siblings, etc., and we have decided to take this into account when investigating the structure and characteristics of interactions between teachers and students.

An exploration of these interaction structures can not give definite answers to questions like whether the teacher supports or hinders students' development, because this modeling is also

rooted upon sets of binaries that are not so marked (black or white) in real life situations. Yet, it is very vital for obtaining observations of socio-cultural learning experience. We can see the connection between the interaction structures/methods and socio-cultural learning in the work of interaction groups contrasted to frontal teaching groups which are more widespread in classes in Latvia.

Putting aside the behavioral perspective common to the 70ies theories of interconnection and interaction between students and teachers in learning and teaching processes, we have chosen the 90ies view instead. This approach explores learning as interaction, emphasizing its essential communicative aspect, as we described earlier. In the framework of this approach focusing on the democratic school establishment, there are specific indicators (Bönsch, 1991) to measure efficiency of the teacher's work.

It is obvious that only teacher's work that is tended to ensure communication and dialogue will contribute to creating positive children's socio-cultural learning experience, letting them build and show themselves as unique personalities and attain success in many different ways. Thus it is scientifically proven that only teacher work models that tend to encourage communication will contribute to a positive socio-cultural learning experience for the students.

An examination of pre-existing models of student and teacher actions that outline criteria and indicators of teachers' activities at the end of 20th century and reflect the status of research and discussions have made us understand that universal criteria and indicators do not exist and each country has to modify them according to its existing and predicted future situation.

During the process of development of the code system, the following meta-codes for a theoretically grounded assessment of the current situation grounded in theoretical judgments were created (fig. 1):

```
                        ┌─────────────────┐
                        │  Code of school │
                        └─────────────────┘
                          Defines type of school
              ┌──────────┐                    ┌──────────┐
              │ Teacher  │                    │ Student  │
              └──────────┘                    └──────────┘
```

Codes refering to the teacher	Common codes	Codes refering to the student
Teacher's activity	Verbal language	Indicators of student's desirable activity
Indicators of teacher's desirable activity	Non-verbal language	Student's social (collaborative) processes
	Study materials	Student's emotional processes
	Interaction	Student's intellectual processes
	Socio-cultural experience	
	Media	

Fig. 1: Code system for the analysis of qualitative data of the project "Open School"

For example:

> *"Teacher's activity" has the following descriptive criteria: a teacher's abilities to prepare appropriate work and study materials, information sheets, to divide study content in units (themes, in collaboration with students, to consult and help students individually and in small groups; in contrast to the tendency to place himself above? the course of study process and direct students with the help of questions and instructions, to dominate explanations of content.*

As the development of video transcripts is a lab our and time-consuming process, we agreed on a common approach to that job that would decrease the time necessary for the development and coding of each transcript. While observing the recording, we paid attention to the spoken text, non-verbal be-

havior and socio-cultural context of the situation and reflected it in the transcript.

While transcribing, we indicated the speaker, person or persons that were addressed, spoken language, pauses in the speech, volume of the speech, posture of the speaker (sits, stands, leans on something, holds on something, uses some objects etc.).

While describing the situation in a classroom, we indicated the number of students in the classroom. After we finished a transcription, we counted how many students were actively involved in the lesson – contacts with the teacher, contacts with other students, and chances to express opinions or otherwise demonstrate involvement. Short, concentrated description of the classroom was given. Other factors that would not be clear from the text (for example, movement of the teacher and students, non-verbal expressions of the teacher and students, noise in the classroom) were commented upon.

To analyze processes that proceed in the classroom we discuss examples of situations and activities that characterize the correspondence of ongoing processes to the specific models of teaching activities, and their codes. Codes are recorded after a particular section at the end of the previous line and at the end of the section. For example:

> *"Teacher's activities"*
> *Examples of situations that may characterize teacher's activities:*
> * *Teacher prepares appropriate working and study materials, info sheets*
> * *In collaboration with students divides study content in study units (themes)*
> * *Consults and assists separate small groups or students and is available to them when needed, also for private talks*
> * *Teacher "conducts" and directs all students with the help of questions and instructions and determines the direction of studies*
>
> *"Socio-cultural experience"*
> * *Transfer of socio-cultural experience and information from teacher to student*
> * *Transfer of socio-cultural experience and information from student to student*

Frequently we encountered situation when several codes were applicable to the same part of the transcript. In such cases we use all appropriate codes – as in a case of the given example.

Qualitative analysis of collected data, elaboration of the research instrument and its piloting for the assessment of the current and the future situation as main results of research

Project activities with the support from SFL resulted in the analysis and assessment of the ways in which students,' parents' and teachers' socio-demographical situation influences the socio-cultural context of students' learning; documentation and qualitative analysis of one school day of 9 year old students; qualitative analysis of collected data and development of socio-cultural learning biographies of teachers and student's classes that were included in the study and description of correlative structures for the exchange of school experience, allowing us to:
- Recognize the situation of schools in Latvia;
- Ascertain models of instructional activities of the teachers and correlations of the development of student's socio-cultural learning experience;
- Develop research methods to analyze student's socio-cultural learning experience;
- Develop methods of teachers' activities self-evaluation.

Data that were collected during the project were interpreted under the aspect of development of socio-cultural learning experience in three research stages:
- Surveys of students, parents and teachers;
- Review of the material that was transcribed from the video-recording;
- Data coding for the software package for qualitative data analysis.

The following longitudinal research methodology and instruments for the research of 3rd grade student's learning experience for the needs of the project "Open School" were developed within the framework of the project:
- Standardized questionnaires for measurement of the socio-cultural context of students, parents and teachers;
- Printout of the data-base as well as data disk with data input instruction;
- Students' and teachers' socio-cultural learning biographies for every school involved in the study, based on the analysis of collected data;
- Lesson observation sheets with observation indicators and examples of lesson transcripts (keywords);
- Interviews for adjustment of survey and observation data;
- Coded transcript of lesson as example of self-analysis of school's positive experience.

Within the framework of the research commissioned by SFL and MoES, we developed and tested a methodology for self-evaluating quality management of primary education in Minority schools, allowing schools to perform self-evaluation with a common

methodology so that data would be comparable across regionally, nationally, and internationally.

Monitoring of this project was conducted, and research showed that teachers and directors as well as structures of MoES are interested in its full implementation. It should be admitted that creation and testing of this self-evaluation was possible only with the financial support of the SFL project "Open School." To address current limitations in funding and researchers, and as a way to give current students significant research experience, we propose involving education students at bachelor's, master's, and doctoral levels in the development of Latvia's educational monitoring system. At a workshop of Latvian and EU monitoring experts, arranged by the Integration division of the MoES, experts confirmed our belief that the instruments developed during our project may allow us to conduct studies comparing the Latvian system of education with those of other European countries. We are aware that we have made just a small first step in 15 – 16 year long research process to keep track of the personal development of 9-year old children at least until the end of high school.

Nonetheless, we believe that we are making an important contribution to the future of this first step of the collected data with the help of interviews with the children, their parents and teachers that we didn't manage to conduct in time due to objective and subjective causes.

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The Importance of Emotion and Rhythm for Learning

Hannu Soini and Mark Flynn

Introduction

In this presentation the authors propose that the critical incident technique offers a promising means of studying learning from the perspective of students, particularly in higher education (Soini, 1999; 2001). The potential contribution of the critical incident technique is significant because it can illuminate the authentic aspects of students' personal learning experiences. Authentic learning experiences are defined as the concrete personal experiences of students as described by themselves, independent of the abstract theoretical presuppositions of researchers. The second aim of our presentation is to consider how these authentic descriptions of personal learning experiences might be consistent with Whitehead's (1942) concept of the rhythm of mental growth. Whitehead has pointed out that, what is learned should be grounded in the experience and involvement of the learner. Moreover, there is a rhythm in the learning process where the learner freely contemplates experience, disciplines their thinking, and then freely and creatively applies what has been learned. In Whitehead's view, failing to heed the importance of personal experience and the rhythm of learning leads to an education that is lifeless, that is, ideas are inert and knowledge remains dead for many students (Flynn, 2000; 2002)

One problem for a more comprehensive study of the concrete experience of human learning is the design of interpretive-hermeneutic methodologies. Carefully designed interpretive-hermeneutic methodologies seek to illuminate more and more personal and concrete explanations of human experience as a means of revitalizing theoretical psychology. The creative search for new methodological designs in the study of human learning has, of course, already begun. Interpretive-hermeneutic – subject-oriented – methodologies are predisposed to the illumination of the 'subjectivity' of an experience. In the case of learning, these methodologies seek to illuminate subtleties of personal learning experiences, that is, what are the feeling and meaning aspects of such experiences according to the individual who is experiencing them. The "critical incident" method offers us a clear example of a subject-oriented methodology (Flanagan, 1954). A *critical incident*, according to Flanagan, is a situation where some activity is sufficiently complete in itself to permit predictions to be made about the aesthetic experience, thoughts, and actions of the individual involved. It is an incident where the purpose or intent of the research participants experience seems clear to the observer. Brookfield (1994,1991) defines critical incidents as the parti-

cipants' brief descriptions of significant events in their lives. He applied the critical incident method in helping students consider what they really meant when they spoke of their own learning. Rather than asking students to provide a general and abstract definition of learning, he asked them to describe, concretely, a particular learning event from their past. The use of personal learning incidents from the students' own lives revealed essential insights into how they felt and thought about the experience. Insights like these are fodder for an evolving interpretation of the concrete experience of human learning.

In recent years, the usefulness of what Woods (1993) refers to as *critical events* for the understanding of human learning has become evident for many researchers. Woods (1993) has reported several benefits that the study of critical events possess for the understanding of the nature of student learning. First, critical events as learning experiences have a strong emphasis on "reality" – because it is based on students' personal needs and goals, the learning they describe is integral to their real self. In describing their personal experiences, students can construct their own view of reality. Second, in critical events students have substantial control over their own behavior in learning settings. In other words, critical events allow us vital insights into the role of intellectual autonomy in learning. Students are the owners of the products of the learning process. Learning in critical events is, in a way, a by-product of the experience. The emphasis is on 'how to learn'. There are no external controls on the students, all experiences are meaningful only for themselves (Woods, 1993). Although critical events have usually been studied from a larger perspective than just a learning point of view, they are reminders of the importance of emotional and social aspects in the human learning process. In the study of critical learning events by researchers, the following aspects of learning seem to be essential; the learner's personal involvement in the learning process and periods of both autonomy and collaboration (Belenky *et al.* 1986; Morgan 1997; Woods 1993.) For example, Sikes et al. (1985) studied the impact of critical events on the collaboration and socialization of teachers. They concluded that the careful consideration of such events by teachers might have enormous consequences for their personal change and development. Very often these consequences are unexpected, unplanned and cover a multitude of activities. Examining the critical events in experience may help learners to 'become persons,' understand their own course of action, and promote positive attitudes towards further learning.

The point of critical incident and critical event methodologies is to provide more *authentic descriptions* of human experience than can be provided by causal-explanatory methodologies alone. As Bruner (1996) points out, interpretive-hermeneutic studies speak to the 'real life' contexts of human learning. In his view,

psychology reduced to causal-explanation would be "arid without such intervening interpretive assists" (p. 112). Interpretive-hermeneutic studies, as exemplified in critical incident and critical event methodologies, could illuminate not only the "idiosyncratic histories" of learners but also the "canonical ways" in which reality exists for various cultures (p. 14).

In this study we asked students to describe critical learning *events* in their lives. While some researchers claim that critical 'incidents' and critical 'events' are synonymous, we find a significant difference between the two. Critical learning incidents are incidental, that is, they represent short learning periods that may or may not be of consequence for the life of the learner. Conversely, critical learning events represent learning that is profound for learners in some way and has lifelong influence (Maslow, 1962; 1970). Woods (1993) found that such learning events are personally meaningful to the learner leading to valuable personal and social development. Critical learning events are characterized by the learners emotional engagement in the learning experience resulting in some transformation of their lives. In studying critical learning incidents and critical learning events it is important to remember that the importance of the learning experience is always determined by the learner themselves. This is why we hold that student self-reporting of critical learning 'events' is so promising for research. Student self-reporting is a method which helps us identify learning experiences that are transformative rather than incidental.

Alfred North Whitehead: An ontology of growth and episte-mology of mental growth

Over the last ten years, the study of student learning using inter-pretive-hermenuetic methods has often produced findings that are consistent with the concept of mental growth, or learning, in the ontology and epistemology of Alfred North Whitehead (1978; 1942). In this presentation, we would like to provide a brief rendering of Whitehead's ideas and then proceed to make com-parisons between our research findings and Whitehead's notion of learning.

In Whitehead's (1978) ontology, as presented in *Process and Reality*, bodily feelings are the fundamental stuff of the universe and, as such, the essential medium for all organisms', including higher organisms, growing experience of the world. His philosophy is organic, there are no isolated subjects and objects as is the case with Newtonian explanations of the universe or Cartesian explanations of mind. There are, however, subjective and objective *polarities* in a total experience that constitutes the universe. These polarities are transcended and unified, according to Whitehead, by the vectoral nature of bodily feelings. He pro-

poses that bodily feelings are "vectors" that "feel what is there and transform it into what is here" (p. 55). In this way, bodily feelings bond us directly with the experiences of all other organisms in the universe in an unbroken ebb and flow of feeling between organisms. From the welter of feelings that form the universe, there can emerge in some subjective polarity of an experience what Whitehead calls the "superject" (p. 78). The superject of experience is neither an isolated subjective or objective polarity of the experience, rather, it is a fusion of both polarities. It is an example of the "unity of feeling" that constitutes *growth* (p. 220). The superject of an experience is a growing entity "constituted by the process of feeling". It is the "feeler" of the experience emerging in the process of its feeling other entities in the universe (p. 88). If the superject of an experience is a higher organism, a human being for example, "subjective forms" of bodily feelings such as "emotions", "purpose", "valuation", and "causation" can sustain a growing awareness of the experience. This awareness could potentially become a period of consciousness under certain circumstances. Thus, the concept of growth in Whitehead's cosmology can involve 'mental growth' in higher organisms. Bodily feelings and consciousness, body and mind, encompass various aspects of a single living experience and, as such, are inseparable. The relationship of growth and mental growth, ontology and epistemology, in Whitehead's philosophy is organic. In this way he overcomes the false dualism of human experience – body or mind – prevalent in behaviourist and constructivist epistemologies.

For Whitehead, bodily feelings, in particular emotions, serve as the medium for a growing physical and, in the case of higher organisms such as human beings, mental experience of the world. It should not be surprising, then, that his epistemology is rooted in bodily feelings (Woodhouse, 1995). Unlike behaviorism or constructivism in educational psychology, Whitehead does not exclude, nor address as an afterthought, bodily feelings such as emotions (Flynn, 1995; 2003). These feelings are at the heart of Whitehead's (1942) epistemology, the very palpitation in his concept of the "rhythm of education" (pp. 24-44). This claim is wholly consistent with Whitehead's (1978) cosmology where the primary subjective experience of higher organisms is "emotional feeling, felt in its relevance to a world beyond" (p. 163). The feeling of emotion is the medium from which consciousness and learning grow. In Whitehead's (1942) epistemology, the most rudimentary "educational axiom" is that in "teaching you will come to grief as soon as you forget that your students have bodies". This is because "intellectual activity [is] diffused in every bodily feeling" and bodily feeling, especially emotion, is diffused in every intellectual activity (p. 78). As mentioned above, body and mind, for Whitehead, are two aspects of one 'unity of feeling.' Any attempt by psychologists, or others, to study one of these

aspects in the absence of the other leads to a serious misunder-standing of the fullness of human experience. This misunder-standing constitutes, in his view, a "false psychology of the process of mental development which has gravely hindered the effectiveness of our methods" (p. 27). Whitehead argues that any epistemology, or theory of learning, that ignores the centrality of bodily feelings such as emotions is doomed to failure. Pedagogies founded in such an epistemology or theory amount to trans-mitting to students a mish-mash of lifeless "inert ideas" or "dead knowledge" as he describes it (p. v). Moreover, Whitehead argues that to keep knowledge alive, there must be an animate *rhythm* to education. A pace that allows students time to connect emo-tionally, reflect on, and apply new ideas so that they can be deeply assimilated in their experience of the world. For White-head, 'efficient' learning lies in a thorough understanding and application of ideas, not merely their hasty accumulation.

The rhythm of learning

In Whitehead's (1942) epistemology, mental growth – learning – is life itself. The bodily feeling of emotion is the medium from which consciousness grows in higher organisms like human beings and is, therefore, present throughout the learning process. Emotions are the seminal feeling of awareness in humans. They grow into wonder and a desire to clarify one's thoughts and actions and they inspire the application of new thoughts and actions in further experience. Life for Whitehead is a union of mind and body, "that stream, compounded of sense perceptions, feelings, hopes, desires, and mental activities adjusting thought to thought"(p. 4). Living is a matter of continuous growth in body and mind together. Whitehead's epistemology proposes that learning experiences are a 'unity' of physiological, aesthetic, and mental aspects. These aspects are represented by the cycles of romance, precision, generalization and a return to romance. There are also *cycles within cycles* – romance, precision and generalization are always present, commingling during any learning experience. Moreover, within these three cycles there are also cycles of freedom, discipline, and a return to freedom constituting the *rhythmic* pace of learning. In Whitehead's view, all these cycles are present to varying degrees during the learning experience. In the 'unity' of a learning experience some cycles are dominant and some subordinate. For Whitehead, fluctuating cycles of romance and freedom, precision and discipline, gene-ralization and a return to romance and freedom constitute the essentially rhythmic character of mental growth, learning, and education. Learning is only possible through a unified experience of "freedom in the presence of knowledge" and "discipline in the acquirement of ordered fact" (pp. 47-48). It is also important to

remember that when Whitehead uses words like 'cycle' and 'stage' he is referring to periods in continuous time and not clear breaks between independent cycles or stages in experience. There are no increments of time in Whitehead's ontology and epistemology only the whole of eternal time. His conception of time, like his philosophy, is organic.

Romance and freedom

During the cycle of romance, freedom of thought is dominant. Precise thinking is subordinated for the moment in favor of an uninhibited contemplation of experience. Whitehead (1978) proposes that from the amorphous welter of feelings and apprehensions that characterize romance and freedom there emerges an initial *apprehension* of experience. This apprehension is an "emotional feeling, felt in its relevance to a world beyond" – the romance (p. 163). As the emotional apprehension grows, according to Whitehead (1942), there is a bodily feeling for the "vividness of novelty" in the experience and an apprehension of the importance of the "unexplored connections" which that experience contains. It is a time when aimless contemplation is transformed into the realization that the experience holds "within itself unexplored connexions with possibilities half-disclosed by glimpses and half-concealed by the wealth of material" (p. 28). The cycles of romance and freedom are the aspects of a learning experience from which wonder emerges, that is, becoming aware that there is more to know. This feeling of wonder is not stimulated by some external force, rather, it is a free expression of "natural curiosity" that is intrinsic to individual experience and "in itself pleasurable" (p. 47, 49).

Precision and discipline

During the cycle of precision, disciplined thought predominates. Free ranging thought and reflection is briefly subordinated in favor of putting ideas in some logical order and making sense of experience. As explained above, this period of learning emerges naturally during cycles of romance and freedom. Whitehead (1942) states, that as a result of "plenty of independent browsing amid first-hand experiences, involving adventures of thought and action", the learner in this period of learning becomes aware of the potential "enlightenment" inherent in "knowing the subject exactly" (p. 52). It is important to remember, however, that in cycles of precision and discipline, romance and freedom are still present. Whitehead claims that if the contemplation of ideas is not founded in bodily feelings like emotion, precise thought and attention to conceptual detail is "barren" – lifeless (p. 29). Without a passion or desire to learn, ideas remain outside the lived experience of the learner – impersonal, not assimilated,

'dead knowledge.' The desire to learn must be "kept fresh by romance" or learning becomes an "aimless accumulation of precise knowledge, inert and unutilized" (p. 54, 58). During cycles of precision and discipline, the desire to know something thoroughly is the basis for learning as opposed to working for mere reward. Whitehead claims that when romance and freedom are excluded from the learning process there is a "paralysis of thought" as curiosity dies (p. 58). The cycles of romance and freedom are integral in the cycles of precision and discipline – a unity of body and mind. The learning process is rooted in the rhythmic fluctuations of these cycles in terms of their dominance and subordination. First, romance and freedom, and then, precision and discipline, are dominant, then subordinate, in a continuous dance of life.

Generalization and return to romance and freedom

During the cycle of generalization, the disciplining of thought and action is subordinated for the moment while freedom of thought and action predominate. Emerging from the mental ordering of experience and the honing of abilities in the cycles of precision and discipline, the learner is, once again, immersed in the experience of wonder, free thought, and action characteristic of the cycles of romance and freedom. The cycle of generalization and return to romance and freedom is characterized by the creative application of knowledge and abilities gained during the cycles of precision and discipline. It is a period in experience where the learner utilizes new knowledge freely and in their own unique ways, a period of creativity. As stated above, in the cycle of generalization and return to romance and freedom the cycles of precision and discipline are subordinated. Once again, however, the cycles of precision and discipline are integral to the cycles of generalization and return to romance and freedom. Without the cycles of precision and discipline, generalization and return to romance and freedom would also be 'barren.' In other words, without the new ideas and abilities gained in the cycles of precision and discipline, there would be no substance for the learner to generalize during new experiences. The cycle of generalization is characterized by a wonderous and free utilization of ideas and abilities gained in the cycles of precision and discipline. This process of utilization, in turn, fosters continuing wonder and further cycles of precision and discipline, *ad infinitum*.

In our study of university students' descriptions of learning, Whitehead's (1942) rhythmic cycles of romance and freedom, precision and discipline, generalization and the return to romance and freedom seemed to be present. We wonder if researchers in the field may have overlooked, for the most part, the importance of emotion and rhythm for mental growth or learning. In

particular, periods of freedom may have been under emphasized in modern schooling and as Whitehead (1942) points out:

> My main position is that the dominant note of education at its beginning and at its end is freedom, but that there is an intermediate stage of discipline with freedom in subordination: Furthermore, that there is not a unique threefold cycle of freedom, discipline, and freedom; but all mental development is composed of cycles, and cycles of such cycles (p.48).

Whitehead claims that romance and freedom are the essential elements of any critical learning experience. When this is the case, education becomes a process of inquiry that is "both natural and of absorbing interest" (p. 50).

The main findings of critical learning events methodology

Characteristics of critical learning events given by education students in Canada and Finland

In the study presented here, we analyzed the descriptions of learning provided by 234 College of Education students, 114 from Finland (83 female; 31 male) and 120 from Canada (86 female; 34 male). The mean age of Finnish students was 23.03 ± 4.49 and Canadian students was 23.90 ± 6.50. The students were asked to, "Give a concrete example of a situation in which you really learned something". The descriptions of learning provided by students were analyzed using a constant comparative method. In using this method, we extracted units of meaning from the descriptions, compared these units of meaning and combined them into categories on the basis of logical relationships, and reexamined them in the context of verbatim student descriptions to eliminate logical contradictions (Guba & Lincoln, 1994). From this process emerged six primary aspects of learning according to the students in our sample: *emotional significance* (62%), *reflection* (53%), *differing perspectives* (42%), *collaboration* (38%), *autonomy* (33%), and *dialogue* (24%). Because the detailed statistical and comparative findings of this study have been presented elsewhere, we include here only the percentages of students who described these aspects as elements in their learning experience (Soini, 1999; Soini & Flynn, In Press). We will say that there was, generally speaking, an equal distribution of Finnish and Canadian students using these aspects to describe their learning experience. In this presentation, however, we are more interested in seeing how these aspects of learning might be consistent with Whitehead's (1962) theory of the rhythm of mental growth. For example, in his view, emotion is the primary

bodily feeling from which consciousness and learning grow (Flynn, 1995). Consequently, when two out of three students described the emotional significance of learning as a critical aspect of their experience we were intrigued and thought comparisons with Whitehead worthy of further study.

The rhythm of mental growth or learning

> I had observed Dad doing this before but had never done it all by myself. ...So one day we drove to the field and I watched and helped Dad check the equipment. Then we began doing the summer fallow. Dad did the first few rounds and explained how to and what to watch for. Then he let me try. He stayed and helped me. Then he left and returned home and I continued to work in the field.
>
> *Canadian Student*

In comparing the findings of our research to Whitehead's thought (1942), we will consider the cycles of freedom, discipline, and freedom which constitute the rhythm of mental growth. We will also discuss the commingling with these cycles of the cycles of romance, precision, and generalization. In our analysis of student descriptions of learning, we found that Whitehead's concept of a rhythm in mental growth – learning – was validated in many ways. Student descriptions offered us a more *concrete* glimpse into the workings of the cycles of romance and freedom within the cycles of precision and discipline constituting their thoughts and actions. For those of us involved in the study, Whitehead's abstract idea of the cycles within cycles of mental growth seemed to become more accessible and understandable by means of this analysis. We would like to remind you, however, that the ideas presented here are preliminary and speculative. Because of the limited time for presenting this paper, we will use only a few examples and a very brief analysis. The real purpose of this presentation is to evoke questions and serious discussion about the study of the aesthetics and possible rhythm of human learning.

Romance and freedom

The cycle of freedom, where romance initially predominates, seems to be represented in the aspects of emotional significance and autonomy as described by students. Students reported an intuition of relevance emanating from feelings of personal and emotional connectedness with some situation or subject matter. For example:

> I love physical fitness and was very excited to learn about all the muscles in the body. Even though the course is loaded with information, I

> devoted a lot of time to this class and learned an
> amazing amount.
>   *Canadian Student*

This description is consistent with Whitehead's (1942) notion that learning begins with a feeling in the learner that there are "unexplored connections" between themselves and certain situations and subjects (p. 28). Moreover, these feelings of connectedness were described by students as personal and emotional. In Whitehead's (1978) view, emotions – romance – serve as a medium between the primary experience of feelings and a growing awareness of an event that leads to consciousness of its salient features (Flynn, 1995). Emotions are the '*elan vital*' of learning, that is, a personal feeling for the relevance of the subject or situation is what motivates students to persevere and separates real learning from the mere acquisition of bits of information or 'dead knowledge'. Whitehead (1942) also characterizes the cycles of romance and freedom as a time of autonomy. It is time for "discursive activity amid a welter of ideas and experience" and "plenty of browsing and first-hand experiences involving adventures of thought and action" (p. 50; 52). Whitehead stresses in the initial cycle of freedom one's free reign in exploring some area of personal interest. This a period where it is critically important that learning not be "dominated by systematic procedure"(p. 28). Here is a good example of this discursive and adventurous period with an emphasis on free ranging thought.

> We were having fun and sitting together with
> friends. There was a nice and gentle feeling.
> One of us wanted to discuss the meaning of
> history. He suggested that in order to learn
> history it would be fruitful to be unaware of ones
> history or cultural background. Most of us had
> conflicting opinions and discussion flew in diffe-
> rent directions. Sometimes we agreed, some-
> times we had strongly conflicting views, but
> afterwards I had a feeling that my opinions had
> changed and I really learned a lot about history.
>   *Finnish Student*

The kind of discursive thought described here leads to wonder and a growing desire for more precise knowledge. Wonder is the basis for what Whitehead calls the "setting in order of a ferment already stirring in the mind" that occurs during the cycle of discipline (p. 29). Real learning is "dominated by wonder" emanating from within the learner (p. 50). The student quote about farming that introduces this section of the paper is also a good example of such discursive learning. She observed and wondered about her father's work in the fields but never

considered exactly how to do this work, that is, she freely attends to the salient features of her experience without systematizing them.

Precision and discipline

Whitehead (1942) describes the cycle of discipline as a period of time when precision in thought and action is predominant. It is to be remembered that the discipline of which he speaks is *self-discipline* rooted in wonder and the natural desire to know more about something. As such, the cycles of romance and freedom are vital to this period of learning. The rhythmic nature of learning, and the idea that there are periods of freedom within periods of discipline or 'cycles within cycles', is evident in student descriptions of their experiences. These cycles appear in the aspects of reflection, differing perspectives, collaboration, and dialogue. For example, autonomy – freedom – is nearly always present in student descriptions of their coming to know something precisely – discipline.

It is interesting that, according to students, time for reflection in learning was almost as important as the emotional significance of the subject or situation. An example of precise reflection founded in emotion was provided in this student's description of her experience following the death of a loved one.

> I learned much about myself, my family, and the people around me. I found that there is a part in every human being that brings out a sheer kindness. The good in people comes out in the depths of tragedy. In this way, I feel true learning must be experienced.
>
> *Canadian Student*

In this case, the discovery of a compassionate humanity in others is founded in the emotion of grief. The young women whose experience is cited here made this discovery autonomously. There is freedom in the cycle of discipline, as Whitehead (1942) puts it, "... the only discipline important for its own sake, is self-discipline, and ...this can only be acquired by a wide use of freedom" (p. 55). Thus, while being in a cycle of precision and discipline, the student in this example still freely notices the salient features of experience along the way and chooses which of these to include in the growing body of "general rules" that guides her life (p. 57). This period of learning is at once free in exploration and disciplined in observation. As Whitehead claims, there are always cycles within cycles, periods of freedom commingling with periods of discipline. There is never "one unique threefold cycle of freedom, discipline, and freedom ," rather, learning and life are "composed of such cycles, and of cycles of such cycles"(p. 48). The commingling of self-discipline

and freedom is also evident, for example, in the discursive thought and activity of students who explore history collaboratively in the example quoted above. The free ranging external dialogue that transpired, in that case, was punctuated by periods of self-discipline where students attended to the differing perspectives of others precisely and changed their own thinking as a result. Elements of self-discipline and freedom, and the importance of exploring differing perspectives, also appeared in student descriptions of foreign travel.

> I went to France and saw how they talk, ate, and lived. All this was so very different from what I had taken in French class that I was astounded.
> *Finnish Student*

The thinking of this student, while becoming more and more precise, is characterized by periods of autonomous reflection, a kind of inner dialogue. No one points out to the student the differences between her experiences in France and what she learned in French class. Real learning, according to some students, is a very personal experience that involves reflecting on previous assumptions and altering these assumptions on the basis of new knowledge. Learning, in these cases, is a kind of inner dialogue. That is not to say that collaboration with others is not important. Learning, as the student descriptions of learning we use in this paper indicate, is at once personal and social (Jarvilehto, 1998a; 1998b). For example, one can alter their assumptions while talking with peers, walking the streets of Paris, or listening to a lecture. As one Canadian student described this latter case, the lecturer was "incredibly interesting and, in turn, I critically examined my own memories to try and see if they were reliable or not!" Learning, according to students, is a matter of adjusting one's thoughts while freely exploring the salient features of experience, that is, a matter of self-discipline and freedom. This seems to be consistent with Whitehead's conception of learning as a fluctuating, rhythmic process.

Returning to the student quote at the beginning of this section, we can see the cycles of precision and discipline when she focuses on the salient features of farming and begins to organize her thoughts and actions. One day, rather than just observing and wondering about the summer fallow, the young woman began to help her father check the equipment. He explained to her how to do the fieldwork she had been observing, briefly helped her with the work, and then left her alone. Consequently, the young woman no longer has the freedom to simply observe, she must now do the summer fallow herself. She now focuses on the salient ideas and procedures of the work explained to her by her father. As Whitehead (1942) would say, she "adds value to bare experience", that is, she adds knowledge to the feeling of wonder

she experienced during the cycles of romance and freedom (p. 50). The young woman's description of this learning experience incorporates aspects of collaboration, differing perspectives, dialogue, and a growing autonomy as illustrated above. She now enters the cycles of generalization and the return to romance and freedom and where her work in the field is guided by new found knowledge and capabilities gained during the cycles of precision and discipline.

Generalization and return to romance and freedom
For Whitehead (1942), the cycles of generalization and return to romance and freedom would be barren without the preceding cycles of precision and discipline, just as the cycles of precision and discipline would be "barren" without the preceding cycles of romance and freedom (p. 29). He proposes that the intermediate period of discipline, characterized by a growing precision in thought and action, is a "preparation for battling with the imme-diate experience of life ." The period of freedom he calls the cycle of generalization is characterized by the creative application of the "general rules" and "aptitudes" learned during the previous period of discipline (p. 57). Generalization, in this view, is a renewed ex-perience of life itself, a life in which the learner is able to "qualify each immediate moment with relevant ideas and appropriate actions" (p. 58). It is a time of a freedom founded in the joy of discovering one's enhanced capabilities.

> In my class this last year we were discussing and comparing poems that we had recently taken. The general theme of the poems was about mans' relationship with nature. Through our class discussions I gained insight into many different viewpoints and the background of the poems. Our professor never came out and said that this is the conclusion you should have but instead encouraged us to develop our own ideas. From this I learned that 'the arts' provide a whole new way to look at life on earth. Science, for example, provides a very efficient way to approach and deal with our environment. The arts provide a unique way to look at the world from different perspectives and develop con-clusions and realities about the world we live in today.
>
> *Canadian Student*

Aided by cycles of freedom and discipline, the life of the student who provided this description of learning is transformed. He has come to different 'conclusions and realities' that now guide a renewed experience of living in what Whitehead would call the

cycles of generalization and return to romance and freedom. In considering this student's description of learning, however, we see that the period of generalization and freedom he is entering does not stand on its own. This period of mental growth is grounded in discursive dialogues and a growing personal knowledge of poetry. Undoubtedly, his new outlook on life will lead him to freely ask new questions, leading to new knowledge, and new questions. and so on. Life and mental growth, according to Whitehead, is a rhythm consisting of cycles of freedom, discipline, and freedom. Moreover, within these rhythmic cycles there are also cycles of romance, precision, and generalization. As we attempted to show, these cycles are not mutually exclusive or linear in occurrence. They are organic, cycles within cycles, that is, each period of learning commingling with and informing the next.

The student description of her learning experience in doing summer fallow is, once again, germane here. As she stated, when her father returned home she continued working the fields on her own. This feeling of freedom was exhilarating for her because she had gained the knowledge and ability needed to do the work independently. She described this experience as a critical learning incident. This learning incident was rhythmic – she was free in observing the work, she was disciplined in paying close attention when her father explained and demonstrated the work, and she was then free to do the work herself. This rhythm was apparent in most of the student descriptions we examined.

Conclusion

As we stated earlier, the study presented here is preliminary and we are not prepared to come to any specific conclusions at this time. The purpose of the presentation was to evoke discussion and questions that might guide further research into the aesthetic aspects of the human learning experience. We would like to say that there appears to be a natural symmetry between the descriptions of learning provided by students in the study and Whitehead's description of the rhythm of mental growth. For example, the fact that emotional significance constituted the most important single aspect of learning for students seems to be consistent with Whitehead's idea that romance – emotion – is always present in any real learning experience. We also found the importance of autonomous reflection – freedom – in the student's description of learning very interesting. It should be noted that reflection, as described by students, was not just a period of freely exploring their personal assumptions. It was also a period of 'discipline' where students carefully examined, and sometimes altered, these assumptions. As Whitehead might say, there are cycles within cycles in the learning process. It does seem,

therefore, that there is a natural fit between student descriptions of learning in our study and Whitehead's rhythm of mental growth. Our analysis leads us to conclude that Whitehead's theory of mental growth has merit and could inform research in psychology and the formulation of new theories of learning that take greater account of: (i) human aesthetic experiences such as emotions; and (ii) the importance of extended periods of freedom or autonomy in the learning process.

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Online Survey + Qualitative Analysis + Quantitative Results = Possible & Reasonable?

Meike Watzlawik

The following article presents a detailed description of an Internet research project that combined qualitative and quantitative methods. Special focus will be on the method, its implementation will be explained and particular suggestions will be given for researchers considering application of a similar design.

The project's research question

In this study, 12 to 16 year old adolescents responded to an on-line survey that contained open and closed questions about the process of becoming aware of one's individual sexual orientation. One of the key research question was: "What did you think when you noticed that you felt sexually attracted to girls (*or* boys *or* boys and girls)?"

Important considerations that lead to the research question

Different studies have shown that homosexual and bisexual adolescents face many obstacles in the development of their sexual identities (e.g. Biechele, Reisbeck, & Keupp, 2001; Massachusetts Department of Education, 2000). In most of these studies either homosexual *or* bisexual *or* heterosexual adolescents were interviewed, which on one hand helped to stress their special needs, and on the other implied separability. In fact, sexual orientation is only one facet of an individual's identity, of *all* individuals, no matter if they feel sexually or/and emotionally attracted to persons of the same, the other, or both sexes. Therefore, adolescents with different sexual orientations were included in this study to allow for group comparisons.

Since adolescents become aware of their sexual orientation during puberty (Steinberg, 2002, Zimbardo, 1995), the participant target group was between 12 and 16 years of age. This way, the influence of retrospective changes in memory (Schacter, 1996) could not be excluded but minimized.

Reasons for choosing the Internet

Classroom surveys that dealt with the subject of sexual orientation encountered certain difficulties. Homosexuality is still a taboo subject so that only few adolescents categorized themselves as

same-sex oriented (e.g. Schupp, 1996). Especially questioning adolescents would most likely result in their denying any possibility of being "different" based on the great importance of peer acceptance in this developmental stage (Steinberg, 2002).

Therefore it was concluded, that a more anonymous environment was needed to gather information on how different sexual orientations impact identity development during adolescence. The Internet offers one possible solution; it allows for anonymous participation and an expanded target group. Especially minorities and unusual cases, which are not easily recruited for psychological studies, can be reached more effortlessly through online appeals.

Advantages and disadvantages of Internet surveys

Added advantage lies in the Internet accessibility for adolescents all over Germany and even beyond it's boundaries. No additional costs are involved for the researcher, as he does not have to travel to the adolescents for personal interviews. A critical aspect is that the target group is self-selected (Batinic, Reips, & Bosnjak, 2002). Only those adolescents participated who heard of the survey through mailing lists, discussion forums, word of mouth advertisement, or came across the survey via search engines (altavista, google, yahoo, etc.). A certain interest in the subject was mandatory.

However, Internet access can be limited and pose a disadvantage for Internet surveys. Individuals with higher education and who are technologically more advanced dominate Internet populations. They are usually part of a higher economic bracket and it is more likely that they are male users, not female (GVU, 1998; Growth from Knowledge Group, 1999).

Reasons for choosing the qualitative approach

Questionnaires with closed questions always include certain expectations and assumptions of the researcher. In this case, one could assume that homophobia (the irrational fear of heterosexuals concerning homosexuality) and heterosexism (the false belief that all individuals are heterosexual and that all other orientations are deviant) dominate the thoughts of homo- and bisexual adolescents, whereas positive thoughts should be prevalent among their heterosexual peers. Instead of providing these answers as options, the open question allows for individual descriptions and emphasis. The adolescents are not given preset ideas of what they might or should have thought by having to evaluate answers concerning their appropriateness. They describe their own thoughts, stressing what was most important for them personally. This procedure is even more important, if societal

changes are likely to have occurred (Bech, 1997). "Old" theories might neglect new obstacles or supportive influences that have become relevant. Therefore, it is important to describe the developmental task of becoming aware of one's own sexual orientation *by* the adolescent not *for* him/her (Baacke, 1994).

On the contrary one could argue that giving options helps adolescents talk about discrimination and prejudices. Without these options, they might be hesitant to discuss their negative experiences. Due to the anonymous environment provided by the Internet, it seems less likely that adolescents try to answer in a socially depicted way.

Technical realisation

The questionnaire itself consisted of 26 questions. It was programmed in HTML (HyperText Markup Language) using the features shown in tab. 1 (next page).

JavaScript was used to determine to which page the participants were transferred after sending off the questionnaire.

Table 1: *Posing questions: different options using HTML programming*

Type		HTML example
Radio buttons (one answer possible)	You are… ○ male ○ female	`<input type=radio name="sex" value='0'>`
Checkbox (multiple answers possible)	You would rather be… ☐ bisexual ☐ heterosexual ☐ homosexual	`<input type=checkbox name="orient1" value="1">` `<input type=checkbox name="orient2" value="1">`
Drop-Down Menu[1]	Which school do you go to? [choose from list ▼]	`<select name="school" size=1>` `<option selected>` `choose from list</option>` `</select>`
Text field	With whom did you talk about your feelings? (type in answer) [ ]	`<input type=text size="50" name="withwho">`
Text area	What did you think when you first noticed it? [ ]	`<textarea name="thoughts" rows=3 cols=46></textarea>`
Submit button	[submit]	`<input type="submit" name="submit" Value="submit">`
Reset button	[clear all]	`<input name="reset" type="reset" Value="clear all">`

[1] The first item in the selection should always be "choose from list" or a similar item, because even if the participants do not answer the according question a value will be generated in the database. If the first item were already a possible answer, one would not be able to separate actual from missing data.

Transferring data from the questionnaire to the database

The HTML questionnaire was transformed into a php-file (acronym for Hypertext Pre-Processor) through additional programming. The php-commands ensured the transfer of the subjects' data into a MySQL database[1] (SQL: Structured Query Language) that can be installed on all Windows Servers. A good tool to administrate the database, especially for computer laymen, is phpMyAdmin (http://www.phpmyadmin.net/home_page).

Both, the server and the database are password protected. Additional safety precautions were taken not to collect data that

would reveal the participant's identity. Neither IP addresses were logged, nor were participants asked for their e-mail addresses. It was advertised that the study's results would be published on the project's homepage. For further descriptions of Internet surveys and their requirements see Batinic (2000) or Reips and Bosnjak (2001).

Analyzing the data: special features

One major advantage, especially for qualitative data, is the immediate availability of participants' answers as computer files. Text does not have to be transcribed and all quantitative data can easily be imported into, e.g. SPSS, for statistical analysis. Disadvantages are the participants' ability to express themselves in writing; it can differ immensely and probing is not an option for gathering further information. The following examples (original spelling and grammar) will illustrate the described:

> "Only until I turned fourteen did I begin to understand that I might be gay. Even now I am baffled at the thought, because I do not act like normal gay guys. What I mean by that is most homosexuals act more femine than their straight conterparts. I hope it is just a stage I'm going through, as I don't look forward to the hardships a gay teen is bound to face." (63) [2]

> "I didn't really think about it but later heard that it was 'wrong' " (104)

> "no way" (37)

Another restriction is that the emotional intonation of the answers often remains unclear. During personal interviews body language and mimic of the interviewee can be observed which is not possible in anonymous surveys. Internet users have come up with a sign language that allows them to describe emotional states not only through writing: emoticons. Those "faces," e.g. ☺, ☻ or ;-). :-|, can be added to statements (Batinic, 2000) and should be taken into account when the researcher interprets answers such as:

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[1] Questionnaire and database were all placed on the same server, which is not mandatory.

[2] Participant's number in data pool.

"I thought to myself "hey, I think this is puberty!" ;-)" (365)

The significance of Internet surveys often triggers objections because participants are believed to frequently fake their identities and answers (Batinic, 2000). Less than 1% of this study's data had to be excluded from analysis due to lack of reliability. Coherence and plausibility of the answers to the (openly) posed questions were assessed. Based on these criteria, most of those who completed the questionnaire were unlikely to be fakes. Since a certain interest in the subject is needed to participate, it seems questionable that many Internet users will complete a survey that consists of more than 20 questions only to send off a set of false data. It seems more likely that those, who are only curious and not really interested in participating seriously, will not complete the questionnaire.

In this study, 8.5% stopped answering the questions before completion. Unfortunately, it is not possible to determine whether this was due to personal choice or caused by technical problems.

Analyzing the data: Qualitative Content Analysis

The answers to the question, "What did you think when you noticed that you felt sexually attracted to girls (or boys or boys and girls)?", were categorized using qualitative content analysis (Mayring, 2000). Guidelines were developed so that others could trace the statements' assignments to certain categories. The guidelines contained the categories' names, elaborations of their content (meaning), rules for their application, and example statements. An excerpt from the guidelines is presented in table 2:

Table 2: *Excerpt from categorization guidelines*

#	Category	Meaning	Application rules	Example statements
3	ambivalent	The adolescent mentions positive as well as negative emotions.	All statements that match the category's meaning. If this category is assigned to a statement, **no other** categories can be assigned.	"I thought, "Wow, this is great" (discovering the sexual side of it of course) but then I thought "shit, this is going to be difficult" (50)

The categories represent repeated thoughts and were thereby extracted from the data (inductive categorization) instead of applying a theoretically founded system (deductive categori-zation). Category labels were, if possible, original statements of the adolescents.

In the case of this study 862 statements of 718 German adolescents were assigned to 52 different categories. The number of statements exceeded the number of adolescents, because answers often contained multiple statements, so that more than one category was assigned.

The developed guidelines were later given to further coders[3] who again categorised part of the data to be able to calculate intercoder reliability. Due to the high number of categories, a formula (see table 3) was used that did not account for the influence of coincidence. It should be accounted for, if fewer categories are assigned to the material.

Table 3: *Simple formula to determine intercoder reliability (Ritsert, 1972, as cited in Lisch & Kriz, 1978)*

$$Z_N = \frac{N \times M}{\sum_{i=1}^{N} K_i}$$

N = number of coders
M = number of matching assignments of **all** coders
K_i = number of categorised statements for each coder

Intercoder reliability for categorizing the answers to this study's main research question was 0.82.

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[3] After a reasonable long intermission the first coder, who developed the guidelines, can also categorize the data again to determine intercoder reliability.

After having analyzed different intercoder reliabilities, Bos and Tarnai (1989) came to the conclusion that a quotient > 0.7 can be rated satisfactory. Thus, the reliability established in this study is satisfactory.

Important: One advantage of online surveys is that the participants type in their answers so that text files are available right away. The content of these text files can be analyzed with assistance of special computer programs. The one used in this study was Atlas.ti 4.0 (Scientific Software Development Berlin, 2000). Computer based analysis has proven to be easier and more efficient than traditional methods. They also support the researcher in developing a category system, which underlies changes: e.g. category names have to be changed in the process or it sometimes seems more reasonable to merge categories. Both changes are easily undertaken.

Analyzing the data: quantitative analysis

To determine how frequently different categories were assigned to the adolescents' answers, the categories were entered into an SPSS file that already contained the socio-demographics of the participants (imported from the database). For each adolescent all categories were either coded with 1 (was assigned to his or her answer) or 0 (was not assigned to his or her answer). An example SPSS file (version 11.5.1) is shown in figure 1. Afterwards frequencies (descriptive measures) could be analyzed for the different groups (homosexual, bisexual, and heterosexual adolescents) and subgroups (e.g. examining gender differences).

Fig. 1: Example for an SPSS (version 11.5.1) file for analysing frequencies; 1st column: identification number, 2nd to 5th: socio-demographics, 6th to 8th: first three categories.

Part of the qualitative analysis and content analysis is the formation of meta-categories to summarize the data again. To do so, categories similar in content have to be assigned to superior topics. In this study, the following 13 meta-categories were formed (Watzlawik, 2004):

- panic & desperation
- ambiguity
- insecurity concerning reactions of others
- first reaction unproblematic
- to disavow/to repress
- self rejection
- positive reaction
- infatuation prevalent
- to desire physical closeness/sex
- neutral reaction
- ambivalent thoughts
- having thought nothing
- do not remember

The researcher accounts for the assignment with regard to content, but within the SPSS file, adding up the according categories can easily generate meta-categories. After adding up the categories, it is possible that values higher than 1 appear within the meta-categories. All values higher than 1 have to be changed back to 1 to create a nominal scale. The only meaningful parameter values are: "meta-category was assigned" (1) and "meta-category was not assigned" (0). Higher values cannot be interpreted as stronger values in a certain meta-category. They are most likely caused by a more detailed answer given by an adolescent, whose ability of expressing himself exceeds that of others. It does not mean, for example, that he experienced more panic and desperation than his peers.

Analyzing the data: statistical analysis

Once the frequencies of the categories and meta-categories have been analysed, group differences can be tested for significance. In this study -Tests and, if the frequencies fell below a certain number, the Fisher's Exact Test were applied (Bortz, Lienert, & Boehnke, 2000). This way it could be shown that the frequencies differed significantly in most cases that compare same-sex oriented (homo- & bisexual) with opposite-sex oriented peers. Heterosexual adolescents reported significantly more positive thoughts (e.g. *infatuation*) or wrote that they *couldn't remember* what they had thought, whereas the main issues for homosexual and bisexual adolescents were *panic & desperation* and *ambiguity*.

Strikingly noticeable became that within the meta-category *ambiguity* (adolescents were desperate because they were not able to interpret their own feelings) significant differences were found between bisexual and homosexual adolescents, showing that bisexual adolescents have even greater problems to integrate their feelings into an overall sense of identity (Watzlawik, 2004).

Significant gender differences were only found among homosexual adolescents: the meta-category *panic & despera*tion was more often assigned to the boys' statements (Fisher's Exact Test: [1] =4.2; p<.05).

All these findings can be used to stress the need for change in sexual education (e.g. in the media, schools, families, etc.).

Online Survey + Qualitative Analysis + Quantitative Results = Possible & Reasonable?

The answer to the first part of the question "is it <u>possible</u> to collect qualitative data through online surveys and to then analyse them qualitatively as well as quantitatively", is YES.

Is it <u>reasonable</u>? Yes, for the study described it is. Is it reasonable in general? No. As it is true for all designs and methods, their appropriateness depends on the research question. In this case, the advantages of the design outweighed its disadvantages. The emotional experience of becoming aware of one's own sexual orientation was the centre of this study. It was told in the adolescent's own words, so that the differences between heterosexual, homosexual, and bisexual adolescents could be described in detail with regard to content. The quantitative analysis was used to visualize these differences through graphics and percentages (frequencies). Statistical analysis has proven that the differences presented did not occur coincidently, but were in fact significant.

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About the Authors

Auckenthaler, Anna
Prof. Dr., Free University of Berlin
Faculty of Education and Psychology
Department of Clinical Psychology and Psychotherapy
Habelschwerdter Allee 45
14195 Berlin
Phone: +49 30 838-55752
Fax: +49 30 838-54945
E-mail: *auckenth@zedat.fu-berlin.de*

Bischkopf, Jeannette
Dr. , Free University of Berlin
Faculty of Education and Psychology
Department of Clinical Psychology and Psychotherapy
Habelschwerdter Allee 45
14195 Berlin
Phone: +49 30 838-54672
Fax: +49 30 838-54945
E-mail: *bischk@zedat.fu-berlin*

Burkart, Thomas
Dr. phil., Dipl.-Psych., works as psychotherapist. His fields of research
and publication include problem solving, counseling, emotional
experience, and introspection.
Address: Stephansplatz 2, D- 20354 Hamburg, Germany
Phone: +49 40 354-101
Fax: +49 40 354-123
E-mail: *dr.thomas.burkart@t-online.de*

Domínguez, María Concepción
Dr., Titular de Universidad,
UNED University, Senda del Rey, 7; 28040 Madrid, Spain
Phone: + 34 91 398 6970

Flynn, Mark
Ph. D., Prof., University of Saskatchewan, Canada
Research Interests: Epistemology, the process of learning, systemic
inhibitors of learning, critical thinking,
the critical analysis of conventional presuppositions in psychology,
educational psychology, & special education,
Aboriginal psychology and healing, & the philosophy of science.
Address: Department of Educational Psychology and Special Education
College of Education, University of Saskatchewan,
28 Campus Dr., Saskatoon, SK. S7N 0X1
Office ED 3094
Phone: +1 306 966-7710
E-Mail: *mark.flynn@usask.ca*

Gahleitner, Silke-Birgitta
Affiliation: Free University Berlin, Department of Educational
Science and Psychology, Therapy and Counseling Unit
Main reserach interests: Psychotraumatology, psychotherapy and
counselling, gender issues
Contact adress: Spessartstrasse 11, D-14197 Berlin
Phone: +49 30 82709921
Fax: +49 30 89731594
E-mail: *silkegahleitner@hotmail.com*

Gento Palacios, Samuel
Dr., UNED. Facultad de Educación
Madrid (Spain).
Phone: +34 91 3 98.76.47;
Fax: + 34 91 398.66.78
E-mail: *sgento@edu.uned.es*

Gläser-Zikuda, Michaela
Dr., Pädagogische Hochschule Ludwigsburg
Phone: +49 7141 140-429 341
E-mail: *glaeser-zikuda_michaela@ph-ludwigsburg.de*

Gürtler, Leo
Research Assistant at the Dept. of Educational Psychology (Abteilung
Pädagogische Psychologie), Institut für Erziehungswissenschaft,
University of Tübingen, Münzgasse 22-30, 72070 Tübingen, Germany.
E-mail: *leo.guertler@uni-tuebingen.de*

Huber, Günter L.
Prof. Dr. phil., Chair of Educational Psychology at the Dept. of
Educational Psychology (Abteilung Pädagogische Psychologie), Institut
für Erziehungswissenschaft, University of Tübingen. Among his
publications are books and training materials on cooperative learning and
teaching/learning problems, on inter-individual differences, and software
for the analysis of qualitative data.
Institut für Erziehungswissenschaft, Münzgasse 22-30, 72070 Tübingen,
Germany
Phone: +49 7071 2972113
Fax: +49 7071 294957
E-mail: *huber.paedpsy@uni-tuebingen.de*

Jeschke, Karin
wissenschaftliche Mitarbeiterin at Free University,
Department of Clinical Psychology, Psychological Diagnostic and
Community Psychology, Habelschwerdter Allee 45, 14195 Berlin.
Dissertation on "Sexualized violence from the perspective of staff- an
analysis of focus groups". Additional work in Crisis Counseling and

domestic violence
Counseling Phone: 030-23270916
E-mail: *kjeschke@zedat.fu-berlin.de*

Kiegelmann, Mechthild
Ed.D. (Harvard University) works as junior faculty (Wissenschaftliche
Assistentin) in educational psychology at the University of Tübingen. She
is the founder of the Center for Qualitative Psychology.
Institut für Erziehungswissenschaft, Münzgasse 22-30, 72070 Tübingen,
Germany
E-mail: *mechthild.kiegelmann@uni-tuebingen.de*

Kleining, Gerhard
is Professor of Sociology Emeritus at the University of Hamburg,
Germany. His publications include contributions to social structure and
stratification, social images and stereotypes, qualitative methodologies
and methods, heuristic research, introspection.
Institut für Soziologie, Universität Hamburg, Allende-Platz 1, D-20146
Hamburg, Germany.
Private: Elbchaussee 159, D-22605 Hamburg, Germany.
Phone/Fax: +49 / 40 / 880 1977
E-mail: *kleining@sozialwiss.uni-hamburg.de*

Lim, Levan
Associate Professor, Early Childhood and Special Needs Education
Academic Group, National Institute of Education, Nanyang
Technological University, 1 Nanyang Walk, Singapore 637616,
E-mail: *llim@nie.edu.sg*

Maslo, Irîna
Prof., Dr.habil.paed., University of Latvia,
Institute of Pedagogy and Psychology.
Main research interests: Qualitative-quantitative research of social
culture learning. Mixed methods. New instrumentation of self-research
and monitoring.
E-mail: *irina.maslo@lu.lv* and *irinam@lanet.lv*

Medina, Antonio
Prof. Dr., UNED University,
Senda del Rey, 7; 28040 Madrid, Spain
Phone: + 34 91 398 6969
E-mail: *amedina@edu.uned.es*

Ose, Liesma
Doctoral student, University of Latvia,
Institute of Pedagogy and Psychology.
Member of doctoral student's research group in social pedagogy.
E-mail: *liesma@sfl.lv*

Skoromka, Tamâra
Doctoral student, University of Latvia,
Institute of Pedagogy and Psychology.
Member of doctoral student's research group in social pedagogy.
E-mail: *tamaara_skoromka@navigator.lv*

Schuster, Hanne
c/o Michaela Gläser Zikuda (see above)

Soini, Hannu
Ph.D.
Professor of Educational Psychology
University of Oulu
Dept of Educational Sciences and Teacher Education
P.O. Box 20000
SF- 90014,Oulu, Finland
Pone: +358-8-553 3643
Fax: +358-8-553 3600
E-mail: *hannu.soini@oulu.fi*

Stiglmayr, Christian
Dr., Free University of Berlin
Faculty of Education and Psychology
Department of Clinical Psychology and Psychotherapy
Habelschwerdter Allee 45
14195 Berlin
Phone: +49 30 838-5 57 43
Fax: +49 30 838-5 49 45
E-mail: *stigl@zedat.fu-berlin.de*

Strods, Gunârs
Doctoral student, University of Latvia,
Institute of Pedagogy and Psychology.
Member of doctoral student's research group in social pedagogy.
E-mail: *gunars@ru.lv*

Ullrich, Annette
Postgraduate Student at the University of Tübingen
Her research interests include professional development in special
education, intentional communities for people with disabilities, inclusion
and processes of personal transformation through living with persons
with disabilities.
Belthlestr. 40, 72070 Tübingen
Tel. +49 / (0)7071-45421
E-mail: *Ullrich_Annette@gmx.de*

Watzlawik, Meike
Dr., TU Braunschweig Abteilung für Entwicklungspsychologie
Spielmannstr. 19 D - 38106 Braunschweig
Tel.: +49-(0)531-391-3616
Fax: +49-(0)531-391-8188
E-mail: *m.watzlawik@tu-bs.de*

Witt, Harald
Prof., Dr. phil., Dipl.-Psych., University of Hamburg,
Department of Psychology.
Fields of research: computer supported work procedures, experienced
workers, qualitative methodology, introspection