# Why A Qualitative Research Strategy? A discussion on research strategies, focusing on qualitative research; a challenge for the maritime cluster

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### ABSTRACT

This paper discusses the qualitative versus quantitative strategies in research, emphasizing the qualitative strategies. With the increased importance in studying maritime human behaviour, in a research area historically dominated by quantitative strategies, a qualitative strategy will give additional and deeper knowledge relevant to every IAMU researcher. Qualitative strategies have been used since the mid 60s. What do they signify? Are they unbiased? It certainly cannot be just an ignorant interviewing of a population and its world that the researcher wishes to investigate. There is more to it. We must realize that human perception is highly selective. What people "see" is dependent on their interests, biases and backgrounds. Those who do observational research are expected to go beyond ordinary looking and do systematic "seeing". *Nota bene*, if the researcher lacks method-knowledge there is the risk of subjectivity. This paper introduces, to the MET world, a few research strategies to reasonably do away with subjectivity.

Both qualitative and quantitative data can be collected in the same study. We have to realize that different perspectives give different types of insight. Qualitative strategies are preferably used in social science.

In walking together and communicating with the research object the researcher attains knowledge that s/he otherwise would not be able to discover. Truth is created by dialogue and by observing people's reactions to specific occurrences. Through language humans handle situations, surroundings, themselves, relationships, etc. Classroom teaching articulates ways of using language in social relations. Research strategies sometimes classified as "loose" can certainly be justified.

### 1. Introduction

Social science research is vitally important for the welfare, safety and security of the one million people who work at sea. In an article in the Numast Journal May 2004 the Nippon Foundation of Japan is launching a fellowship grants program on human related aspects in shipping in partnership with the SIRC in Cardiff. This contribution indicates the need for research on the human factor in shipping. The call for applying appropriate strategies naturally follows. The type of research carried out in shipping activities usually builds its validity on quantitative strategies. With increased interest in research on phenomena where human beings have a focal role these strategies perhaps do not justify means, nor meet expected objectives. Numbers, by means of human figured formulas dealt with in computers, cannot be the only tool to justify a certain statement according to an assured hypothesis. Already, numbers and formulas have their origin not only in natural science but also from social science, realizing that person/s with specific knowledge have worked with it.

Discussions in this paper are mainly drawn and inspired by the following four books:

- 1) Steinar Kvale (1997): Den kvalitative forskningsintervjun
- Marianne Winther Jörgensen & Louise Phillips (2000): Diskursanalys som teori och metod
- 3) Michael Quinn Patton (1990): *Qualitative evaluation and research strategies* and
- Norman Fairclough (2003): Analysing Discourse, textual analysis for social research

There are two strategies within the theory of research methodology: Quantitative investigations and qualitative investigations. Quantitative investigations are built on a positivistic research theory and the qualitative on hermeneutics. Both these theories follow established science theories (almost similar to knowledge theories) where:

- Theories and not conceptions of belief are discussed
- The truth (perhaps a theory is truthful when it correctly describes and corresponds to the world) is discussed
- 3) Scientific theories must be supported
- 4) A scientific theory must be used
- 5) A general consideration of scientific rationality and development of science.

A quantitative research strategy is often a) associated with a deductive approach i.e. it begins with a theory and tests to show evidence to a provided pre-set hypothesis, b) usually linked to the notion of science as objective truth or fact and c) the strategy usually begins with pre-specialized objectives focused on testing preconceived outcomes. The opposite approach, the qualitative research strategy, is often a) associated with a inductive approach i.e. observations are made usually in order to develop a new hypothesis, b) often identified

with the view that science is lived experience hence subjectively determined and c) begins with open-ended observations and analysis looking for explanations to *how* and *why* questions.

Natural sciences try to find explanations to reasons for certain phenomena whilst social sciences try to understand the meaning of certain phenomena from its context. And the quality (the success) of a strategy is determined by its ability to explain new data. *Strategy*, as recommended by Hartman, is a word that in this paper will be used to cover and describe the array of possibilities and methods that exist to conduct a qualitative research.

In maritime research, to the author's knowledge, so far no researcher has stated *what qualitative strategy* that has been used. This paper will show that there are valid and reliable research strategies without a hypothesis to be tested.

#### 2. Quantitative research strategies

Quantitative research is defined as the numerical representation and manipulation of observations for the purpose of describing and explaining a phenomenon that those observations reflect. Quantitative research is often based on statements like: anything that exists does exist in a certain quantity and can be measured. To quote Lord Kelvin "When you cannot measure, your knowledge is meagre and unsatisfactory".

A quantitative approach makes it possible to measure reactions of many people but to a limited number of questions. Still, this facilitates comparison and statistical regression of data. It is, however, important that the instrument used measure what it is supposed to measure. This can be done by adhering to prescribed procedures and by following a set standard for the instruments used (test items, survey questions etc.). Data is usually easily aggregated for analysis and should be systematic and standardised. Findings are usually not difficult to present.

The concept is to separate facts from values

and science from politics. The aim is often to foresee\_and control people's behaviour by producing scientific, objective, quantifiable and unbiased facts that can be reproduced. The latter is very important in order for other researchers to build on a previous research and for decision makers to use the findings for their decisions.

Questions usually necessitate a quantifiable yes or no and the questions have to be standardized. Quantitative research, long held to be the only form of research that was statistically valid and reliable, starts by the researcher formulating a hypothesis that must be tested. Hartman (2004) says that it is irrelevant how the hypothesis has been found because it is more important that it can be given necessary scientific support. This is one of the reasons why quantitative strategies are used now in conjunction with qualitative research strategies, the latter in studies that cannot be adequately described, measured or fully interpreted.

Observations and enquiries can be part of the study. Observations become independent of the interviewee's memory and willingness, but it is an expensive and time-consuming strategy. The analysis of all types of data has to be statistically calculated. If the hypothesis can be supported it also has to pass a significant level that normally is set to 5%.

For any type of observation it is necessary to have a scale of measurement. But how does one measure the level of people's depression, physical health, psychological condition, intelligence or e.g. the force of being convinced? Without being able to measure no investigations can be made unless we find another strategy. A qualitative approach might be the solution.

#### 3. Qualitative research strategies

If one wishes to know how people see their world and their lives the best way is to ask them. The reason for this being that the world and self has a *meaning* to each of us.

By using a qualitative research strategy the

researcher tries to understand the world from the interviewee's point of view. In this way knowledge is built through an exchange of views between two persons. It is defined as a non-numerical examination and interpretation of observations, for the purpose of discovering underlying meanings and patterns of relationships. The whole person has to be investigated because our values of life cannot be fragmented.

A qualitative strategy produces detailed information usually of a smaller group of people. This increases the understanding of that particular group but, of course, reduces the possibility to generalise. The researcher in himself/herself is the instrument. Therefore, the result depends a lot on the researcher's skill and diligence. Usually, collected data are longer in presentation, more detailed and the content is variable. Diligence is required because data is neither standardised nor systematic. "Open-ended responses on questionnaires represent the most elementary form of qualitative data" (Patton 1990, p.24, author's italics) but it requires skill to interpret.

To explain system behaviour it is necessary to apply synthetic thinking. This is different from doing an analysis. A SWOT analysis (quantitative) answers many questions but, as well, it should be important to find the interdependency (qualitative) between its parts. Qualitative strategies are appropriate when phenomena under study are complex, social in nature, and do not lend themselves to quantification. Qualitative strategies can contribute to practical problem solving, decision-making, action research, policy analysis and organisational development.

The idea of introducing qualitative research was also to make research and science less dramatised. The point is to put forward the genuine knowledge interest of the researcher and the skill of interpreting (reading between the lines) in science. Any hypotheses, to be proven or rejected, are not necessary. Instead, the starting point becomes loosely formulated

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questions. The door is open for surprises. This is a strategy with an opposite approach to working with e.g. questionnaires. On the road to the truth the researcher formulates findings *after* his work in the field. It is important that the researcher has few pre-stated answers to his area of research and instead keeps open questions like: "What does it mean to...?" or "What is happening ..."? etc.

Grounded Theory emphasises the importance of creating something new. Therefore, theoretical creativity is needed. The spoken and written language should be mastered at the same time knowing that it sets borders to our possibilities of comprehending the world. If one does not have words to describe a certain phenomenon one does not see it. The world is organised and interpreted by the use of language. It is not possible to discard either our mother tongue or our cultural inheritance. The researcher has to be prepared to pose questions on what is seen and on what conditions this seeing is based upon. In this way the research becomes exempted from fact contaminations.

What we do becomes less important than *how* we do it. The process is the main point. "Arguments are thus primary in social science and not proof" (Kvale 1989, p.121).

Börjesson (2003) states that the research expectation is to find some correlation between words and things; coordination between what has been spoken and what is. A methodological problem appears when interviewed people say something but do it in a different way; there is a gap between words and deeds.

It is the combination of personal experience and intensity that yields an understanding of a phenomenon. In a researcher's report it is important for the reader to know the researcher's experiences and knowledge in the research subject. A question could be raised: How can a researcher know and be able to motivate that his/her research is "better" than other researchers? The answer is that s/he cannot: this is why the researcher's pre comprehension is important in order for the reader to judge validity in the researcher's arguments. In qualitative research the researcher becomes a tool to produce results. To study others is the same as studying ourselves. One cannot talk about the world without having an impact on the world. Therefore, it is essential that the researcher is vigilant to avoid bias. The question is not what material best represents reality because reality is objects made by humans. It would be smarter to study how our world is being formed and use empirical material to suit our own purposes.

The object for studies is something that has to be anchored at its cultural context, the phenomenon needs to be contextualized rather than be given a general explanation. Therefore, a starting-point becomes to realize that discourses are speaking discipline and a logic that govern the limits of what is culturally and socially accepted as: truth, trustworthy, common sense, good and bad etc. These limits of discourse show what is not possible to say in a certain context (Börjesson 2003).

The choice of research strategy influences the way in which the researcher collects data. Specific research strategies also imply different skills, assumptions and research practices. The researcher must believe in the theories of the strategy chosen - a very important statement.

The researcher has a number of strategies to choose between. Sometimes only a fine-tuning separates them. The strategies discussed in this paper are:

- 1) Phenomenology
- 3) Discourse analysis
- 2) Phenomenography
- 4) Action research and Case study

The discourse analysis strategy will be

emphasised because it appears to be a method widely and more and more practised.

How does one practically get on with a qualitative research? Nowadays a lot has been written but to quote Jonathan Potter: "study how others have done it by reading their research" (Potter pers. comm. 2004).

The following provides a brief insight to some of the above strategies. Each strategy has a key person or "originator" and this has been indicated by the expression "here represented by...".

### 3.1 Phenomenology

(here represented by Husserl) Mr Edmund Husserl (1859-1938) was a German philosopher.

Phenomenology is perhaps the most significant philosophical movement in the 20th century. The word has become synonymous with qualitative research and sometimes viewed as a paradigm, perspective and sometimes as a strategy.

A phenomenological perspective follows a concentration on the value of life, a unique openness to the experiences of the interviewee, a priority to exact information given and an attempt to find static meanings in the information. Patton (1990, p.69) says that the strategy (author's definition) focuses on the question: "What is the structure and essence of experience of this phenomenon for these people; or how is it that they experience what they experience"?

Phenomenologists tend to conduct research in a style that could be described in the below abbreviated approach-list:

- 1) Oppose the acceptance of unobservable matters
- 2) Oppose naturalism
- 3) Justify cognition
- Believe that not only objects but also a conscious life itself can be made evident and thus known
- 5) Inquiries ought to focus upon objects as they are encountered

6) Recognize the role of description by means of causes, purposes or grounds

### 3.2 Phenomenography

(here represented by Marton) Mr Ference Marton is a professor of Pedagogy at Gothenburg University.

This empirical strategy describes how people experience, conceptualise, understand, perceive and apprehend various phenomena. The different ways in which people see a phenomenon is shown in the words they use to describe it. This we can state because it is impossible to deal with an object without in some way experiencing or conceptualising it. The strategy works extremely well in confirming practical problem solving and decision-making (Patton 1990).

It has now been more and more realized that the conceptualization of distinctively different ways in which people understand various phenomena is of great interest in itself. The principle of this strategy is to identify logically interrelated ways in which a situation is experienced or understood. The different ways that all this depends on is our way of describing them and is independent of the differences between experience, perception, apprehension, understanding, conceptualization etc. What happens during a conversation is important to understand. Besides the wording it is important to observe and interpret how humans act. Psychologists, doctors, sociologists and other scientists do the same in their work. What a person answers, and how s/he answers has a meaning for the total attitude of life, feelings and acts.

The object is human experience. The aim is to find the variation that defines a phenomenon. As expressed by Marton (1986, p.32): "What are the critical aspects of ways of experiencing the world that make people able to handle it in more or less efficient ways"? The strategy was developed from empirical studies of learning in higher education. This might be the most powerful way of finding out how the development of knowledge and skills within these domains can be facilitated. It is tantamount to characterize the collective mind encompassing the different ways in which people make sense of the world. He states that if we are interested in how people think about e.g. school success the answer cannot be derived either from what we know about general properties of the human mind or from knowledge about the school system itself. Neither combination of these two parameters will give us the required insight. Researchers have to find another way. The natural choice is phenomenography.

#### 3.3 Discourse analysis

The following scholars provide the base for the most well-known social construction strategies. There are many philosophers/researchers/scholars etc. that have similar implications. The strategies below are known to be the leaders in the field:

- Potter & Wetherell: "Discoursive Psychology" (DP)
- Fairclough: "Critical Discourse Analysis" (CDA)
- 3) Laclau & Mouffe «Discourse Theory» (DT)
- 4) Derrida: "Deconstruction" (D)

The reason for mentioning these different strategies is to get an understanding that the view of the world has many faces and the researcher has to make up his mind on the preconditions for his/her belief in relation to his/her research objective and then choose a strategy that suites both criteria. Different discourse strategies use different discourse conceptions. Any of the above discourse strategies has an interest in analyzing how the structure in the form of discourses is constituted (made up) and altered depending on the context.

In the above strategies it is realized that our understanding of world-reality always comes through language. Language is a "machine" that constitutes the social world. When we have a change in discourse it manifests a change in our social world. In constructive research the belief is that all that which is being studied is constructed. With a discursive analysing strategy the question being posed is *how* something is constructed, in what *context*, within what *framework* and with what *consequences* for the human being. According to Winther Jörgensen (2000) researchers repeatedly have to ask themselves the following questions:

- How extensive is the discourse who has a relation and who presides over this discourse?
- From where does this discourse take place

   what type of people carry the discourse forward (interest)?
- 3) In what manner does the discourse exist and for whom – methodology (collective or individualistic)?
- 4) When does it take place risks for anachronism?
- Does it have any competitors why is this discourse dominating, or is it?
- 6) Why do discourses change with time, controversies, competitive ways of thinking?

A researcher's report should be comprehensive in order to give the reader a possibility to judge the researchers interpretations. The report must be transparent. The report should contain examples from the empirical material and clearly show how the researcher has moved from discoursive data to conclusions.

The following should illustrate the major strategies (theoretical perspectives) in a little more detail.

#### 3.3.1 Discoursive psychology – DP

(here represented by Potter & Wetherell). Mr Jonathan Potter is a professor of Discourse Analysis at the Department of Social Sciences at Loughborough University and Ms Margaret Wetherell is a professor of Psychology at the Open University.

This strategy states that the interest is in investigating how people strategically use

a discourse to present themselves and the world in an (often) egoistical social interaction. To study the social consequences that such behaviour might have is fundamental in this strategy. This strategy wishes to investigate relationships between individuals and between groups to find out the meaning, the consequences and the actions taken in such relations. The actual language used in such constellations therefore becomes very important. "The study of language is particularly vital to social psychology because it simply is the most basic and pervasive form of interaction between people" (Potter 1998, p.9).

DP rejects the cognitive effort to explain attitudes. Instead it is social activities that make us act as we do. An individual's attitude is not seen as stable mental dispositions, but seen as products of social interaction. When using questionnaires it is taken for granted that people's attitudes are stable mental dispositions. Small differences in the formulations of the questions give a big difference in answers. Attitudes are not stable. Potter defends the strategy saying that in DP the variations and contradictions are considered in answers (Winther Jörgensen 2000, author's translation).

To speak is the same as constructing an identity. Humans have several flexible identities according to researchers using DP. Identities are connected, incomplete and unstable. The identity becomes visible in particular events.

Certain expressions can be suppressed in certain social contexts. Discourse analysis can investigate the importance of language in processes of suppression. The awareness that certain contexts are put under taboo will make the person refuse certain discourses and this has ideological consequences because certain ideas of the world will be excluded. It is also possible to analyse why people are silent in certain discourses. The researcher analyses peoples' conversations as an expression of a world that the participants create themselves. Speech is action oriented and therefore varies with the social context.

This strategy differs from other strategies by being interested in how meanings are constituted in discourses that people use as a resource to talk about the world with a specific opinion. The researcher should focus on *how* people in discourses create their constructions of the world and form groups and identities.

Like all qualitative strategies DP rejects the positivistic epistemological strategy for collecting material (a structured strategy where the social interaction between the interviewer and the informer is minimised). Epistemological strategies cannot accept, for reliability reasons, diffuse formulations, leading questions or questions that are set together. Even wrong answers can be rejected with the motivation that the question was not measuring what it should measure. On the other hand, in DP the interview is considered to be a way to survey how people attribute importance to various phenomena in a social context.

One has to choose a transcribing system that makes it possible to analyze the interview. First thing, in the process, is to read the transcribed text and identify themes being put in categories. This is done repeatedly until the researcher has fully understood what categories best describe the text. It is interesting to search for the pronoun that has been used e.g. a change from "I" to "we" indicates a change of discourse. The coding is usually standardised and done by two researchers in order to sustain reliability.

### **3.3.2 Critical Discourse Analysis – CDA** (here represented by Fairclough). *Norman Fairclough is a professor of Language in Social Life at Lancaster University.*

This theory states that it is discourse that creates the social world. Fairclough's theories focus on investigations of changes. It means that all discourses are built on historically established definitions. It is the variety in the language we use that changes the discourse and with this also the cultural and social world.

Foucault is very much associated with discourse. He focuses on the relation between power and knowledge. His strategy of discourse analysis will help to find out what is the truth. This sets limits for what is conceivable. Who is allowed to speak and upon what grounds does such legitimacy rest?

There are five common criteria for CDA. Fairclough (Winther Jörgensen 2000, author's translation) explains them:

- Discoursive practises are an important way of constituting the social world, including social relations and identities.
- In a CDA strategy both language and discourse are seen as types of actions because discursive practises have an impact from forces in society.
- CDA helps to create and reproduce relations of power-groupings between social groups. This is the reason for establishing groups of any kind.
- 4) CDA is not to be considered as politically neutral. Contrary, it makes an effort to be a factor in social change. In order to do that people have to be more aware of how language is dealt with, in particular to achieve political or social power.

The discourse forms an important role in social practices; it reproduces and transforms knowledge, identities, and social relations including power relations and at the same time is itself formed by other social practices and structures. Discourses contribute in constructing: social identities, social relations and systems of knowledge and meaning.

In cultural studies as well as in communication studies it is realised that *meaning* is partly created in the process of interpreting texts. A specific text has several potentials of meanings and these connotations might well be contradicting each other. Therefore, all texts are open to analysis. People's social relations and identities are not based on fixed social positions but rather created using negotiations in daily interactions. CDA is not just another form of academic analysis. Part of the task is to spread the awareness of language as a factor of domination.

### 3.3.3 Discourse Theory – DT

(here represented by Laclau & Mouffe) *Mr Ernesto Laclau is a professor in Political Theory at the University of Essex and Ms Chantal Mouffe is a senior* 

Research Fellow at the Centre for the Study of Democracy at the University of Westminster.

This theory states that the social world never can be fixed because any language fundamentally is unstable by nature. A certain discourse is constantly subject to reconstruction in contact with other discourses because a discourse can never be seen in isolation.

Power is what brings the social world to existence and that makes the world develop. It is power that carries our knowledge, our identities and relations to others as individuals or as group members forward. It is in discovering what social possibilities that have been excluded that one can discover social consequences for the individual. The subject identifies itself as an individual by comparing itself to something outside itself. These outside identities form the foundation of an identity but can also create a feeling of alienation. The complete identity is something one imagines; it is a needed horizon, in the creation of the ego and one's social world. The discourse forms a special protocol for actions of human beings; a protocol that is very binding telling what one pretends to be i.e. your identity.

All people do not have access to the same subject position. For example, there are limits on what a patient can say in front of the doctor to be trustworthy and believed. Therefore, one of the tasks in DT is to map how people

are categorized in groups and how this classification has an impact on their way to act i.e. to say and do something. According to Jonathan Potter (Potter pers. comm. 2004) "this strategy is on the opposite side of the hill compared to DP".

### 3.3.4 Deconstruction

(here represented by Derrida) Mr Jacques Derrida is a French philosopher and professor of Strategy. Today he directs the École des Hautes Études en Science Sociales in Paris.

Deconstruction is a philosophical strategy directed towards the (re)reading of philosophical writings. Derrida suggests that there is nothing beyond text i.e. the strategy is partly based on the fact that the development of the world is seen as a complex historical and cultural process rooted in the relations of texts. Human knowledge is not as controllable or as cogent as Western thinking would believe. Language operates in an understated way and often is contradictory. Therefore, it has a tendency always to elude us.

Derrida contends that the traditional or metaphysical way of reading makes a number of false assumptions about the nature of texts. A traditional reader believes that language is capable of expressing ideas without changing them. The author of a text is the source of its meaning. Derrida's deconstructive style of reading subverts these assumptions and challenges the idea that a text has an unchanging, unified meaning. Western culture has tended to assume that speech is a clear and direct way to communicate. Drawing on psychoanalysis and linguistics, Derrida questions this assumption. As a result, the author's intentions cannot be unconditionally accepted. This multiplies the number of legitimate interpretations of a text.

By deconstructing the works of previous scholars, Derrida attempts to show that language is constantly shifting.

#### 3.4 Action research and Case study

Action research is a process through which practitioners study their own practice to solve their personal practical problems. Teacher action research, for instance, means daily practical problems experienced by teachers. It does not refer to theoretical problems defined by pure researchers within a discipline of knowledge. It is characterized by repeated problem identification. systematic data collection, reflection, analysis and, finally problem redefinition. The approach is built on collaborative observation and very similar to case study strategy.

In a case study the belief is that the goal of a study establishes the parameters. The objective must be met and if so there is no doubt as to validity and reliability. A case study can well satisfy the methodological rigor of: describing, understanding and explaining. The player's views are incorporated in the study.

This strategy is criticised because a single case renders it weak in providing a generalizing conclusion. Case studies are not representative of entire populations, nor do they claim to be. The case study researcher should take care not to generalize beyond cases similar to the one(s) studied. In statistical analysis one is also generalizing to a population based on a sample, which is representative of that population only. With a large sample generalizations can be made.

### 4. Discussion

In any research, the researcher should consider the following general questions:

- 1) Who will use the findings?
- 2) What kind of information is needed?
- 3) What is the purpose of the evaluation?
- 4) When is the information needed?
- 5) What resources are available to conduct the research and to evaluate the findings?

Having obtained an answer to the above questions, the researcher should ask:

6) What strategies are appropriate?

Item 6) has become the reason for writing this paper to awaken maritime researchers to shun subjectivity. In the maritime field and particularly in researches conducted on the human factor there is an evident lack of item 6): information on the strategy that has been used. When qualitative research methods are used this becomes very important for the reader in order to judge a papers reliability etc. Equally important is telling the reader the researcher's pre comprehension; what reason gives him or her right to speak.

The latest major study on e.g. crew societies is the SIRC study *"Transnational Seafarers Communities"* where the method is described as *"Tape-recorded, depth interviews used* extensively and transcribed verbatim. They were translated as necessary and organised into thematic files for collation and analysis" (Kavechi, 2001, p.2). Fine, but the author assumes that a professional reader expect more details on actually *how* these transcriptions were analysed.

Quantitative and qualitative constitute alternative strategies but are not mutually exclusive provided there is logic in the reasoning. Different strategies are appropriate for different situations. Patton (1990, p.39) states, "A paradigm of choices rejects methodological orthodoxy in favour of methodological appropriateness ... for judging methodological quality". A qualitative strategy, in isolation, is indeed relevant as long as the objectives are met.

According to the author, discourse is an encircled and analysed *system of conversation* in line with some type of perspective. It is all about what we look for in life; on what questions we put forward and the strategy we use to answer the great questions in life. The efforts to find interpreting possibilities are an important ambition in itself. The researcher can dramatise his study and analyse the result. The researcher's "story" of the world will give a new picture of the world, or an old story that has been dramatised in a new way.

To understand the world does not necessarily mean that you tell how the world really is. The issue is to understand what conditions apply to understand something that can be understood in different ways. To *reflex* is the key and the goal to understand the discourses that are studied. "Knowing who you are in our society is in part knowing that you are part of a tradition in which knowing who you are is important and which is committed to this quest", (Gouldner, quotation from Börjesson 2003, p.187).

An individual can have many identities. Critics then argue: How can it be possible to have an opinion on a group with a mixture of identities? Critics also mean that there is room for too many subjective interpretations; there is no system to separate between good

Type of concept	Strategy	
	Quantitative (positivistic)	Qualitative (hermeneutic)
Reasoning	Deduction	Induction
	Objectivity	Subjectivity
	Causation	Meaning
Question	Pre specified	Open-ended
	Outcome ended	Process oriented
Analysis	Numerical estimation	Narrative description
	Statistical inference	Constant comparison

Table modified from A.Casebeer and M.Verhoef (1997) *Combining Qualitative and Quantitative Research Methods* 

Table 1. Opposing strategies

and bad interpretations and valid and invalid conclusions. Quantitative researchers always give the critique that a qualitative strategy is a lot less stringent and therefore less valid in its conclusions. As an answer to such skeptics Winther Jörgensen (2000, p.116, author's translation) states, as one argument, that ten interviews can give equally good information as one hundred answers on a questionnaire.

Statistical data provide a succinct and parsimonious summary of major patterns and are easily aggregated for analysis, while qualitative research such as case studies provide depth, detail and individual meaning.

Table 1 illustrates the differences between the two opposing strategies. The concepts are fundamental in any research.

The analyser's power for explanation, including the capability to forward new explanations, shows validity. The problem is not to add facts but to arrange facts making them understandable in their context and then better understood.

### 5. Conclusion

The *rules* of research strategies are seen as a guarantee that personal or cultural

preferences do not govern the research result. Quantitative variables can be quantified with validity, reliability, and credibility. On the other hand, in qualitative research the validity of a statement depends a lot on who is presenting a specific statement (a privileged speaker). For example, as in Figure 1, the classroom is a platform (formation) for many discourses. The two identities, culture and communication, are examples of discourses in a mixed ethnic classroom.

The researcher's task is to make clear how the two discourses form an opinion on the world in the classroom and what social and learning consequences it might have. The activities in the discourses create boundaries on what is false and what is truth. Some become more relevant than others (perhaps even unthinkable). In this way the discourses constitute a social process. The world in the classroom also depends on what has not been said and on discourses outside the room. Together all will form some consequences that could be of interest to analyse. Perhaps, a classroom analysis will show that it is human power that creates the social environment because power is often linked to knowledge. Really, who has the power in the classroom? Perhaps it is someone outside the room.



Figure 1. Classroom discourses

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To give an example on how a qualitative research, according to one of the above strategies, could be another challenge.

Being unable to recognise the difference between the spring blossom and the summer fruit, the scholar never realized that he had not experienced what he was looking for

From Halcolm's Evaluation Parables

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# BIOGRAPHY

#### Jan Horck

Captain Jan Horck has a Master Mariner examination from the Malmö Maritime Academy, 1970. He also has an "Extra Master" (Navigationslärar examen) from the University of Stockholm, 1979. From the University of Lund and the University of Malmö he has obtained academic points in mathematics, astronomy and pedagogy. In 2003 he obtained an MSc in Education at the Malmö University.

Between 1965 and 1982 he served onboard ships, of the Broström Shipping Company, in different positions. In 1980 he enrolled at the Maritime Academy in Malmö (University of Lund) as Associate Professor. In 1982 he took part in the pre-planning of World Maritime University (WMU), and in 1983 he was contracted with WMU. Presently he is a Lecturer at WMU.

His international experience includes conducting and lecturing at IMO/SIDA international courses on survey MARPOL Annex II and I and presenting papers at inter alia BIMCO, IAMU and IMLA seminars. He is also a visiting lecturer at IMO's International Maritime Academy (IMO/IMA) in Trieste, Italy and the TUW Academy Middle East in Abu Dhabi, UAE.

Besides lecturing at WMU he has been, and is, engaged in research projects like the EU project on Harmonization of European MET systems (METHAR), EU Study Project on the Maritime Education and Training Systems of China, India, Indonesia and the Philippines (CIIPMET), Maritime Training in Malaysia and currently in the EU project on Information exchange and impact assessment for enhanced environmental-conscious operations in European ports and terminals (ECOPORTS).