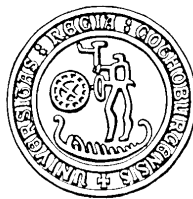GÖTEBORG STUDIES

IN EDUCATIONAL SCIENCES 134

Glen Helmstad

UNDERSTANDINGS OF UNDERSTANDING

An inquiry concerning experiential
conditions for developmental learning

Helmstad, G. (1999). *Understandings of understanding: An inquiry concerning experiential conditions for developmental learning* (Göteborgs studies in educational sciences 134). Göteborg: Acta Universitatis Gothoburgensis

Errata

Page	Paragr.	Line	Currently is	Should be
14	1st	10th	as he also indicates, as he also indicates	as he also indicates,
*36	3rd	3rd	is a rule	a rule
*37	3rd	7-8th	respond to	are responsible for
*40	1st	2nd	inquiry appears to have	inquiry has
*49	Last	1st	being can	being that can
*60	3rd	12th	through the	through experience
74	1st	10th	this	This
81	2nd	12th	experienced with understandings ways of being.	experienced with.
	3rd	5th	for possibilities	for one's possibilities
90	1st	2nd	has however has	has
		3rd	these	These
*92	5th	5th	(p. 20)	(p. 20; my translation)
96	2nd	2nd	as,	
105	Last	1st	understanding on	understanding was carried out on
112	2nd	5th	young and mature	young and mature adults
*114	1st	7th	about when they have experience and what	about what
115	3rd	7th	for as	for oneself as
*120	2nd	4th	?	.
*122	2nd	2nd	list be	list can be
126	Last	4th	can probably can be	can probably be
*129	2nd	5th	sense,	sense, and
		23rd	It worth	Its worth
*134	2nd	3rd	world the	world, the
*135	2nd	6th	understanding.	understanding (see Appendix 4, p. 256 f.).

136	2nd	7th	to facilitate	to either facilitate or frustrate
142	2nd	2nd	what became	
143	1st	4th	also the	also experienced as
*166	2nd	5th	b) relational	b) referential
*170	1st	9th	characteristic reception	characteristic of reception
173	2nd	3rd	gave following	gave the following
174	2n	2nd	more an more	more and more
175	2nd	6th	that if the if the	that if the
	3rd	5th	appears	appeared
*176	1st	2nd	involve	involves
	2nd	8th	realising	realisation
*178	3rd	8th	with feels	with and feels
183	2nd	8th	comparison of with	comparison with
*184	2nd	9th	understood	understand
*186	6th	2nd	this finding	this, finding
*187	1st	3rd	with	when
188	2nd	3rd	led	lead
		5th	led	lead
*189	2nd	6th	that though	though that
		9th	experience	experiences
190	4th	1st	encourage	encouraged
191	3rd	3rd	over above	over and above
192	2nd	14th	significant	a significant
193	3rd	Last	foreseen.	foreseen target.
196		7th	reach the	reach with the
203	1st	8th	where	were
*205	4th	2nd	supported	given
208	3rd	7th	presents itself to	presents to
*211	2nd	5th	themselves	them
*	3rd	3rd	included as in	included in
*212	1st	Last	develops does.	develops.
	2nd	21st	self-understanding learners	self-understanding of learners
213	1st	10th	forward beyond	forward
214	3rd	1st	read synony-	read as synony-
218	2nd	5th	be express	be expressed
*		7th	being to oneself,	being,
		8th	also be	also to be
*	3rd	3rd	understanding, is	understanding. This is
*		4th	so far in relation to the understood, others	so far oneself in relation to the understood. This links one to others

5th   and oneself in   in

_____
* The most significant corrections.

To all my teachers and their teachers with deep gratitude and great expectations

ABSTRACT

Title:	Understandings of understanding: An inquiry concerning experiential conditions for developmental learning
Language:	English
Keywords:	Activity, learning, experience, understanding, explanation

ISBN: 91-7346-349-3

This thesis is about understandings of understanding and has developed from previous research on study skill and conceptions of learning among participants in various forms of education. The purpose was to investigate understandings of understanding as a phenomenon and the significance of understanding of understanding for learning.

The investigation involved 101 persons between 12 and 75 years of age from four different forms of education. The data was produced in two steps. In the first, the participants wrote a narrative about an occasion when they experienced that they had understood something. In the second, 8–10 participants out of each group were selected and participated in a subsequent interview about the meaning of understanding. The results were constituted through two interpretative turns. Data was analysed with reference to forms of understanding, types and conceptions of understanding and a selection of the cumulated contribution of four participants was also analysed as expressions for differently advanced forms of consciousness of understanding and their significance.

The enquiry resulted in a description of three different ways of understanding understanding as a phenomenon. Understanding emerged as: 1) a reception of new knowledge either through observation or information; 2) an acquisition of desired knowledge through relatively successful completion of deliberate learning activity; and: 3) realisation of a new truth on the basis of experience and interpretations of experience. This was the first part of the findings. Regarding the second, the different understandings expressed by four participants, this indicated that performance of learning activity that involves development of more advanced systematic understanding as an essential objective, requires relatively sophisticated understandings of understanding. It also suggests that the development of understanding is guided by the conversations about learning and understanding that are developed in different pedagogical practices.

The conclusion is that relatively comprehensive and formal education, is a necessary but not sufficient precondition for the development of experiential prerequisites for deliberate developmental learning. In addition, the education must also make provisions so the learner may also realise that all human understanding is finite and contingent.

CONTENTS

PREFACE

About 4 1/2 kilometres north north east of *Nyhamnsläge,* on the other side of the *Kullaberg* peninsula in the north western part of *Skåne,* lies a remote rocky cove called *Hålestenar.* Since the north face of Kullaberg, which is a ten kilometre long primary rock horst, is very step and the beach is covered with large erratic block, it is hard to get there. But at this remote place, the artist and art historian Lars Vilks started in the summer of 1980 to work on a sculpture of driftwood and forest rests (Vilks, 1994).

According to Vilks' own account, which is written in the third person, "[t]his was his first attempt to construct anything, and it took time before he – the long road – learnt a kind of trade. He called the work 'Nimis', a word in Latin that means 'too much, or a super abundance'. The idea… was to create a place that could stimulate the mind, a curious suggestion for unification of theory and praxis." (ibid., p. 17).

I had my first encounter with *Nimis* in the summer of 1982. At that time I was a young and newly wedded first year student at the university. It was my wife, Cecilia, that took me to it. She had heard her parents speak about the sculpture, which at that time was subject for animated discussion in the local press. Cecilia led me along the trail that was gentle to begin with, but that soon got rough. After about a 15 minutes we reached the beginning of a ravine and started to go down. After about 10 more minutes the sculpture all of a sudden appeared to us. It was an enormous driftwood construction, about 75 meters long and had several towers. The highest was over 10 meters high. And all was made out of thousands of driftwood pieces, dead tree limbs, rocks and nails. I could hardly believe my eyes, "And this is a one man's work", I repeated to my self over and over.

About one and a half years later I started with my own construction, the book you have in your hands. I've been back to *Nimis* several times since my first encounter. The last time I was there was in 1994. The

construction was then about 150 meters long and the highest peak was 15 meters tall. The construction weighed 70.000 kilos and was held together by 150.000 nails. Vilks had by then worked on the sculpture on 3.500 occasions.

At that time, I made also a new acquaintance. Some 200 meters south of *Nimis*, Vilks was working on a new construction, *Arx* (fortress). I walked over to it and noticed that it was made out of rocks, iron bars, concrete, and decorated with things like wrist watches and letters. As I walked up the narrow ravine that afternoon, the idea struck me that the manuscript I was working on was a little like both *Nimis* and *Arx*.

At that time I had serious doubts that I ever would be able to finish the project I started as a young doctoral student. The project had grown over its proportions. The time for the work on it had also run out. And I felt like I carried the weight of the world on my shoulders. I was almost down and out, but I've continued to go on with my project and now I have come this far with it. Being here, I have come to realise better than ever that the work of the thesis is equally as little as *Nimis* and *Arx* are, the work of only one man. It is certainly true that I am the author of the book, but behind me are all the good women and men, boys and girls, that have helped me on it.

The book is the latest in a row of writings on the experience of learning and understanding among participants in various forms of education. It is about unfolding understandings of understanding that involve deliberate development of more advanced systematic understanding of the object for one's teaching and studying, as a general prerequisite for teaching and learning. This is a teaching and learning that is believed to be more educative that teaching and learning that merely aims at "understanding". This is because, whereas the latter form of reaching-learning is merely oriented towards establishing what is, the former is oriented toward bringing out what can become.

I have dedicated the book to "all my teachers and their teachers with deep gratitude and great expectations". This might need some words of explanation. For me, "teachers" are first of all persons that one has learnt of, now learns of and can come to learn of in the future. Teachers

are thus present, past and future servants of one's education. My teachers are the persons that have addressed me, that I have heard and that I have learnt of. I also think of them that I learn of now and that I can learn of in the future. My teachers' teachers are the persons that they have learnt of, now learn of and can learn of in the future.

Among my teachers, I think first of all of my mother Kerstin and father Lennart, my brothers and sisters (Kenneth, Liselotte, Morgan, Per-Anders and Lena) and their husbands and wives, for their unfailing love for me. I think also of all the persons that have been such a good friends, neighbours, classmates, coaches, teachers, church leaders, employers, managers, work-mates, collaborators, etc. through out the years from birth until now. It takes a whole city and more to educate a person. Thank you all!

At the university and on various conferences, I have met a lot of people that mean a great deal to me. Among these, I think for instance of Claes Alexandersson, who encouraged me to apply to the researcher education and Ference Marton, who has been my supervisor throughout the years and without whom this thesis would never have come into existence. I would also like to thank Staffan Larsson for being such a great "coach" in the Privux-project and for good supervision while Ference was on the first Sabbatical and of course for the contribution that has been made to this project by the participants in the study and their teachers. Thank you for sharing your time, thoughts and efforts with me in the quest to make sense of understanding.

In addition to the above, I would here also like to express my gratitude to a long list of persons that have been good study comrades and work mates over the years. In the work with the manuscript, which to say the least has been cumbersome, I have received a lot of good comments from a lot of persons. Among these, I would especially like to mention Biörn Hasselgren who has supervised me so generously with his tough care since Ference went to Hong Kong. I express here also my gratitude to Bengt Molander, Janet Burns, Dennis Beach and Márta Fülöp for their comments on earlier and in some cases even more recent versions of the manuscript. Over the years I have also

received financial support from several sources. I thank you for this. It takes a whole university and more to educate a researcher. Thank you all!

I would also like to express my gratitude to my wife Cecilia and our four children Amelie, Amanda, Aron and Astrid, for their unfailing support in my "Nimis-project". Let's go and have a picnic at Hålestenar as soon as school's out to celebrate our part of the project! I would here also like take the opportunity to thank Cecilia's parents Kalle and Berit, her sister Wanda and her husband Jørn for their unfailing support to me and my family through out the years. It takes a wife, children, an extended family and more to educate a man, father, son and brother in law. Thank you all!

At last I would also like to acknowledge your role in the project too, dear reader(s). For when summarising a Nimis-project "one can use the familiar aphorism of Marcel Duchamp, that 'the observer creates the work of art'. This was the case with Nimis. It was created and continues to be created in a perpetual friction against social reality. Nimis is still in progress. It does not exist officially and lives in a sphere of lawlessness. And it scarcely reminds us about anything other than itself." (Vilks, 1994, p. 58)

So, good luck in your completion of the work as a reader. I hope you will find that it was worth the effort! I also hope to learn from you and from what you manage to make from the book.

Nyhamnsläge, April 10, 1999

Glen Helmstad

PART I

INTRODUCTION OF THE RESEARCH PROBLEM

OVERRIDING PURPOSE OF THE STUDY

> *Thoroughly understand what it is to understand, and not only will you understand the broad lines of all there is to be understood, but also you will possess a fixed base, an invariant pattern, opening upon all further developments of understanding. (Lonnergan, 1956, p. xxviii)*

This study is from an educational context. In educational activity, as well as in all other activity that involves communication, *understanding* is a highly prestigious word. It is a word that is employed to express meaning about and to refer to something that is desired; something that one would like to do or see come to pass, and is employed whenever one hears, reads, thinks, says or writes things like: "[the s]tudies shall develop the pupils' abilities to understand" (*Regler för målstyrning,* 1994, p. 138; my translation) or "[the] evidence is fairly compelling that… students often manage to get through courses without acquiring a clear understanding of some of the most fundamental aspects of the material the courses are intended to cover" (Nickerson, 1985, p. 201).

In this sense, the meaning for "to understand" functions as an organisational notion which guides one in planing, implementing, participating, performing and evaluating cognitive transactions as parents, teachers, administrators and students in education (Rosenberg, 1981). It is obvious that teachers and others that have an

interest in teaching and learning as parents, administrators and researchers in education as a rule think that "understanding" means something other than "rote-learning".

In order to "understand", it is argued, it is not sufficient that a student "can give evidence that he [or she] remembers, either by recalling or by recognising, some idea or phenomenon with which he/she has had experience of in the educational process" (Bloom, Engelhart, Furst, Hill & Krathwohl, 1956, p. 28 f.). In addition the student must also be able to present evidence that he/she can also utilise what he/she knows "in new situations in a form very different from that in which it was originally encountered" (ibid., p. 29). In other words:

> we cannot be said to understand something unless we can employ our knowledge wisely, fluently, flexibly, and aptly in particular and diverse contexts. (Wiggins, 1993, p. 200)

In spite of this awareness of what it means "to understand", it seems as if parents, teachers, administrators, and researchers in education, are often not consciously aware of what it takes to understand, nor what is involved in understanding. Nor do they seem to be consciously aware of what they mean understanding as a phenomenon is.

The assumed difficulty in explaining what understanding is, or what is meant with understanding, is something that also seems to be shared by philosophers, logicians, linguists, and psychologists, that have in one way or another approached and tried to understand understanding (Parret & Bouveresse, 1981). In a linguist's treatment of the problem of understanding understanding for instance, it is even suggested "that to understand understanding is a task to be attempted and not to be achieved today or even tomorrow" (Ziff, 1972, p. 20).

Understanding is obviously difficult to understand. It seems even as if it is difficult to understand wherein the difficulties in understanding understanding reside and what they consist of. Reflecting upon this, Parret and Bouveresse (1981) note that, "[a]n object can be difficult to understand because of its particular complexity" (p. 1). This is obviously the stance that is taken up in Ziff (1972). An object can, according to Parret and Bouveresse (1981) however, also be difficult to

understand because of the vagueness or "in distinctness" of the character of the thing under consideration, or because of its only too great simplicity. Difficulties in trying to understand an object may, following these authors, also though stem from approaching the object as something other than itself, or from its "exceptional and unheard-of aspect, or equally from its excessively ordinary, mundane and familiar character." (ibid., p. 1).

Lingering on to the latest mentioned reason, Parret and Bouveresse draw attention to the phenomenon that was touched upon above, namely the experience that something that has always been understood as being *selbstverständlisch* (self evident) all of a sudden becomes strange and incomprehensible, when one tries to give an explanation or reach an explicit understanding of it. The attention is also directed to a classical example of this phenomenon, which has also been discussed by Wittgenstein, namely the difficulties Augustine experienced when he asked what time is. These difficulties could obviously not stem from that he had no or little experience of time, but rather from that he was not consciously aware of what he experienced time as.

Commenting upon this source of difficulty in understanding understanding, Parret and Bouveresse (1981) conclude finally by quoting Tugendhat that:

> There seems to be here a domain of knowledge where our ignorance does not seem to be based on an insufficient experience but on the fact that it concerns aspects of our understanding which are too close to us and too evident (*Selbstverständlich*) for us. We are not looking here for an explanation of an ununderstandable object in its factuality but for an elucidation of what is already understood. And this elucidation can only be obtained by reflecting on our understanding itself, not by experience. (Tugendhat, 1976, p. 19; in Parret & Bouveresse, 1981, p. 1)

The difficulties in understanding understanding appear, thus, not only to be many, but also stem from different sources. It seems also reasonable to assume that difficulties in understanding understanding also vary with a lot of other things, such as, what discipline the enquiry is carried out in, at what point in history, by whom, under

what circumstances, for what purpose, towards what end, with what means, etc. But what is meant semantically with "understanding"?

A brief check in any of the larger dictionaries reveals that the noun "understanding" and the approximate Swedish equivalents, are verbal nouns: i.e. nouns that are "directly derived from a verb or verb stem and in some uses having the sense and the construction of the verb." (Webster's Ninth New Collegiate Dictionary, 1991, p. 1309). In Swedish, the nouns (*förståelse; förstående)* derive from an Old Swedish verb, *forstanda,* that comes from the Old Saxon verb *forstandan.* This corresponds with the Old High German verbs *firstantan* and *firstan,* the origins to the German verb *verstehen* which means know [how to], grasp, apprehend, mean (Svenska Akademin, 1928, F. 3256). In the English case, the noun *(understanding)* derives from the Old English verb *understondan, -standan,* that corresponds with the Old Frisian verb *undirstonda,* the Mediaeval Danish verb *understande,* the Mediaeval Low German verb *unterstan,* to understand, to step under, the Medieval Dutch *onderstaaen,* and the Old High German *understan, -sten,* which means to take upon oneself, to venture, presume, etc. (Oxford English Dictionary, 1970, p. 147). The Oxford English Dictionary says also that the same use of *stand* with a different prefix appears in the Old English *forstandan,* which like the Old Swedish verb *forstanda* is traced back to the origins for the German verb *verstehen.*

In each of the two cases, the verbs from which the nouns are derived, are thus formed out of a combination of a prefix and word for a mode of standing. In the first case, the prefix seems to stem from the preposition, *före* (before, in front of, ahead of). In the second case, the prefix seems to stem from the preposition *under* (below, beneath). In spite of this obvious difference, the Swedish and the English verb seem to be quite similar to the German verb *Verstehen,* whose original meaning appears to have been "the legal sense of the world, i.e. representing a case before the court… mastering it to such an extent that one can cope with all the possible moves of the opposing party and assert one's own legal standpoint" (Gadamer, 1960/1993, p. 260). In this sense "to understand" means, thus, to know a thing to the extent that one also knows how to explain it. It is a sense of "to

understand" that reminds of what educators and researchers in education appear to sustain.

Now, "to understand" (*förstå)* is not only used in a non transitive sense. In *Svenska akademins ordbok öfver det svenska språket* [The Swedish academy's dictionary over the Swedish language)], for instance, the word *förstå* (understand) is also said to have the following usage:

> 1) … notice, experience…; learn to know…; 2)… get to know, learn that, hear, experience…; 3) find out; realise that, realise (something or that something is or what is)…; 4) (with the intellect) penetrate, comprehend the real meaning or the significant or the inner coherence in (something) realise (how something is possible or why something is in a certain way, etc.); also realise the natural or justified in (something); grasp… 6) (with the intellect) apprehend (a through speech or writing or sign or otherwise made message), so that one with the words or signs etc. associates a certain significance or meaning, grasp…, apprehend; … 7) (especially in writing) (ap)prehend or construe (something) in a certain way, take or comprehend (something) in a certain significance), (for oneself) impute a certain meaning or significance in (something); interpret…. 8) mean, refer to, intend; put a certain meaning or significance into in (something). (Svenska Akademin, 1928, F3256-3262; my translation. See Appendix 1 for a transcription of the original text.)

In the *English Oxford English Dictionary* (1970), the word *to understand* is said to have the following usage :

> 1. To comprehend; to apprehend the meaning or import of; to grasp the idea of… c. To apprehend clearly the character or nature of (a person)… 2. To comprehend by knowing the meaning of the words employed; to be acquainted with (a language) to this extent…b. To grasp the meaning or purport of the words (or signs) used by (a person)… 3. To comprehend as a fact; to grasp clearly, to realise… 4. a. To grasp as a fixed or established fact or principle; to regard as settled or implied without specific mention… b. …to… learn by information received… c. To take or accept as a fact without positive knowledge or certainty; to get as an impression or idea; to believe… 5. To take, interpret, or view in a certain way… 6. a. To give heed to, attend to… b. To receive, accept… c. To conceive… 7. To recognise or regard as present in thought, though not expressly stated or mentioned; to supply mentally… (Oxford English Dictionary, 1970, volume XI, T-U, p. 147 f.).

In this sense, the Swedish verb *förstå* and the English verb *to understand* appear to be used in just about the same senses. Both the one and the other can function as a word that expresses meaning about and refers to what happens when understanding takes place. In this sense *understanding* refers not to a concord nor to an intellect or a

signification, meaning, sense or comprehension of something, which are some of the things that can be ment with the noun (Svenska Akademin, 1928, F. 3264; Oxford English Dictionary, 1970, volume XI, T-U, p. 148 f.). It refers rather to something that presents the character of a happening or an event, namely what could be said to take place whenever one arrives at or whenever a new significance, meaning, sense or comprehension, etc. takes place in the world or, in other words, comes into existence.

This use of the noun "understanding" (*förstående)* suggests that *understanding* is perhaps not so much something that one does or achieves, as it is something that one participates in. If understood in this sense, understanding can perhaps also be interpreted as the kinds of occurrences or happenings where one: 1) experiences that one realises something, for instance, that something is or what is; or where one: 2) experiences that one penetrates, or comprehends something, for instance, the real meaning or the significance or inner coherence in something, or the idea of how something is possible or why something is in a certain way.

In this perspective, *understanding* is, thus, first of all conceived as human experience. It is what one goes through whenever one arrives at a new *comprehension, insight, etc.* In this sense, it is not so much something that a person does, as it is something that he/she undergoes as he/she grows more experienced. It is a conception of understanding that first and foremost has been inspired by Gadamer (1960/1993), but that has also been inspired by Vygotskij (1934/1987), Whorf (1942), Leont'ev (1959/1977), Engeström (1987), Lave and Wenger (1995), Lave (1990) and others (Säljö, 1982; Giorgi, 1985, 1992).

According to this conception, understanding is not so much something that one has achieved as it is something that one exercises and undergoes as one participates and grows into relatively fully fledged practitioners of particular and related practices (Lave, 1990). Leont'ev (1959/1977) provides, through an example from the practice of child rearing a principle explanation of the character of the circumstances wherein one rises to relatively more insightful being:

> The mother or the child's nurse feeds the child with a spoon. Shortly thereafter she places the cutlery in the child's hand, and the child attempts now to eat with it without assistance.
>
> At the same time the child lets itself be guided by its natural tendency to put everything that it lays hand on, in its mouth.
>
> The child does not yet, hold the spoon horizontally, so therefore the food slides off. The mother does not however merely observe. She helps the child in that she intercedes in its actions. In the course of the *mutual* action that thereby arises, the child now forms the skill to use the spoon; it uses it from now on as a human tool. (p. 627; my translation)

This example gives a principal explanation of the circumstances wherein one above all rises to better "understanding", one does so first of all in an educational activity and in an activity that involves elements of instruction. In an attempt to determine the meaning of "education", Myhre (1992) arrived at the following definition:

> With education we mean the over all attempts of particular adults and the older generation to – under mutual influence – bring about the knowledge, skills, attitudes and values, forms of life together and beliefs to children and youth that represent the social and cultural coherence that the education take place in, in such a way that the new generation receive help in realising their abilities and possibilities toward human kindness, responsibility and independence, and by this become able also to contribute to society and culture in both a stabilising and innovating sense. (p. 45; my translation).

This gives an image of education as a certain form of interpersonal and societal activity (Enerstvedt, 1989). As such, education refers to the activity where teaching and learning are co-ordinated for the purpose of developing socially and personally desired abilities. Education is whenever one or several persons (A), which want one or several other persons (B) to develop a personally and socially desired ability (X), perform an activity (T) with the purpose to engage B in activity (S), which A thinks can lead to X, and where B as a response to T also tries to do S in order to develop X and thereby at least to some extent also succeeds in doing so (Hirst, 1973, p. 171 ff.).

On the basis of this, one can also say that education is the activity form where typically at least two persons – that differ from one another in at least some respect with reference to their functional relations relative a particular object – interact with one another through communicative actions about that object with particular means that lead to mutual

actions arising whereby the "less knowledgeable" (with the assistance of the "more knowledgeable") takes over and develops a particular socially and personally desired functional relation relative that particular object. If understood in this sense, one can, to put it shorter, say that education essentially consists in teaching and learning in productive association. And if *teaching* is reserved for "the more knowledgeable's" activity, *learning* can be reserved for "the less knowledgeable's" corresponding activity in that dual activity form called *education.*

GENERAL DELIMITATION OF THE PURPOSE

This thesis has been conceived in an educational context. In educational activities of the kind that are performed in a researcher education, the purpose is to develop a better understanding of whatever it is that is the subject for study. In this case, the subject for study has been "understandings of understanding" among persons engage in studies. Assuming that just as what one tends to understand with understanding guides, one as educator in planning, conducting, and evaluating teaching activity, so does what one understands with understanding as a learner, guide one in one's participation in and performance of study activities. Moreover, assuming that what one tends to call understanding is determined by one's previous and current experiences of understanding, this experiential ground forms a basis for one's current personal readiness to engage in study activity and tends to develop as one grows more experienced in understanding. The study has also been intended as an inquiry into this, as a prerequisite for engagement in such activity (Marton, Dahlgren, Svensson, & Säljö, 1977; Marton, Hounsell, & Entwistle, 1984, 1997; Svensson, 1984b).

The research object is, thus, studying persons' understandings of understanding, with the general overriding purpose to study such experiential conditions for developmental learning, so one may better understand what it takes to understand, what is involved in understanding or, in other words, the learning that involves devel-

opment of better understanding. Hence: *Understandings of under-standing: An inquiry concerning experiential conditions for developmental learning.*

OUTLINE OF THE THESIS

The thesis consists of four parts. These are: I. Introduction; II. Methodology; III. Results; and: IV. Discussion.

In the first of these parts, *Introduction of the research problem;* which besides this introductory chapter also consists of chapters two, three and four; the more precise purpose of the study is introduced against the background of some previous studies of conceptions of learning and understanding, and against the background of an account of how understanding has been understood in the philosophical tradition.

In the second part, *Methodology,* which consists of chapters five and six, the design and the procedures of the study are, explained against the background of an account of the general characteristics of the research approach that the work can be considered as an example of.

In the third part, *Results,* which consists of chapter seven and eight, the results about how understanding of understanding tends to develop, and the significance of different ways of understanding un-derstanding, is presented against the background of a presentation of the results concerning how understanding has appeared to be understood by the subjects in the empirical study.

In the fourth part, *Discussion,* the results of the investigation are discussed against the background of previous studies, the foreground of the possibility to investigate the development of understandings of understanding and the pedagogical significance of such development more precisely. In this part the results are also discussed with respect to the potential significance for relevant aspects of pedagogical practice.

UNDERSTANDING IN PSYCHOLOGY AND EDUCATIONAL RESEARCH

> *At root understanding is a true paradox…what it means to understand is… much more complex than might first appear. But recognition of this fact may be a step in the direction of better understanding… (Nickerson, 1985, p. 235, 236)*

Against the background of the initial characterisation of understanding, it could be expected that there is quite a lot of psychological and educational research on *understanding*. Judging from the indexes of contemporary encyclopaedias of psychology and education and educational research, however, the interest seems very small. The word *understanding* is, for instance, not included at all in the index of *The Encyclopaedia of Psychology* (Corsini & Ozaki, 1984). It is used in *The Encyclopaedia of Educational Research* (Mitzel, Best & Rabinowitz, 1982) and in *The International Encyclopaedia of Education – Research and Studies* (Husén & Postlethwaite, 1985–1990), but only in relation to *hermeneutics* and the debate of the character of human studies as opposed to natural science on the one hand, and in relation to research on student thinking on the other.

Attempts to find relevant literature through literature searches in databases such, as *ERIC, PSYCINFO* and *PSYCHALERT* can at first sight appear more promising, since one there actually can find quite a few titles that include the key word. At a closer inspection however, it

emerges that hardly any of the articles are about understanding as a phenomenon. An exception from this rule is Nickerson (1985), who under the title of *Understanding understanding* in the *American Journal of Education,* draws attention to quite a lot of research on students' learning and understanding in teaching and learning in various school-, high school and university subjects over the last two or three decades.[1] This research has, following Nickerson (1985), shed some light on the nature of understanding as he also indicates, as he also indicates, one has still not, however, yet arrived at a working definition of understanding

Assuming that the achievement of this objective will be very important for working out "educational policies and procedures that will ensure understanding" (Nickerson, 1985, p. 229), Nickerson also discusses some of the results from the above research with reference to what it seems to reveal about the nature of understanding, what it means to understand something and how to assess understanding:

> Understanding is an active process. It requires the connecting of facts, the relating of newly acquired information to what is already known, the weaving of bits of knowledge into an integrated and cohesive whole. In short, it requires not only having knowledge but also doing something with it. (p. 234)

Notwithstanding that Nickerson's article draws attention to the phenomenon of understanding and also discusses some obviously very relevant aspects of it with respect to education, it does not say so much about what characterises understanding, only about what one has to be aware of if one tries to make understanding of understanding an object for research in its own right.

Besides Nickerson (1985), the search for psychological and pedagogical research literature on understanding in the mentioned data bases has also resulted in the observation of a hand full of articles that concern students' understanding of understanding (Burns, Clift, & Duncan, 1991; Entwistle & Entwistle, 1991, 1992; Tan & Novac, 1992). But apart

---

[1] See Pfundt and Duit (1991) for a bibliography on students' alternative frameworks and science education.

from these few examples, the research on understanding seems sparse in psychology and education.

There is research literature in psychology and education about *understanding* in the sense, for instance of child psychological research on *ideas and explanations* (Hall & Browne, 1903; Piaget, 1929/1982; Oakes, 1947) and early pedagogical research on *study methods* (Forsberg, 1928). There is also gestalt psychological research on *insight* (Köhler, 1925) and *productive thinking* (Duncker, 1935/1972; Wertheimer, 1945) and the discussion of *insight* in psychoanalysis (Kris, 1956; Bush, 1978; Blum, 1979; Thoma & Kachele, 1986). The historical psychological research on *concept formation* and *development of concepts* in individual and general history, is also about understanding (Vygotskij, 1934/1987; Leont'ev, 1959/1977) and the same holds for Perry's (1970) study of *forms of intellectual and ethical development* in the college years.

Further, there is also some phenomenological research in psychology on *the experience of being understood and learning* that could be said to be about understanding (Van Kam, 1959; Colazzi, 1973; Giorgi, 1985, 1992) and some research on *problem solving* (Ohlsson, 1984a, 1984b; Montgomery, 1988), *reading comprehension* (Spiro, Bruce & Brewer, 1980; Waern, 1981), *mental models* (Johnson-Laird, 1983), *developmental learning activity* (Engeström, 1987) and *situated learning as legitimate peripheral participation* (Lave & Wenger, 1995). Not to speak of the research on *misconceptions* and/or *alternative frameworks* that Nickerson (1985) refers to (cf. Pfundt & Duit, 1991; for an overview of this research in science education).

In addition to the mentioned literature, there is also some literature on *study skill and conceptions of learning,* which to the extent that it presents accounts of learning activities that involve understanding, is also about understanding (Svensson, 1976; Marton et al., 1984, 1997, Säljö, 1979, 1982; Pramling, 1983; Marton, Dall'Alba & Beaty, 1993; Marton, Watkins & Tang, 1997). So instead of a scarcity, one is now rather confronted with an abundance of literature about understanding in psychology and education and it is rather just the case that the term itself is not included in the title or the list of key concepts in the abstracts.

A closer study of the literature reveals, however, that most of it either deals with particular types of understanding understanding, or with aspects of understanding, or with understanding as mental meaning. The Gestalt psychological research focus, for instance, is on how one finds a solution to one or another type of problem. The psychoanalytical research focus, for instance, is on the analysand becoming conscious of the unconscious during psychoanalysis. The historical psychological research focus is on the development of concepts or word meanings. The more recent research on problem solving focuses on processes that lead to the solution of certain and often specific problems, and which often only have one or a limited number of – for the researcher already known – solution(s). The research on reading comprehension deals with understanding that results from reading. The research on mental models, deals, as it seems, preferably only with established "understanding" and not so much with the event as such. The activity theoretical research on learning by expansion and the research on situated learning as legitimate peripheral participation in social praxis, focus more on the socio-cultural character of the activities where understanding takes place, than on the character of the event as such. The research on study skill and conceptions of learning that involve understanding will of course also present its own limitations when considered as research on understanding in education.

This means that in spite of the mentioned literature in psychology and education being expected to have at least something to say about *understanding,* this is not about understanding as a research object in it own right. The nearest is the research on conceptions of learning, as this relates to research on experiences of understanding, which have been found. This is also why just this research will be discussed in the following sections of this chapter, along with historical research on the development of thinking and speaking, concept formation and word meaning, which have also been found relevant for the present study.

RESEARCH ON EXPERIENCES OF LEARNING AND UNDERSTANDING IN EDUCATION

The nearest research context for the present study is the research on study skill and conceptions of learning that has been carried out at the *Department of Education, Göteborg university,* and elsewhere, since the early seventies (Marton & Svensson, 1970; Svensson, 1976; Marton et al., 1977; Marton & Svensson, 1978; Säljö, 1979, 1982; Pramling, 1983; Marton & Wenestam, 1984; Marton, Hounsell & Entwistle, 1984, 1997; Marton et al., 1993; and Marton, Watkins, et al., 1997). This is research that has typically involved interpretations of expressions for different understandings as a significant feature (Marton, 1981; Svensson, 1985; Marton & Both, 1997).

Four such studies has been taken as of special interest in this context, namely: Säljö (1979, 1982); Pramling (1983); Marton et al. (1993); and Marton, Watkins, et al. (1997). The reason for this is that they all present accounts of conceptions of learning that involve understanding either as an outcome of or as an objective in or as both a prerequisite for, an ingredient in and a product of learning. However, in addition to these studies there are also some additional studies that concern conceptions of understanding among school pupils and other students (Burns et al., 1991; Entwistle & Entwistle, 1991, 1992; Tan & Novac, 1993). And two of these studies will also be discussed, namely Burns et al. (1991), and Entwistle and Entwistle (1992).

FOUR STUDIES OF CONCEPTIONS OF LEARNING

LEARNING IN THE LEARNER'S PERSPECTIVE

The first of the four studies on conceptions of learning (Säljö, 1979) could be said to form a paradigm for the three subsequent studies, and involved 90 young adults and adults in varying ages in an interview study about various aspects of their learning activities. It formed a part of a more encompassing study that concerned differences in constructing meaning from reading a text (Säljö, 1982). After having

talked with the participants about various aspects of their learning activities for some time in the interview, Säljö asked them to tell what they actually meant by learning.[1]

In a subsequent analysis of the verbatim transcripts from the interviews, which was intended to lead up to a discernment, description, exemplification and discussion of different ways participants conceived and explained the meaning of learning from reading, Säljö found that the discerned variation could be described in terms of five different categories of description. Assuming that these categories could be said to represent five different ways of understanding learning in the discussed sense, and intending to catch the essence of the different meanings in a few words, Säljö (1979) called them:

1. Learning as the increase of knowledge;
2. Learning as memorising;
3. Learning as the acquisition of facts, procedures, etc. which can be retained and/or utilised in practice;
4. Learning as the abstraction of meaning; and:
5. Learning as an interpretative process aimed at the understanding of reality (p. 12 ff.).

Arguing that these differences seem compatible with the variation in approaches or levels of processing described in the previous studies (i.e. a surface approach and an atomistic treatment of the written or spoken meaning on the one hand, and a deep approach and a holistic treatment on the other), Säljö wondered if it might not "be fruitful to assume that the fact that people employ either of these strategies has to do with their general conception of what knowledge and learning is" (Säljö, 1979, p. 21). He also came to the conclusion that "people seem to have… different conceptions of what learning is all about" and that it "might be fruitful to assume that this affects both *how* people approach a learning task and *what* they manage to get out of it" (ibid., p. 22). This was also something that he tried to gather additional support for later on in the same study.

---

[1] What do you actually mean by learning? (Säljö, 1979, p. 9).

Pramling's study of *The Child's Conception of Learning* (1983) involved interviews with nearly 300 children in ages between three and eight years. It was conceived to serve the purpose to "trace the development whereby children become conscious of the fact that they can learn, and to describe the qualitatively different forms that their learning subsequently take" (ibid., p. 83).

The interview-protocols from the research were made subject to a qualitative analysis aimed at a description of qualitatively different conceptions of learning and the logical relations between these meanings for learning. What was arrived at could be described in terms of: 1) what learning is brought out as, 2) what learning is said to be a learning of, and finally: 3) how learning of that which it is learning of is considered to come about.

The development of the child's thinking about learning is said to take place within an over all conception of *learning as becoming (more) able.* To begin with learning is a taken for granted and undifferentiated phenomenon and concept. And at this point in the developmental history of the child's understanding of the meaning of learning, the child appears, in other words, not to be aware of learning as something other than a mere act.

The first phase in the child's, as it were, three parted ascension to-wards a more advanced consciousness of the meaning of learning and what it may mean to learn, begins by learning emerging as a certain action, or, in other words, by the child making an implicit distinction between doing and learning to do. At this point in the development of the child's thinking about the meaning of learning, learning implies an action that aims at learning to do and at learning to do things differently.

The second phase is characterised by the child beginning to become aware that learning may not only lead to the ability to perform a definite action, but that it may also have become able to know something about something. At this phase in the developmental history of the child's understanding of learning about their thinking

about learning, learning is also believed to be characterised by the child beginning to become aware that knowing something about something could be something that the learner acquires through his or her own activity in relation to that which is the subject for learning.

The third phase is characterised by the child beginning to differentiate understanding from skills and knowledge, or, in other words, by the child beginning to become aware that learning may also have "to understand" as an objective. When this begins to be the case, the child begins, following Pramling, to also become able to conceive of qualitative differences in his/her own and other persons' thinking about what may become the subject for learning. This is conceived as a prerequisite for learning of the kind which leads to one becoming able to conceive of something in a qualitatively different way than before.

Pramling gives, thus, a description of the development of the child's thinking about the meaning of learning. It is based on a cross sectional study and reconstruction of the ways in which the child seems to interpret what is learned in learning, and how learning of this is achieved.

As may follow from a reading of the account, the child lives mainly in a world where learning typically means the acquisition of knowing how and knowing that by doing, observing, being told, and/or by practice. Towards this age, the child begins, however, to also become aware of learning as an acquisition of knowledge in, knowledge of, or understanding of something by thinking.

In the first sense it is mainly seen as a transition from one state of knowing one kind of knowing to another state of knowing of the same kind, which is brought about as a result of one doing, perceiving, or learning through goal-oriented action. In the second, however, it begins to emerge as a transition from one state of knowing one kind of knowing to another, that is brought about through an act of understanding. What is meant more precisely with understanding in this perspective is, however, never explicitly stated, but merely implied as something that could be explored in further research and

thinking on what it means to understand for the slightly older child and older and more experienced persons.

<p style="text-align:center;">*CONCEPTIONS OF LEARNING*</p>

The third study of conceptions of learning involved multiple interviews 29 adult students at the Open university in England (Marton et al., 1993) concerning what they felt it meant for them to be a student at the Open university. The first interviews were carried out at the time when the participants were about to take up or had just taken up their studies in their first course, a social foundations course called *Making sense of society,* which had explicitly been conceived to challenge and change the participants' conceptions of various societal phenomena.

The interviews, which among other things dealt with the participants views on learning, were repeated with students still on registers, at the end of each university year between 1980 and 1986; by 1986 the interviewees were down to ten persons. At each interview, the opening question was, "What exactly do you mean with learning?". This question was repeated, not necessarily in exactly the same words, but in a way that appeared appropriate in each interview. The purpose of the study was twofold. On the one hand, the researchers wanted to obtain material to "give a more precise characterisation of the different conceptions of learning" than that given by Säljö (1979, 1982) a decade earlier (Marton et al., 1993, p. 278 f.). On the other, they sought "…to identify relationships between the conceptions." (ibid., p. 279).

The tape-recorded interviews were fully transcribed verbatim, but the analyses were limited to those parts that appeared to be the most significant with respect to the purpose of the study. This was guided by the findings that had emerged from the proceeding decade of phenomenographic studies, which had meant an elaboration of the phenomenographic key notion, namely, the notion of qualitatively different conceptions of the same phenomenon.

The analysis resulted in a "re-discovery of the five conceptions of learning" that Säljö described (Marton et al. 1993, p. 282), plus one

more. The authors described, exemplified and elaborated on each of the six conceptions of learning, which were called:

Learning seen as:

A. Increasing one's knowledge

B. Memorising and reproducing

C. Applying

D. Understanding

E. Seeing something in a different way

F. Changing as a person (Marton et al., 1993, p. 277).

The list of categories is intended to represent a progression from the least advanced to the most advanced conception of learning. However, they were also of two distinctly different "types" of categories, or families. In the first, learning appears to be viewed in terms of laying hold on knowledge about something (A–C). In the second, it appears to be viewed in terms of developing an understanding of something (D–F). This development is also believed to consist of separate stages or "steps". These are from (D) viewing learning as grasping or laying hold on the meaning of something, to (E) viewing learning as a change of the meaning of something for someone, to (E) viewing learning either as developing a conception of something or as (F) developing another understanding of oneself as a person.

THE EXPERIENCE OF LEARNING

Marton, Watkins, et al. (1997) interviewed 43 Hong Kong high-school students in order to explore "the dimensionality of learning" on the on hand, and to investigate "the nature of the relationship between memorisation and understanding as experienced by Chinese learners" (ibid., p. 21) on the other. The interviews were carried out by participants in a part-time Master of education course in qualitative research methods at the University of Hong-Kong and the interviewers followed a common interview schedule. This was divided into six parts: 1) Introduction, 2) Actual task, 3) General questions, 4) Conceptions and approaches to learning, 5) Language of instruction, and 6) Attributions.

The interviews were taped and verbatim transcripts were made. These were then subjected to a contextual analysis that, as mentioned before, aimed at a description of similarities and differences in the ways wherein the interviewees could be said to have discerned and discussed learning, understanding and memorisation.

The study resulted in a description of four different ways of experiencing learning among the participants. The four different ways of experiencing learning are accounted for in terms of:

   • learning as committing to memory (words)

   • learning as committing to memory (meaning)

   • learning as understanding (meaning)

   • learning as understanding (phenomenon) (Marton, Watkins, et al., 1997, p. 29)

In addition to the categories, the analysis also resulted in an interpretation of the relationship between memorisation and understanding in the experience of learning among Chinese learners and in particular the close relationship between memorisation and understanding for these learners. It suggests that the Chinese learners experience of the relationship between memorisation and understanding is such that some "see memorisation and understanding running in parallel, others think that the memorisation precedes the understanding and others again talk about understanding being a substitute for memorisation" (Marton, Watkins et al., 1997, p. 42). However, the research also suggests that they tend to link "memorisation to understanding" functionally (ibid.). The participants accounts suggest that they "are forced by educational context to switch from an emphasis on memorisation to an emphasis on understanding" in the studies and that the experienced relationship is such that:

> In primary school and in early years in high-school the students can rote memorise relatively small chunks of texts. Later on, however, the amount of text they have to deal with is simply too extensive for memorisation to be possible. They have to look for the meaning of greater wholes in the first place. (Marton, Watkins, et al., 1997, p. 42)

In addition, the results give a certain support for the idea that "the experience of understanding may *originate,* or become differentiated

from, the experience of memorisation" (Marton et al., 1997, p. 43). There are more precisely two results that have appeared to support this hypothesis. The first is that "the categories of description form a continuum from committing to memory to understanding and there is a significant correlation with age" (ibid., p. 43.). The second is that "understanding is not differentiated from memorisation in many of the students' answers, mostly among the youngest students [who] …claim that understanding means having memorised or having become able to reproduce" (Marton et al., 1997, p. 43).

TWO STUDIES ON CONCEPTIONS OF UNDERSTANDING

In the previous part of this chapter four studies of conceptions of learning were accounted for. In this part two studies on conceptions of understanding that have been found especially interesting will be presented. The studies are Burns et al. (1991) *Understanding of understanding* and Entwistle and Entwistle's (1992) *Developing, revising, and examining conceptual understanding in degree courses*.

STUDENTS' UNDERSTANDING OF UNDERSTANDING

Burns et al. (1991) study concerns students' understanding of understanding in the context of learning in sixth form chemistry in New Zealand at the middle of the eighties and its relationships with their teachers' views of understanding. It reveals that most of the 39 students from six different schools that participated in the study gave evidence of some coherence orientation as opposed to a knowledge orientation toward understanding. This means that they appeared to be more concerned about the relationships between pieces of information and between these and recalled information, than about recognition of terms and the memorisation of fact and rules. It also means that these students seemed more focused on trying to seek out the meaning of terms and why things happened, rather than merely trying to seek to learn to know what and how things happen.

Burns, Clift and Duncan maintain also that the participants usually said they felt they had achieved understanding when they could make a whole from the many pieces of new information they were receiving together with those they recalled from memory. And, moreover, that reaching understanding often meant that having worked first and foremost on their own, they suddenly felt that everything fitted into a whole. They say also that students often reported that this experience was frequently accompanied with a feeling of satisfaction too.

The assessment of understanding in this study indicated, that only students with some coherence orientation achieved levels of understanding indicating links had been made between pieces of information. It revealed also that these students as a rule were more oriented toward intrinsic assessment than toward extrinsic ditto, usually meaning that they said they could recognise their understanding for themselves and, moreover, also that they meant they could not only visualise what they understood, but also felt high confidence in that they could explain it to others.

The authors of the article assert, finally, that the indicated student "attempts to achieve coherence were thwarted (for all but the most highly motivated students with strong chemical background) by the teachers' focus on examination skills", the teachers domination of the lessons, their transmission model, their attempts to cover too much on too short time, their under evaluation of students efforts to achieve understanding and by their focus on "knowledge" rather than higher levels of understanding (ibid., p. 285).

Burns et al. (1991) conclude that if students are to learn with understanding they will need:

1. To be taught about "understanding".
2. To be taught about the skills necessary to achieve coherence.
3. To be provided with conditions that will allow them to pursue coherence. (p. 286)

They maintain also that this means that students have to be taught about: 1) "the generally accepted view of understanding and the spectrum of views held by students"; 2) how "to recognise when there

is a problem and… what questions to ask to solve a problem"; and, finally: 3) that they are also given "access to resources and time for independent study, opportunities for student-student discussion… and opportunities for fruitful student-teacher discussion" (Burns et al., 1991, p. 286).

With respect to the third and last point, the point most emphasis is put on, the authors say that "teachers as assessors rather than as helpers in the learning process discourage student confidence". They refer here to Butler [1988] and Nicholls [1983] that are said to have shown that "12-year-old students given feedback in the form of grades or grades and comments are likely to become ego-involved…, whereas comments alone will preserve task involvement" (Burns et al., 1991, p. 286.). Burns et al. refer also to Rosenholz and Simpson [1984], who speak of multidimensional classrooms including more group and individual work and less whole-class teaching, and say in connection hereto, that a modification of teaching in this direction probably "will also reduce the likelihood that students will see their abilities as fixed and provide more opportunity for task-involvement" (Burns et al., 1991, p. 286).

Beside these changes of teaching in a broad sense, Burns, Clift and Duncan (1991) suggest finally also that "the use of assessment tasks aimed at developing understanding, particularly oral and written explanations, fewer topics, and topics which respond to students interests and concerns, [will also contribute to the development of more advanced understanding, and this] since the achievement of coherence requires active involvement and effort and therefore high motivation" (ibid., p. 286).

This leads over to Entwistle and Entwistle's study of experiences of understanding.

EXPERIENCES OF UNDERSTANDING

Entwistle and Entwistle's (1992) study *Developing, revising, and examining conceptual understanding,* concerns university students' experiences of understanding in the context of learning in degree

courses and preparing for final examinations in Great Britain. The study involved first and foremost interviews with thirteen students, most of whom had just prepared for and had taken their final examination in psychology at Edinburgh University. It involved, however, also an additional group of eleven student in their final year of psychology at the same university. These gave a written answer to "what understanding is" with reference to their own experience on the one hand and with reference to what they thought they had learnt about understanding from their studies of literature on psychology on the other.

Entwistle and Entwistle (1992) found that these students basically considered understanding as an achievement of "a feeling of satisfaction that sets of information and ideas have been brought together in a coherent whole which can be used with some confidence to construct explanations or to use in novel contexts" (p. 35). These feelings of relative "satisfaction" over and "confidence" in one's ability to give relatively insightful and coherent explanation, which also appears to imply a certain belief in one's capacity to deal with these matters in a successful way within a particular sphere of experience and practice, were typically described "achieved after active intellectual engagement with course materials, which often involved trying to work out a personally satisfying structure which related and integrated information, experiences, and ideas" (Entwistle & Entwistle, 1992, p. 29).

Students described the experience of understanding in terms like: "seeing the interconnectedness of disparate things", "the jig-saw pieces clicking into place", "following his drift", "feeling it hangs together", "the mind has locked into a pattern", which, following the authors, all suggest that it "depends on recognising or creating a structure… to bring together previously discrepant items of information into a recognisable and satisfying pattern" (Entwistle & Entwistle, 1992, p. 29 ff.).

Entwistle and Entwistle (1992) also found that the participants seem to have been involved in different activities with reference to their intended object for understanding, the extent to which they seek to

understand this, and the means they use in order to achieve their intended end when they studied and revised for examination. They maintain also that these differences can be represented by five different categories of description.

The five different categories of description are worked out with the explicit intent to describe essential similarities and differences in typical ways in which the participants appear to have carried out their studies in preparation for final examinations and make up a system. Entwistle and Entwistle (1992) call the categories of description in order from the narrowest, shallowest and most reproductive to the broadest, deepest and most creative:

A. Reproducing content from lecture notes without a clear structure

B. Reproducing content within the logical framework of the lecture notes

C. Creating own structure for topics, relying mainly on lecture notes alone

D. Adjusting structures from strategic reading to meet exam requirements

E. Developing an individual conception of the discipline from wide reading (p. 20).

Considering the ways in which the participants talked about revision for finals, which was conceived by Entwistle and Entwistle (1992) as a particular kind of study activity within the overall activity of studying at the university, the researchers described some different kinds of activities in revision and purposes for such activities. These were also found to vary with the over all study activities that students appeared to carry out, to the effect that, for instance, "condensing notes" may take on very different meaning dependent on the intended overall purpose of the activity within a larger meaningful whole approach to learning in the discussed context.

Entwistle and Entwistle (1992) say that students' preparations for and experiences of answering examination questions, seem to vary with the orientation of the students' study project. They maintain more precisely that, whereas students that mainly appeared to have been involved in "reproducing", tended to memorise particular answers to expected questions in order to recall and put down such answers, students that appeared to have been more concerned with "developing

understanding", tended to try to articulate their understanding to the degree that they felt confidence in their ability to respond to just about any question about the subject for their studies in a manner that would convince the examiner that they had understood.

Commenting upon this, Entwistle and Entwistle (1992) state that:

> While this set of categories may again seem like a hierarchy, it did not match the apparent success of the outcomes as well as might be expected. Memorised notes proved perfectly effective for answering questions which could be answered from logical structures contained in lectures, and some questions were of this form. Narrow, technical questions often did not require any great breadth of understanding, whereas more abstract, theoretical questions tested personal conceptual understanding more thoroughly. Students who wanted to demonstrate their own conceptual understanding might run into difficulties created by the time constraints, while the most strategic student seemed to present themselves to the examiner in the most effective way. (p. 23)

By the end of the report, Entwistle and Entwistle (1992) suggest finally that:

> 1. the answers that students work out to examination questions are constructed specifically to satisfy the perceived requirements of the examiner;
>
> 2. the forms of understanding that are developed in academic courses usually present the character of "an uneasy compromise between the personal understanding towards which a student might aim … and what is possible within the constraints of the course and assessment procedures";
>
> 3. it seems "essential in higher education to be aware of the ways in which the forms of understanding developed by students depend, not just on the assessment requirements, but on the whole learning environment which they experience"; and, finally, that;
>
> 4. the great challenge for educational researchers and practitioners that are concerned with teaching and learning at this level is to learn how to design courses, provide teaching and assessment that foster development of the kinds of understanding that ought to be prefer over other less desirable forms. (p. 35)

So in spite of a more thorough "personal conceptual understanding" of all issues involved in the various courses being the most preferable outcome from a general pedagogical perspective, it is not this approach, but the more limited approach to develop the kind of understanding of particular topics that a particular examiner seems to value, that students think is the most effective, when it comes to pass examinations with as high degrees as possible.

The dilemma of studying at the university, which probably is applicable to studying in most other forms of formal education as well, appears then as that of developing the best possible understanding of the things that are dealt with in the teaching for one's own purposes, on the one hand, and that of developing the understanding that is called for to pass examinations with as good grades as possible on the other. It appears as question of profiting from and finding one's way through the "system" that one's counterpart appears responsible for.[1]

CULTURE HISTORICAL PERSPECTIVE ON THE DEVELOPMENT OF THINKING AND SPEAKING

The historical research on the development of thinking and speaking, understanding and explaining proceeds from the belief that human behaviour is qualitatively different from animal behaviour, to the same extent that the adaptation and development of human beings is different from the adaptation and development of animals (Vygotskij, 1930/1978, p. 60 f.). In this perspective, a person is from birth until death in constant interaction with him/herself, other persons, beings and things (Vygotskij, 1930/1978, 1934/1987; Lurija, 1978). One's possibilities to relate to oneself, other persons, being and things as particular entities in any kind of perception, attention, physical movement, activities are to begin with relatively limited, because one activity has yet not come to include the instruments and symbols that makes this possible (Vygotskij, 1930/1978).

Through participation in the activities that more experienced others set up, one gradually takes over such means and begins also to operate with them oneself (Leont'ev, 1959/1977), and may develop an orientation to the world and being in it like the ones that the more experienced, capable others have developed. It is also through this that it becomes possible for one to present these entities to oneself (Gadamer, 1960/1993, 443 ff.).

---

[1] See Beach (1997) for a critical ethnography perspective on this issue.

The appropriation of this knowledge and these concepts is completed in the course of one's activity (Leont'ev, 1959/1977, p. 628 ff.). In this one encounters the entities and the forms of appearances in one's surrounding world. Such activity does not take place in itself, but corresponds to the practical and linguistic intercourse with the persons, that one co-operates with.

This becomes, following Leont'ev, especially pregnant in the attainment of intellectual activities such as reading, writing, counting and calculation. In the attainment of the capacity to participate in and perform such activities, it becomes obvious that the courses of events presents a character whereby the preceding generations' experiences are appropriated under teaching conditions which steer one's activity along particular paths. It is in this process that operations with the symbols that are involved in various activities are gradually built-up and edified.

Leont'ev (1959/1977) refers here to Galpetrin and associates, who studied this process relatively carefully, and on the basis of this established that:

> … when the adults demonstrate the action and its product, the children [orient] themselves first towards the task. After this "orienting foundation", the child performs the action in shape of external operations with physical objects and with the assistance of adults. The transformation begins, however, already in this phase: The children learn to perform the activities on its own, they become generalised and shortened.
>
> In the next phase, the activities are transferred to the linguistic sphere; they become verbalised. The children begin, f. ex., to count aloud, without leaning on material objects. In this phase the activities take on a theoretical character; they are performed by means of words and linguistic concepts. At the same time they become transformed and in due time also automatised, as was described above. In the next phase, they little by little become transferred to the intellectual sphere; here it undergoes additional transformations until it finally take on all the traits that are characteristic for internal activities. In this phase, it can be controlled and corrected by the adult, in that the children can displace it to the external, f. ex. the sphere of audible speech. (ibid., p. 635 f.; my translation)]

In order to appropriate concepts, generalisations, and knowledge, one must, following Leont'ev (1959/1977), [thus] form adequate intellectual operations. This can only be done through relatively suc-

cessful participation in particular forms of co-operation with more experienced others and arises first in shape of external actions, that the surrounding others lead one into. Later on, also under guidance, these actions are transformed into internal, intellectual operations.

These activities as a rule involve the relative integration of the more encompassing activities that give subordinated activities their direction, at the same time as they to a certain extent also give the super-ordinate activity its direction. Considering the character of the way whereby one learns and develops word meaning in individual history, and the changes that this processes undergoes as it develops, Vygotskij (1934/1987), pays special attention to the function of the word. Thinking that concept formation like all other higher psychological functions, is a mediated process and that signs are the basic means used to master and direct it, Vygotsky explains that in concept formation, that sign is the word (Vygotskij, 1934/1987, p. 121 ff.).

For Vygotsky the word is indispensable and first "functions as the means for the formation of the concept" before later becoming "its symbol."(Vygotskij, 1934/1987, p. 126). Developing this theory of the character of the development of the process of concept formation in individual history, the image that Vygotsky gives is that the process has its roots in the earliest stages of thinking in childhood, but that these mature only in the transitional age. Further, it is only at this point that "the intellectual functions which form the mental basis for the process of concept formation are constituted and developed." (p.130).

The general theory of the development of the meaning for words suggests that word meanings undergo a myriad of radical changes in individual history. In spite of this however, Vygotskij and his associates nevertheless suggest that one can discern four main generations of meaning for words there. In mentioned order with reference to the character of the word meanings these stages are called the stages of formation of: 1) syncretic images, 2) complexes, 3) potential concepts, and 4) concepts proper.

In the first phase, meaning relates to concrete experiential appearances or series of appearances of a being, situation, striking feature or

property, where words functions as an indicator or pointer. The meaning for a word seems in this case to be just about the same as that which the word indicates. It is so interfused with the word that express it and the referents or properties or situations that fall under it, that it can hardly be thought and spoken except in the vicinity of that something to which it is applicable. These syncretic relationships, and the heaps of objects assembled under one word meaning, also reflect objective bonds, in so far as they coincide with the child's perception or impression. Many words, therefore, have in part the same referents for both the child and the adult, especially words referring to concrete objects in the child's habitual surroundings. The child's and the adult's meanings for a word therefore often "meet" in the same concrete object, and this suffices to assure mutual understanding.

In the second phase, meaning relates to a composition of particular traits of a set of concrete experiential appearances that unite series of concrete beings, properties or situations into a group. The word here still refers to concrete manifestations of the meaning that is expressed by the word, but the assembly of entities that fall under the meaning of the word are conceived to be related like the members of a family are related. Consequently the word not only expresses an experienced similarity or unity between the class of entities that fall or can fall under its meaning, it also denotes a particular group or family of entities in the world. On this level of thinking and speaking, the word ceases to be the proper name of individual objects and becomes a family name of a group that has been or may be or may be found to be related in one or another respect.

The meaning of the words at this level are not spontaneously developed by the child, but are taken over from and predetermined by the meaning that they already express in the language of adults. The child's own activity in forming generalisations is however by no means quenched, though it is usually hidden from view and driven into complicated channels by the influence of adult speech. The language of the environment, with its stable, permanent meanings, indicate the paths that the child's generalisations will take. But, constrained as it is, the child's thinking proceeds along this

preordained path in the manner peculiar to his level of intellectual development.

This is because the adult cannot pass on to the child his mode of thinking. He merely supplies the ready-made meaning for a word, around which the child forms a complex – with all the structural, functional, and genetic peculiarities of thinking in complexes. So even if the product of the thinking at this level may sometimes be identical in its content with generalisations that have been formed in conceptual thinking, the meaning of a word is not conceptual, but "complexive" in character. It is not formed through conceptual thinking, and it is usually both too broad and too narrow in scope in comparison with a true concept. Its character is namely marked by an overabundance, overproduction of connections, and a weakness in abstraction.

In the third phase, which develops in dialectical interplay with the second and which therefore is only analytically separated from it, the meaning for a word is an abstraction of a particular trait or set of traits in a group of experiential objects that have been found or may be found similar, in that they share the particular trait or set of traits that have been or may be recognised in one or several groups of beings or situations. At this developmental level of thinking and speaking, a word refers to particular attributes of things or kind of things. It expresses an isolated trait or set or traits that have been or may be found among the classes of objects that fall under or may fall under the meaning that is expressed by the word. It differs from complexive meaning in that it is more stable and in that it discriminates sharper between things. For with this type of meaning the concrete totality of traits has been destroyed through its abstraction, and the possibility of unifying the traits on a different basis opens up.

It is, thus, only after the child has mastered abstraction, which is made possible only at an advanced level of complex thinking, that he/she can begin to form true concepts. Because it is only when the abstracted traits are synthesised anew and the resulting abstract synthesis becomes the main instrument of thought, that the level of conceptual thinking and speaking is reach. This is a moment that is usually reached at about the age of twelve or thirteen or so and is a form of

thinking and speaking where the word, deliberately used to direct all the part processes, plays the decisive role. That the child/adolescent begins to form concepts means, however, not that he/she all of a sudden abandons the more elementary forms. Indeed these continue to operate for a long time and predominate in many areas of his thinking. Adolescence is in this respect therefore not so much a period of completion as it is a period of crisis and transition in the development of thinking and speaking in individual history.

In the fourth generation of word meaning, the meaning for a word could, as has been implied above, thus, be conceived of as a verbal thought wherein a set of isolated, abstracted and integrated traits of experiential objects are united into a relatively distinct sense. It is a meaning that can be understood with one particular word or some particular words that could be said to be synonymous, but which in order to be explained takes several words. A word still refers here to a particular form of being or, perhaps rather, a particular class of forms of beings that fall under the meaning for the word. But it no longer merely indicates them. It represents them rather. It symbolises them as it expresses them. Because the meaning for words is not so much fixed and finished as it is fluctuating and in the process of being worked out, the meaning for words is first and foremost operative. As such it is discursive. It belongs to the thinking and speaking it emerges and plays a role in, which is a thinking and speaking that takes place in the thinker's and speaker's participation in various kinds activities.

So if one with Vygotskij (1934/1987) considers the functioning of newly acquired concepts in the transitional age, one finds that they first and foremost belong to the concrete situations and discourses they are developed in. This means that if a person forms a particular meaning for a particular word through the participation in a particular conversation about a particular object, the meaning for that word makes first and foremost sense for the person in that particular con-versation and situation and relative to that object, as it is understood by the meaning that is formed there. Moreover, if a conversation does not require of the participant to define the meaning for the words used, there is as a rule no reason to do so either. Because in order to

form and use a concept in an intelligent way, one does not first need to give an explicit verbal definition of that concept. On the contrary, the ability to give an adequate explicit definition of a concept emerges as a rule only a long time after the concept has been formed and used in an intelligent way.

The fact that the adolescent may form and apply a concept correctly before he or she is capable of defining what is meant with it is, following Vygotskij, is a rule rather than an exception in some areas of thinking and indicates, according to Vygotskij, that "the concept arises as the result of a process other than the logical processing of certain elements of experience. Moreover, it comes into conscious awareness and acquires a logical character at a comparatively late stage of its development." (Vygotskij, 1934/1987 p. 161). The point is, thus, that one takes over and applies concepts in some areas long before one is consciously aware of what one means with them more precisely.

If one continues to consider the functioning concepts in the transitional age with Vygotskij (1934/1987, p. 167 ff.), one finds that once a concept has been formed, used and defined, the application of that concept to new concrete situations which must be defined in its terms is no less difficult. The account even asserts that it is a more difficult transfer, that it is mastered only toward the end of the adolescent period, and then only as a function of having been called upon, tried and managed through successful participation in communication with more experienced others.

In sum, the account of the development of thinking and speaking and understanding and explaining that Vygotskij (1934/1987) has provided, suggests that the meaning for words arises and develops in and through concrete participation in communication with more experienced others, and suggests also that the direction of the development of the meaning for words is to begin with mainly determined by the senses of the employment of words that others respond to. This suggests that the general direction is one from less conscious, complex, inclusive and exclusive towards more conscious, complex, inclusive and exclusive senses, but also that the development of word meaning in individual history is recognised by others and thus

contributes also to the development of meaning for words in the general history of the actual language and type of discourse. In this sense Vygotskij (1934/1987) has also provided a dialectical explanation of how the development of word meaning in individual history is related to development of word meaning in general and specific history.

UNDERSTANDING IN PHILOSOPHY

> *...be not children in understanding... (Paul, 55–56/1979, p. 1455).*

The concept of *understanding* appears in the history of philosophy from about the beginning of the Seventeenth century until quite recently, first and foremost to have been associated with the philosophy of interpretation (Edwards, 1967). This means that it in the first place is not in the epistemological (Hamlyn, 1967), but in the hermeneutical tradition that an answer to what has been meant with understanding in philosophy is to be sought (Palmer, 1969). In addition to this, however, there is of course also a lot of meaning and moral philosophy that could be of interest for how *understanding* has been understood in philosophy (Wittgenstein, 1968; Levinas, 1987; Vattimo, 1997), but here the focus has been limited to how that appears to have been understood in the hermeneutic tradition.

In an introduction to hermeneutics, Palmer (1969) notes that the term *hermeneutics* has a more than three hundred and fifty year long history, but that the practices of interpretation and reflection over philosophical prerequisites for interpretation, appears to be at least as old as the Western tradition as a whole. From the outset hermeneutics has denoted the science of interpretation, especially the principles of proper textual exegesis, but due to historical changes the interpretations of the field of inquiry have disciplinary differences.

Shifts in focus and interest among theorists have varied. in modern times, and the field of inquiry appears to have been defined in at least six fairly distinct ways.

Palmer's (1969) six definitions of *hermeneutics* are:

> (1) the theory of biblical exegesis; (2) general philological methodology; (3) the science of all linguistic understanding; (4) the methodological foundation of *Geisteswissenshaften;* (5) phenomenology of existence and of existential understanding; and (6) the systems of interpretation, both re-collective and iconoclastic, used by man to reach the meaning behind myths and symbols. (p. 33)

Behind each definition is a particular emphasis. But in addition to them there is also juridical hermeneutics, which also involves its own emphases, approaches, histories, subdivisions, and theorists.

Each of these approaches and the various authors that could be said to respond for them, is believed to have at least something to say about what understanding has been understood as in the hermeneutical tradition. However, due to the long and rich history of each of them, and the plan, purpose and format of the study, it has been found necessary to limit the scope somewhat, to what the main representatives for the third, fourth and fifth approach; respectively Schleiermacher, Dilthey, Heidegger and Gadamer; have said, and particularly how this has emerged first and foremost from Palmer (1969) and also in the writings of Heidegger (1927/1990) and Gadamer (1960/1993). This means that whereas the accounts of the first two scholars (i.e. Schleiermacher and Dilthey) leans heavily on Palmer (1969), the accounts of the two latter are somewhat more detached from his interpretations. This is especially so regarding Gadamer (1960/1993).

SCHLEIERMACHER: UNDERSTANDING AS THE REVERSE OF COMPOSITION

When Friedrich Ernst Daniel Schleiermacher (1768–1834) began his work, hermeneutics was, following Palmer (1969, p. 84 ff.), not more than a collection of practical advise for interpretation of various types

of writings. Schleiermacher was not satisfied with this, because beyond the obvious differences between different types of texts, all texts are authored in written language, and grammar is used to understand their meaning. Moreover, he felt that if one could just formulate the principle for all linguistic understanding, then one would also have created a general theory of interpretation, which could in turn form the foundation for all specific hermeneutics.

In order to fill this function, it was, as he foresaw it, necessary to take a point of departure in an analysis of the prerequisites that belong to all dialogues, and to build an investigation of the concrete and factual circumstances that are involved in all understanding, and interpretation. The question he set for himself to answer was simply: "How is all or any utterance, whether spoken or written, really 'understood'?" (Palmer, 1969, p. 86).

The understanding situation was for Schleiermacher a dialogical relationship:

> In every such relationship, there is a speaker, who constructs a sentence to express his meaning, and a hearer. The hearer receives a series of mere words, and suddenly through some mysterious process can divine their meaning. This mysterious, even divinatory, process is the hermeneutical process. It is the true locus of hermeneutics. Hermeneutics is the art of hearing. (ibid., p. 86)

Understanding is, with Schleiermacher, thus understood and explained as the reverse of composition. In understanding, a person begins with a fixed and finished expression and goes thereafter through an interpretation of the meaning of the same, back to the sphere from which it originates in order to grasp the idea behind it.

This is described as follows by Palmer (1969):

> Understanding is a basically referential operation; we understand something by comparing it to what we already know. What we understand forms itself into systematic units, or circles made up of parts. The circle as a whole defines the individual parts, and the parts together form the circle. A whole sentence, for instance, is a unity. We understand the meaning of an individual word by seeing it in reference to the whole of the sentence; and reciprocally, the sentence's meaning as a whole is dependent on the meaning of the individual words. By extension, an individual concept derives its meaning from a context or horizon within which it stands; yet the horizon is made up of the very elements to which it gives meaning. By dialectical interaction between the

whole and the part, each gives the other meaning; understanding is circular, then. Because within this 'circle' the meaning comes to stand, we call this the 'hermeneutical circle.'(p. 87)

According to Schleiermacher, iterative comparison between the understood parts in relation to one another and in relation to the dawning understanding of the meaning of the whole, leads one to all of a sudden conceive the meaning of the whole and the parts together. These are pulled into a world that understanding/meaning causes to stand.[1]

In order for a dialogue to take place, there must be a common field of understanding between the two actors, not only in respect of medium or language, but also in respect of thing or subject. This prerequisite for dialogue or discourse, is the minimal pre knowledge necessary for understanding. The hermeneutical circle appears, thus, not only to have been believed operative on the level of language, but also on the level of the thing being discussed.

Schleiermacher, moreover, also meant that understanding of written language basically consists of two moments, grammatical and technical or psychological interpretation. Grammatical interpretation appears in connection to this to have been characterised as an essentially negative, general, boundary setting procedure, in which the linguistic structure that the motivating thought is assumed to operate in, is set forth. Psychological interpretation, which appears to have been said to grasp the meaning that the author is assumed to have woven into the linguistic structure as objective, appears to have been considered more creative. Both sides of interpretation are, however, necessary. They appear also to have been believed to not only presuppose, but also interact with one another.

---

[1] It is interesting to note that the Greek word from which the stem in the term for knowledge theory, *epistemology,* appears to originate, i. e. *episthanai,* in translation just means "to cause to stand in the midst of" (Longman Webster's English College Dictionary, 1984, p. 494).

In sum, Schleiermacher, according to Palmer (1969), presupposed that the goal of understanding and interpretation is reconstruction of the intended meaning behind particular linguistic utterances. This was conceived as the art of reconstructing the author's meaning about a particular topic. The objective was, thus, not seen as that of understanding the author from a psychological point of view, but to understand the meaning of the author's linguistic utterance from the point of view of the author him/herself: i.e. to grasp the meaning that the author, as it were, had induced. In order to achieve this, it was, as Schleiermacher conceived it, not only necessary to reconstruct the linguistic meaning of a linguistic utterance, but also to re experience the meaning that the author of the same had put into it.

Understanding can, thus, be said to have been interpreted as the process whereby a person grasps what another person meant to communicate with what was uttered with a particular utterance. It is something that is believed to take place through a reconstruction and re-experience of the meaning that the other, as it were, put into that utterance through two interacting moments. These are namely: 1) reconstruction of the grammatical structure in the linguistic expression; and: 2) reconstruction of the psychological structure behind it. Each of the re-constructive moments are believed possible due to and through the functioning of the hermeneutical principle or circle. This leads over to the account of what Dilthey is said to have understood understanding as.

DILTHEY: UNDERSTANDING AS THE MIND'S GRASP OF THE 'MIND' OF THE OTHER

If Schleiermacher's project was that of working out a general hermeneutics, Wilhelm Dilthey's (1833–1911) can, according to Palmer (1969, p. 98 ff.), be put as that of laying an adequate epistemological and methodological foundation for the human sciences (*Geisteswissenshaft)*. This was grounded in an experienced need to replace the reductionistic and mechanistic methodology that the positivists had provided for the study of human phenomena with a

methodology that could do such phenomena justice without for that sake running the risk of failing to meet the standards of objectivity.

In this perspective *Naturwissenshaften* was one thing and *Geisteswissenshaften* something quite different. The experienced difference was believed possible to capture in two words, namely "explain" *(erklären)* and "understand" *(verstehen)*. In accordance herewith, Dilthey [1958] proclaimed that *Die Natur erklären wir, das Seelenleben verstehen wir* (Palmer, 1969, p 105)[1]

Dilthey meant that:

> A science belongs to the human studies only if its object becomes accessible to us through a procedure based on the systematic relation between life [Erlebnis], expression [Ausdruck], and understanding [Verstehen]. (Palmer, 1969, p. 106 f.)[2]

Erlebnis, or "lived experience" was by Dilthey defined as:

> That which in the stream of time forms a unity in the present because it has a unitary meaning is the smallest entity which we can designate as an experience. Going further, one may call each encompassing unity of parts of life bound together through a common meaning for the course of life an "experience" – even when the several parts are separated from each other by interrupting events. (Palmer, 1969, p. 107)[3]

"Lived experience" appears, thus, as a historically operative consciousness or meaning of something for someone. In this sense, lived experience can be the result of one encounter with what it is a meaning for, but it can also be a result of successive encounters with that or with similar things that due to experienced similarity have lent themselves to be included under the same theme. Lived experience was understood as experience as it is pre-reflexively given.

---

[1] This and the next four quotation of Dilthey are all renderings of Palmer's (1969) quotations of Dilthey from B. G. Teubner's 1958 reprint of vols. I-XII of: Dilthey, Wilhelm, *Gesammelte Schriften,* 14 vols. Göttingen: Vandenhoeck & Ruprecht, 1913-1967. This particular quote is taken from *Gessamelte Schriften* , V, p. 144.

[2] Gesammelte Schriften VII, p. 86.

[3] Gesammelte Schriften VII, p. 194

Dilthey explains the relationship as follows:

> The way in which "lived experience" presents itself for me [literally is there-for-me] is completely different from the way in which images stand before me. The consciousness of the experience and its constitution are the same: there is no separation between what is there-for-me and what *in* experience is there-for-me. In other words, the experience does not stand like an object over against its experiencer, but rather its very existence for me is undifferentiated from the *whatness* which is presented for me in it. (Palmer, 1969, p. 108 f.)[1]

In spite of this emphasis on the personal character of *lived experience,* according to Palmer (1969) Dilthey also pointed out that this not just "some kind of merely subjective reality, for experience is precisely the reality of what is-there-for-me before experience becomes objective (and therefore admits of a separation from the subjective)" (p. 109). *Lived experience* refers, thus, to a realm of pre-reflective consciousness upon which all objectivities and subjectivities are supposed to be established through concrete acts of understanding/interpretation. It is a realm prior to any separation of subject and object, wherein the world and our experience are given together.

Dilthey's account of *experience* involves also an emphasis of the temporality of the context of relationships given in experience. Experience is, following Dilthey therefore not a static matter. It is rather a unity of meaning, that tends to reach out and encompass both a recollection of the past and an anticipation of the future in the total context of "meaning". Meaning can not therefore be imagined, except in terms of what the future is expected to be, nor can it free itself from the dependence upon the material which the past supplies. This is because the past and the future form a structural unity with the presentness of all experience, and to form an inescapable horizon within which any perception in the present is interpreted.

The temporality of *experience* is, following Dilthey, thus not an achievement of the intellect; as for instance Kant's notion of time as a category of the understanding appears to suggest. It is rather "equi-primordial" with or inherent in experience itself. This becomes,

---

[1] Gesammelte Schriften, VII, p. 139

Dilthey says, especially clear when we reflect over what we have lived through, live through and hope to live through:

> What happens when "experience" [*das Erlebnis*] becomes the object of my reflection? I lie awake at night [for example] worrying over the possibility of completing in my old age the work I have begun; I think over what to do. There is in this "experience" a structural set of relationships: an objective grasping of the situation forms the basis of it, and on this is based a stance [*Stellungnahme*] as concern-towards and pain-over-the-objectively-grasped fact, along with a striving to go *beyond* the fact. And all this is there-for-me in this its [the fact's] structural context. Of course, I have brought the situation now to discriminating consciousness, and I have brought into relief the structural relationship – I have "isolated" it. But everything which I have here so brought out is really contained in the experience itself and has merely been brought to light in this act of reflection. (Palmer, 1969, p. 110)[1]

The meaning of an objectively grasped fact is, thus, given with the fact itself, and the meaning is intrinsically defined in terms of one's life or experiential context. Experience is, then, intrinsically historical and from here it follows that the understanding of experience must also be in corresponding categories, i. e. categories that can "express the freedom of life and history".

The second term in Dilthey's formula against positivism, *Ausdruck* or "expression", refers, according to Palmer (1969), to "objectification[s] of the mind – knowledge, feeling, and will – of man." (p. 112). Since expressions are interpreted as objectification of lived experience, it means that human studies can begin with a concentration on a fixed, "objective" manifestation of man's inner life, rather than relying on introspection or direct reflection on experience.

The third term, *Verstehen,* is also a technical term. In ordinary language use, one *understands* not only agents, their actions and their products, but also the causes of natural phenomena, the constitution of mathematical proofs, etc. (Moravcsik, 1979; Furberg, 1981, 1982). In Dilthey's explanation of the character of the *Geisteswissenshaften*, however, the term appears to have been reserved as a designator for a particular act, namely "the mental operation in which the mind grasps

---

[1] Palmer's (1969) paraphrase of Gesammelte Schriften, VII, p. 139-140.

the 'mind' (*Geist*) of the other person" (Palmer, 1969, p. 114); the special moment when one human being, understands the being of another human being.

Dilthey explains the relationship as follows:

> We explain by means of purely intellectual processes, but we understand by means of the combined activity of all the mental powers in apprehending. (Palmer, 1969, p. 115)[1]

Understanding is, thus, conceived as a human experience of human being that presents a fullness that escapes rational theorising. It opens up not only the world of individual others, but thereby also hitherto unforeseen possibilities in the understanding being's own being. It is a kind of non verbal thinking that is believed to involve the achievement of pre reflexive transposition of oneself into another person's being and meaning. Due to this, the understanding human being is believed to share in the same being with the being that lends itself to be understood. And understanding is, thereby, in a deeper sense, also conceived as an understanding of oneself. As such, it is also believed to be an experience that presents a value in itself apart from all practical considerations.

Understanding is, with Dilthey as with Schleiermacher, held to take place within the hermeneutical principle or circle. In this circle, or perhaps rather spiral (cf. Radnitzky, 1970), the whole receives its meaning from the parts and, reciprocally, the parts can only be understood in reference to a whole. Dilthey uses the sentence as an illustrative example of the interaction between the parts and the whole in understanding, and the need for both. The emerging meaning of the individual parts encourages an understanding of the sense of the whole, which in turn changes the indeterminateness of the words into a fixed and meaningful pattern (Palmer, 1969). This is also believed to hold for the relationship between the parts and the whole of one's experience as a whole too. Palmer (1969) explains the relationship as follows:

---

[1] Gesammelte Schriften, V, p. 172.

> The meaning of the whole is a 'sense' derived from the meaning of the in-
> dividual parts. An event or an experience can so alter our lives that what was
> formerly meaningful becomes meaningless and an apparently unimportant past
> experience may take on meaning in retrospect. The sense of the whole
> determines the function and the meaning of the parts. And meaning is
> something historical; it is a relationship of whole to parts seen by us from a
> given standpoint, at a given time, for a given combination of parts. It is not
> something above or outside history but a part of a hermeneutical circle always
> historically defined. (p. 118)

The circularity or "dialecticality" of understanding, means also that there cannot be any real starting point for understanding. Consequently, there can be no "presuppositionless" either, because every act of understanding and every meaning is given only within a certain context or horizon. Since one always understands from within one's own experiential horizon, which is part of the hermeneutical circle, there can be no non-positional understanding of anything, at any time, in any place.

In sum, Dilthey's account of the character of understanding as a phenomenon, which is an integrate part of his attempt to articulate the nature of *Geisteswissenshaften* as opposed to *Naturwissenshaften,* and to found the former on hermeneutics as opposed to empiricism and introspective psychology, suggests, thus, that *Verstehen* ("understanding") refers to the special moment in life where one human being understands another human being. Understanding is in other words, a term that is exclusively used as a reference to an operation that consists in the interpretation of objectifications of life and the re-experience of the experience of the other, which in a deeper sense appears to have been understood as an understanding of oneself. It implies that proper objects for understanding are human agents' ideas, intentions, actions, activity and achievements, and that what is understood then is the character, meaning, signification, etc. of such objectification of life. It implies that understanding always takes place within the experiential horizons of one's own being in the world and that due to this there can be no presuppositionless or positions less understanding. All understanding of human phenomena is therefore intrinsically historical. With the discovery of the impossibility of presuppositionless inquiry, Dilthey should perhaps also have let go of

the ideal of objectively valid interpretations, but he apparently never did (Palmer, 1969).

HEIDEGGER: UNDERSTANDING AS A MODE OF BEING

If Dilthey's discussion of understanding was a part of his project of working out an epistemological and methodological foundation for the human studies, Martin Heidegger's (1881–1976) discussion can be conceived as a part of his quest for a more fundamental ontology (Palmer, 1969). This project is associated with *Being and Time* (Heidegger, 1927/1990) where Heidegger seeks to reach and go beyond the assumption that Western metaphysics had been erected on, and tries to formulate more fundamental categories on which this discipline could be built (Spiegelberg, 1965, p. 271 ff.).

If this gives a glimpse of what Heidegger's project was about, the purpose of his discussion of understanding within this project can then be put as that of providing a more fundamental and encompassing account of the philosophical prerequisites for understanding than the ones that Schleiermacher and Dilthey had provided. In his phenomenological hermeneutic of the general ontological structure being, Heidegger takes the point of departure in the assumption that being, or *Dasein* ("there-being"), which he prefers to call it, is a form of being that presents a special distinctiveness as compared with other entities (Heidegger, 1927/1990, p. 2 ff.):

> Dasein is an entity which…understands itself in its Being, and that to some degree it does so explicitly. It is peculiar to this entity that with and through its Being, this Being is disclosed to it. (p. 32)

The point is, thus, that *Dasein* is a being can become an object for itself. The kind of being towards which *Dasein* can comport itself in one way or another, and always does comport itself, is called *existence,* which is also first and foremost for a particular *Dasein.* So whenever *Dasein* understands itself, it always "understands itself in terms of its existence – in terms of a possibility: to be itself or not itself" (ibid., p. 33).

Heidegger (1927/1990) suggests moreover, that "Dasein has either chosen these possibilities itself, or got itself into them, or grown up in them already." (p. 33). To the extent that *Dasein* has chosen them, he maintains also that it has thereby also decided its existence, whether it has done so by taking hold of or by neglecting its way of being. This means that "Dasein's understanding of Being pertains with equal primeordiality both to an understanding of something like a 'world', and to the understanding of the Being of those entities which becomes accessible within the world" (Heidegger, 1927/1990, p. 33).

This suggests, thus, that *Dasein* differs from all other entities in that: 1) "Dasein is an entity whose Being has the determinate character of existence other than its own"; 2) "Dasein is in itself 'ontological', because existence is thus determinative for it"; and: 3) that *Dasein* "with equal primeordiality… also possesses–as constitutive for its understanding of existence–an understanding of the Being of all entities of a character other than its own" (ibid., p. 34). In this perspective "understanding" (verstehen) means obviously neither what it usually means in English, nor what it appears to have meant in Schleiermacher, nor what it appears to have meant in Dilthey, but rather "the power to grasp one's own possibilities for being, within the context of the life world in which one exists" (Palmer, 1969, p. 131).

Understanding refers, thus, first and foremost to "a mode or constituent element in being in the world.… the structure in being which makes possible the actual exercise of understanding on an empirical level.…Understanding is, thus, ontologically fundamental and prior to every act of existing" (ibid., p. 131). It is the ever shifting pre-giving, fore-seeing, pre-conceiving, basis for *all* interpretation, and as such it is contemporaneous with one's existence.

Dilthey had pointed out that meaningfulness is always a matter of reference to a context (*Strukturzusamenhang*), i.e. that understanding always operates within a hermeneutical circle rather than proceeding in an ordered progression from simple and self-sufficient parts to a whole. Heidegger's phenomenological hermeneutic goes one step further, in that it explores the implications of the hermeneutical circle for the ontological structure of all human existential understanding

and interpretation. Furthermore, understanding is not separate from mood nor is it imaginable without "world" or "meaningfulness".

Understanding is, thus, like meaningfulness, a prerequisite for understanding and interpretation on an empirical level. It is an ontological constituent in one's being in the world. And as such it proceeds every act, wherein each and every thing is made known as a particular being that presents this or that character. However, in order to better understand the meaning of the term "understanding" in Heidegger, it is also convenient to learn more about what is meant with "world" and what he says about our relationship to objects-in-the-world.

Like the term *understanding,* the term *world* is a technical term in Heidegger. But instead of referring to the term surrounding or universe as it appears to a scientific gaze, it refers to what one can call one's personal world. Palmer (1969) explains the concept as follows:

> World is not the whole of all beings but the whole in which the human being always finds himself already immersed, surrounded by its manifestness as revealed through an always pre grasping, encompassing understanding. (p. 132)

World is, thus, something that one finds oneself in as well as all other things that one has and may have co-existence with in the world. To think of world as something distinct from ourselves in an objective sense would be to fall back into the subject-object schema that Heidegger obviously seeks to go beyond. World is what existence is before every subject-object dividing act takes place. For, world is:

> … prior to all "objectivity", all conceptualization; it is therefore also prior to subjectivity, since both objectivity and subjectivity are conceived within the subject object-schema.

> World cannot be described by trying to enumerate the entities within it; in this process world would be passed over, for world is just what is presupposed in every act of knowing an entity. Every entity in the world is grasped as an entity in terms of world, which is always already there. The entities which comprise man's physical world are not themselves world but in a world. Only man has world. World is so encompassing, and at the same time so close, that it eludes notice. One sees right through it, yet one could not see anything in its own manifestness without it. Unnoticed, presupposed, encompassing, world is always present, transparent and eluding every attempt to grasp it as object. (Palmer, 1969, p. 132)

Notwithstanding the assumed elusive, transparent character of world, Heidegger appears to have felt that he found access to it in the fact that world is something divined alongside the entities that emerge in it. At the same time however, understanding must be through world, which is therefore fundamental for all understanding. This gives world and understanding as inseparable parts of the ontological constitution of the being of Dasein.

In order to give a glimpse of the unobtrusiveness of world, Heidegger compares it with the unobtrusiveness of the tools one uses in daily activity. Due to their mundaneness, they tend to become transparent, taken-for-granted, un-noticed. It is, Heidegger tells us, usually first when a breakdown occurs that they for a short moment become visible as what they are. It is also in these moment that one can become aware that their meaning lies in their relation to the structural context of interrelated meanings and intentions which they usually have their existence in. A hammer may be present merely as something that can be weighed, catalogued as to properties, and compared to other objects of the same kind. But this is, however, not what a hammer proximally and for the most part is, at least not in the contexts where it fulfils its function as a tool.

It is, following Heidegger, thus, not by observing a hammer when it lies still, that one understands what a hammer essentially is, but when one uses it, or, perhaps rather, when one finds that it breaks down, or that it is required, but cannot be found. Because it is first then or, perhaps rather there, that it for a short moment emerges from world as what it proximally and for the most part is; namely something that is an essential and integral part of the activities where it is employed as a tool. This means that world and the things as they are experienced in being in the world, is thus "disclosed, not to the contemplative analytical gaze, but in the moment in which it suddenly emerges from hiddenness in the full functional context of world" (Palmer, 1969, p. 133). It means, however, also that "the character of understanding will best be grasped not through an analytical catalogue of its attributes, nor in the full flush of its proper functioning, but when it breaks down,

when it comes up against a wall, perhaps when something it must have is missing" (ibid., p. 133 f.).

The phenomenon of breakdown lights, thus, not only up the being of tools as tools and the being of understanding as understanding, but also says something about the being of world as world, i.e. as "the realm in which the actual resistance and possibilities in the structure of being shape understanding… the realm where the temporality and historicity of being are radically present, and the place where being translates itself into meaningfulness, understanding, and interpretation" (Palmer, 1969, p. 134).

According to Palmer (1969), Heidegger's "world" is thus "the realm of the hermeneutical process, the process by which being becomes thematised as language" (p. 134), where understanding operates in a fabric of relationships (*Bewandnisganzheit*) called world. The ontological ground for the intelligibility of that fabric of relationships is called "meaningfulness" *(Bedeutsamkeit)*. Meaningfulness "provides the ontological possibility that words can have a meaningful signification; it is the basis for language" (Palmer, 1969, p. 134). It is thus:

> something deeper than the logical system of language; it is founded on something prior to language and embedded in world … words may shape or formulate meaning, [but] they point beyond their system to a meaningfulness already resident in the relational whole of world. Meaningfulness… is not something man gives to an object; it is what an object gives to man through supplying the ontological possibility of words and language. (ibid., p. 134)

Furthermore, just as meaningfulness is embedded in world, under-standing is also embedded in meaningfulness and world. Interpretation is seen as "the rendering explicit of understanding" (Palmer, 1969, p. 134). Interpreting is in Heidegger therefore not so much a question of ascribing a certain meaning to a given object, as it is a question of rendering the "as" explicit wherein something is already understood in understanding. For what is encountered arises as "pre-grasped" in a particular relationship. Interpretation thus presupposes, a particular being-in-the-world, meaningfulness, language, and understanding. And whatever presents itself as something with this or that character, is, following this interpretation,

always something that is encountered in the world from within a particular perspective, in a particular situation, through a particular understanding interpretation.

The process whereby something is singled out from the world as a particular something whose sense may be rendered explicit in interpretation, has, following Heidegger (1927/1990) moreover, a threefold structure:

> Whenever something is interpreted as something, the interpretation will be founded essentially upon fore-having, fore-sight, and fore-conception.(p. 191)

It means that whenever something plays itself out as something, that something does always so through a particular understanding interpretation and whenever the meaning of what something is understood as is rendered plain in explicit explanation, it is done so on the basis of a more primordial pre-understanding, interpretation.

From here follows that there can be no "objective" or "presuppositionless" interpretation, because even "the most 'presuppositionless' interpreter… has preliminary assumptions" (Palmer, 1969, p. 136). Hence:

> Even as he approaches a text, he may already have seen it as a certain text, say, a lyric, and is placing himself in the posture he interprets to be appropriate to such a text. His encounter with the work is not in some context outside time and space, outside his own horizon of experience and interest, but rather in a particular time and place. There is, for instance, a reason he is turning to this text and not some other, and thus he approaches the text questioningly, not with a blank openness. (ibid., 1969, p. 136)

Thus interpretation is, according to Heidegger (1927/1990), "never a presuppositionless apprehending of something presented to us" (p. 191 f.), but rather always a projection of a possible meaning of something as it has emerged in preceding understanding interpretation. What is grasped in understanding interpretation and is exposited in explicit interpretation proves, thus, to be being that is neither entirely different from the entity that is the subject for understanding and interpretation nor identical with it. For being that can be and is understood and interpreted is, with Heidegger, never being-in-itself, but always being that is relative to the there-being of the

understanding and interpreting being and the there-being of the understood and interpreted corresponding counterpart.

According to Heidegger, any interpretation that is to contribute to understanding must already have understood what is to be interpreted. This is a fact that has always been recognised in hermeneutics. The new thing is that Heidegger does not limit this basic truth to derivative understandings, such as those that, for instance, take place in the interpretation of literature in philological research, or in the interpretation of remains in archaeological research. He holds namely that it is valid not only for this kind of interpretation, but also for interpretation in natural science, and the more fundamental or primordial interpretations that provide the ground for such interpretations. Namely the existential and ontological disclosures of the structure of understandings that forms the basis for each and all understanding interpretation and interpretative explanation whatsoever.

Heidegger's contribution to the development of philosophical understanding of understanding and interpretation is many-sided (Palmer, 1969). In *Being and Time* (Heidegger, 1927/1990), which has been focused upon here, Heidegger reconceived understanding in a radically new context in comparison with his forerunners. Namely, that of truth as unconcealement, thinking as bringing what is hidden to light, and understanding as the "process of disclosure whereby being comes into manifest existence" (Palmer, 1969, p. 161). In his subsequent works, Heidegger appears to have continued his attempt to go beyond the text of Western thinking and to try to answer the questions which he felt could be said to have given rise to the same, in a more profound way.[1] In these he mainly appears to have worked out: 1) a critique of presentational thinking, subjectivism, and technology; 2) an account of the relationship between language and speaking; 3) an interpretation of the nature of thinking; 4) a discussion of explication and the typology of being; and finally: 5) an

---

[1] For a bibliography see Palmer, 1969, p. 256 ff.

interpretation of the nature of works of art (Palmer, 1969 p. 140 ff.). This account will, however, not follow him into this.

It can be stated that in Heidegger, hermeneutics points "to the event of understanding as such, not to historical methods of interpretation over against scientific methods" (Palmer, 1969, p. 161). It is interpreted in terms of engaged circumspective being-in-the-world, meaningfulness, threefold structure of understanding, language as speaking, and understanding as grasping one's possibilities for being in the world. In Heidegger's world, one exists relative to oneself, other persons, beings, entities, etc., in various forms of activities. Here, interpretation is an explication of the meaning of the being of the being as it is pre-understood or pre-given in its mode of being ready-to-hand as opposed to its mode of merely being present-at-hand. Heidegger leaves, thus, the "historical-scientific dichotomy to which Dilthey devoted his whole life time… behind in the assertion that all understanding is rooted in the historical character of existential understanding" (ibid., p. 161). In so doing, he cleared the way for Gadamer's (1960/1993) treatment of the phenomenon in question. This is to be discussed next.

GADAMER: UNDERSTANDING AS A LINGUISTIC EVENT

Hans-Georg Gadamer is perhaps first and foremost known for having focused on problems concerning the nature of understanding literature and history, but since his discussion of the hermeneutic phenomenon involves an ontological disclosure of the general structure of human experience, understanding his work has of course consequences that go far beyond these human science disciplines. In *Truth and Method (Warheit und Methode: Grundzüge einer philosophischen Hermeneutik)* from 1960, which above all represents his attempt to present the hermeneutic phenomenon in its full extent, Gadamer makes a critical appraisal and development of hermeneutics as it is found in Schleiermacher, Dilthey and Heidegger. In this he takes his point of departure in Heidegger's reinterpretation of understanding, teases out the consequences of this for the understanding of aesthetical and

historical consciousness, and presents a comprehensive and penetrating account of how truth emerges or presents itself for oneself irrespectively of what activity it takes place in.

Truth and Method (Gadamer, 1960/1993) is divided into three parts. In the first *The question of truth as it emerges in the experience of art,* Gadamer performs an existential philosophical critique of the notion of *aesthetical consciousness.* In the second, *The extension of the question of truth to understanding in the human sciences,* he criticises the ordinary understanding of history as something that stands over against oneself as an object. In the third, *The ontological shift of hermeneutics guided by language,* Gadamer gives a general account of how truth emerges for people and what function language fills whenever this takes place.

The conception of art that Gadamer criticises is first and foremost "aesthetical consciousness" as something distinct and isolated from "non-aesthetical consciousness". In this perspective, which he thinks is a relatively late accomplishment and which he traces back to the Cartesian tendency to subjectivise thinking, the subject contemplating the aesthetic object tends to be conceived as "an empty consciousness receiving perceptions and somehow enjoying the immediacy of pure sensuous form" (Palmer, 1969, p. 167). Over against this conception of the experience of art, which tends to isolate aesthetical experience from other more pragmatic spheres of experience and which also tends to consider experience in terms of enjoyment of form as opposed to content, Gadamer places a conception of the experience of art that opens up a world for the one that experiences it.

It is an experience of something that concerns, that gives experience, that tells something about the being of being in the world and that does so as a result of the experiencer already existing in a world, already participating in the structures of self-understanding, already having some experience, and expectations of what addresses him/her anew and that contributes to the modification of his/her experiential horizons. The legitimation of art is therefore not that it gives aesthetic pleasure, but that it reveals being and assists in the realisation of what is.

In order to clarify the way of being as it presents itself in the experience of art, Gadamer (1960/1993) compares it with the way of being of a game or a play (*Spiel,* p. 101 f.) The significance of this analogy, which suggests the being of art as something that one shares in, lies, not only in that it: 1) frees interpretation from the myths of subjectivising aesthetics – especially the dichotomies of subject-object and form-content; 2) keeps understanding of works of art clear from authors' opinions and creative acts; and: 3) steers away from the tendency to take the readers subjectivity as a point of departure for understanding (Palmer, 1969 p. 175 f.). It provides Gadamer also with a means to develop the dialectical and ontological character of understanding and interpretation one step further, because once he had shown the temporality and place of work of art, he had also developed a means whereby he could criticise the ordinary understanding of history as well.

In his critique of "historical consciousness", i.e. the experience of history as an assembly of fixed pastness, that can be reconstructed as what really was or happened on the basis of objective interpretations of a "non-speculative" meaning of relics, Gadamer takes his point of departure in his interpretation of Heidegger's account of the pre-structure of understanding and of the intrinsic *historicalness* of human existence. According to this, human being is a being in the world that arises in, and develops through an ontological entanglement with that world. As such, it presents the character of a life-world, or, in other words, a whole in which persons live as historical creatures (Gadamer, 1960/1993, p. 247).

In the life world, a person never approaches or encounters anything with a blank openness, but always from within particular pre-conceived ways of relating to these things. These spring forth from one's previous and present experience of those or similar things, and the possibilities to project oneself relative those things that are born out of previous and present engagements with things in the actual mode and activity of being in the world. Gadamer refers here to Heidegger's description of the hermeneutical circle in *Being and Time* (cf. Heidegger,

1927/1990, p. 194 ff.). According Gadamer's (1960/1993) account of this:

> A person who is trying to understand a text is always projecting. He projects a meaning for the text as a whole as soon as some initial meaning emerges in the text. Again, the initial meaning emerges only because he is reading the text with particular expectations in regard to a certain meaning. Working out this fore-projection, which is constantly revised in terms of what emerges as he penetrates into the meaning, is understanding what is there. (p. 267)

The process that Heidegger describes suggests, as Gadamer interprets it, moreover, also:

> that every revision of the fore-projection is capable of projecting before itself a new projection…; rival projects can emerge side by side until it becomes clearer what the unity of meaning is; interpretation begins with fore-conceptions that are replaced by more suitable ones. (ibid., p. 267)

Furthermore:

> This constant process of new projection constitutes the movement of understanding and interpretation. A person who is trying to understand is exposed to distractions from fore-meanings that are not borne out by the things themselves. Working-out of appropriate projections, anticipatory in nature, to be confirmed "by the things" themselves, is the constant task of understanding. The only "objectivity" here is the confirmation of a fore-meaning in its being worked out. Indeed, what characterizes the arbitrariness of inappropriate fore-meanings if not that they come to nothing in being worked out? But understanding realizes its full potential only when the fore-meanings that it begins with are not arbitrary. Thus it is quite right for the interpreter not to approach the text directly, relying solely on the fore-meaning already available to him, but rather explicitly to examine the legitimacy – i.e., the origin and validity – of the fore-meanings dwelling within him. (Gadamer, 1960/1993, p. 267)

From this account of the hermeneutical circle, it follows that understanding presupposes pre-understanding and that there can be no understanding without an anticipatory projection of the meaning of that which may come to be understood. It means that all understanding presupposes (understanding) interpretation, experience, and projective modification of the fore-meanings that are borne out in understanding interpretation, experience and explicit explanation of what is there. In this perspective, the cumulated experience of a person consists not only in what the person has experienced, and what the person has made out of it in terms of knowledge, but also in the

orientation towards new experience that is implied or may be inferred by the experience as it is so far. It is "not only to experience in the sense of information about this or that" (Gadamer, 1960/1993, p 356). It refers also to experience in general, which is experience that must constantly be acquired and which is also something from which no one can escape.

Thus experience is, following Gadamer (1960/1993), "something that is a part of the historical nature of man.… Only through negative instance do we acquire new experiences… Every experience worthy of the name thwarts an expectation." (p. 356) The historical nature of man essentially implies a fundamental negativity that emerges in the relation between experience and insight. In this connection Gadamer also cites Aeschylus "learning through suffering" (*pathei matos*), asserting that this saying means "not only that we become wise through suffering and that our knowledge of things must first be corrected through deception and undeception" (Gadamer, 1960/1993, p. 356), but also that the reason why this is so, is that as a person one is bound to learn through the of the limitations of one's previous experiences. The reason for this is the simple fact that all human experience is limited, or, in another word, finite.

Experience is, thus, basically experience of our human finitude. The truly experienced person is, as Gadamer (1960/1993) presents it, namely "one who has taken this to his heart, who knows that he is master neither of time nor the future." (p. 357). Experience is, always, experience of the limitations of one's own experiences'. It is the experience that things are not as one expected them to be. It is, as has been implied above, however, also experience that opens up an interpretation of what is, or, of what cannot be done away with, for instance, one's own historicity. According to Gadamer, interpretation that gives understanding always takes the way through asking and listening, i.e. through conversation.

In order to understand something in another sense than the sense one has understood it in before, requires experience of particular restrictions of previous experience/understanding and a realisation that there is something one does not understand in all ways possible to

understand. This is something that cannot take place except within the experiential horizons of one's own existence, because these experiential horizons exist as a being for which, for instance, being can become a problem. It is true that "being" can change them, but it cannot be done away with, for without it one would not have world.

The experiential horizon is, thus, there for oneself and for other persons, as long as oneself and the others are there. Because being conscious is not just about being open for something in a certain way. It is also about being open for something as something in the world, within one's own horizon, which always includes oneself and other beings and things in a manifold ways, in an ever changing fore grasping understanding activity. Not even when the required openness for the other is acquired, when the hermeneutical horizon is established, does one leave one's horizons. For what happens then, is not so much that one leaves one's own horizon behind, as it is that one's horizon has come to be modified to the degree that it now includes so much of the horizons of the inscription or the work, that one has moved into a position from which it begins to become possible to divine an answer to the question that the text or the work could be considered as an answer to.

This is a question of finding a way to and setting the stage for the work or the text, so that it can address us where we find ourselves. It is a matter of bringing it back into play rather than playing for it. It is a question of allowing it to speak for itself, rather than speaking for it. It is acknowledging its right to be heard, listening to its message, allowing oneself and one's self-understanding the right of being moved out into the open by it, and seeking to answer the question it addresses one with.

Following Gadamer, the dialectic of questions and answers that is disclosed in the account of the structure of the hermeneutical experience allows us to explain more exactly what kind of consciousness historically effected consciousness is. The dialectic of questions and answers makes understanding namely appear to be a reciprocal relationship of the same kind as conversation. It is a type of consciousness that acknowledges its own historicity (i.e. that it op-

erates in history and that it is limited by its lack of experience). It is consciousness that thereby is also open for new experience. It is also consciousness that assumes that thinking dialogue with its counterpart is worthwhile. This is because it expects that it has something to say, which it itself is relatively ignorant of. It is consciousness that questioningly turns to the work or the text, and takes up a dialogue of questions and answers with the same, whose own logic – given that the thinking dialogue can be and is successfully carried out – finally leads to a fusion of horizons. This is the creation of the hermeneutical horizon, the emergence of the question and the working out of the answer that mediates between the meaning of work or the text and the human being that interprets it.

Following Gadamer (1960/1993), the dialectic of question and answer in thinking dialogue, not only results in the fusion of horizons, i.e. the hermeneutical question, but also works out an answer to it. In order to interact, the above need a medium wherein they can interact and wherein an eventual new truth of the disputed object may come into expression. And since the hermeneutical phenomenon has already been compared to a conversation, the step to assume that this medium is language is not far behind.

According to Gadamer (1960/1993), language is, however, not only the medium of interaction between the two parties, it is also the "object" in which the subject matter under consideration is brought to light. Language is where what one encounters in experience is expressed and where an answer to the question that subject matter confronts one with can be worked out. Language and words are in this sense, thus, not so much something that belong to the human being that understands and explains, as is something that belongs to the world, and to the situation in the world wherein the understanding and explaining being finds him/herself. Language makes it possible for persons to have a *world.* But to have a world means to have an orientation (Verhalten) towards the world. And "[t]o have an orientation toward the world … means to keep oneself so free from what one encounters of the world that one can present itself to oneself

as it is. This capacity is at once to have a world and to have a language" (Gadamer, 1960/1993, p. 443).

Gadamer (1960/1993) holds, moreover, that "the verbal world in which we live is not a barrier that prevents knowledge of being-in-itself, but fundamentally embraces everything in which our insight can be enlarged and deepened" (p. 447). For every such world view is, continues Gadamer (1960/1993), of itself always "open to every possible insight and hence to every expansion of its own world picture, and is accordingly available to others" (p. 447). Furthermore, whenever one understands a view that is presented in another language, one does so from within one's own verbal experiential view of the world by broadening its horizons to the degree that it can include the view of the other. "Our verbal experience of the world has the capacity to embrace the most varied relationships of life" (Gadamer, 1960/1993, p. 448).

The reason why language is able to this is because it is not a creation of reflective thought, but itself helps to fashion the world orientation wherein one lives. Hence:

> Verbal experience of the world in language is "absolute." It transcends all the relative ways being is posited because it embraces all being-in-itself, in what ever relationships (relativities) it appears. Our verbal experience of the world is prior to everything that is recognized and addresses as existing. (Gadamer, 1960/1993, p. 450)

Unlike the things that are assumed to appear in the world-views that are embodied in various sciences, the world which appears in language and is constituted by it, has according to Gadamer (1960/1993), no being-in-itself. That is, it is not relative in the same sense as the object of for instance the natural sciences is.

To have a language means, following Gadamer (1960/1993), thus, to have a relationship to the world wherein matters of fact may come to speak or, in other words, into language. In language the structure of being is not simply reflected, because the ground for the process is the finitude of our historical experience. The order and structure of our experience is itself originally formed and changed in language. "Language is", says Gadamer (1960/1993), "the record of finitude, not

because the structure of human language is multifarious, but because every language is constantly being formed and developed the more it expresses its experience of the world" (p. 457). Its centre is "the event of language, whence our whole experience of the world and especially hermeneutical experience unfolds" (Gadamer, 1960/1993, p. 457).

In his elaboration of hermeneutical experience – as an encounter between heritage in the form of a transmitted text and the horizons of the interpreter – Gadamer indicates that the phenomenon of understanding is linguistic in nature. It is, more precisely, described as a conversation between tradition and its interpreter. Trying to describe the manner wherein subject and object belong to one another and the general structure of the ways wherein truth manifests itself for man, Gadamer asks us to note that "the fundamental thing here is that something occurs (etwas geschieht)" (Gadamer, 1960/1993, p. 461 f.).

Gadamer (1960/1993) illustrates what takes place whenever understanding happens with the following example:

> Whether a given traditionary text is a poem or tells us of a great event, in each case what is transmitted re-emerges into existence just as it presents itself. There is no being-in-itself that is increasingly revealed when Homer's *Iliad* or Alexander's *Indian Campaign* speaks to us in the new appropriation of tradition but, as in genuine dialogue, something emerges that is contained in neither of the partners by himself. (p. 462)

Gadamer recalls all this in order to determine the meaning of the belongingness between subject and object as it corresponds to one's hermeneutical experience. If one is seeking a right definition of the concept of belongingness that one is concerned with here, one must, according to Gadamer, take account of the particular dialectic that is contained in hearing.

In a conversation, one who hears is not only addressed. In hearing there is also the element that one who hears must hear, whether one wants to or not. In seeing, one can always look away, but there is no such thing in hearing. This difference between hearing and seeing is, according to the philosopher, significant in this context for the simple reason that the primacy of hearing is the basis of the hermeneutical phenomenon. For as he sees it, there is nothing that is not available to

hearing through the medium of language. The language that one hears in is, however, not only that wherein everything can be expressed, but also something that opens up a world whence what is handed down, comes down in. In hearing, you listens to what reaches you and the truth of what is handed down is like the present that lies immediately open to the senses, with the difference that its mode of being is not sensible intimacy, but language. In interpreting the texture of language, one who understands it relates its truth to his/her own linguistic attitude to the world. The linguistic communication between the present and tradition is the event that takes place in all understanding.

This structure of the hermeneutical experience depends on the eventful character of language. For the use and development of language is not just a process, but that process wherein what is said in tradition comes into being anew, as new understanding. As such it is at once both assimilation and interpretation. This event is, according to Gadamer (1960/1993), not our action upon the thing, but the act of the thing.

However, the hermeneutical experience also has its own rigor: that of uninterrupted listening. A thing does not present itself to the hermeneutical experience without an effort special to it, namely that of "being negative toward itself":

> A person who is trying to understand a text has to keep something at a distance – namely everything that suggests itself, on the basis of his own prejudices, as the meaning expected – as soon as it is rejected by the sense of the text itself…. The unfolding of the totality of meaning towards which understanding is directed, forces us to make conjectures and take them back again. The self-cancellation of the interpretation makes it possible for the thing itself – the meaning of the text – to assert itself. (Gadamer, 1960/1993, p. 465)

What makes the movement of the interpretation dialectical is primarily not the one-sidedness of every statement can be balanced by another side, but because "the word that interpretatively fits the meaning of the text expresses the whole of this meaning – i.e. allows an infinity of meaning to be represented within it in a finite way" (ibid., p. 465).

In order to show that this is dialectic conceived from the centre of language, Gadamer goes on to discuss the way wherein this

(hermeneutical) dialectic differs from the metaphysical dialectic of Plato and Hegel. Both have, says Gadamer (1960/1993), what Hegel called "the speculative element" in common:

> The word "speculative" refers here to the mirror relation. Being reflected involves a constant substitution of one thing for another. When something is reflected in something else, say, the castle in the lake, it means that the lake throws back the image of the castle. The mirror image is essentially connected with the actual sight of the thing through the medium of the observer. It has no being of its own; it is like an "appearance" that is not itself and yet allows the thing to appear.…

> Speculative means the opposite of the dogmatism… A speculative person is someone who does not abandon himself directly to the tangibility of appearances or to the fixed determinateness of the meant, but who is able to reflect or … who sees that the "in-itself" is a "for me". And a thought is speculative if the relationship it asserts is not conceived as a quality unambiguously assigned to a subject, a property to a given thing, but must be thought of as a mirroring, in which the reflection is nothing but the pure appearance of what is reflected, just as the one is the one of the other, and the other is the other of the one. (p. 466)

So whereas Hegel and Plato seem to have thought of the speculative dialectic as a means to reach absolute knowledge of what is beyond all contingencies, Gadamer (1960/1993) makes no such claims. Furthermore, whereas what Hegel calls dialectic and what Plato called dialectic seem to be based on the belief that language has its true being in the form of statements that express the meaning of pre established concepts, the dialectic which Gadamer advocates is historical and based on the notion of language as speech: i.e. language that is always at work as an event of disclosure of being. Language itself presents in this sense, namely a speculative structure. As the realisation of meaning, as the event of speech, of communication, of understanding, which is speculative in that "the finite possibilities of the word are oriented towards the sense intended, as toward the infinite" (Gadamer, 1960/1993, p. 469).

A person who has something to say, seeks and finds the words whereby he makes himself intelligible to the other. He does so not by making statements, but by saying what he intends, which means "to hold what is said together with an infinity of what is not said in one unified meaning and to ensure that it is understood in this way" (ibid.,

p. 469). Someone who speaks in this manner may, continues Gadamer, very well use only the most ordinary and common words and still be able to express what is (as yet) unsaid. Someone who speaks behaves speculatively when his words do not reflect beings, but a relation to the whole of being. This is connected with the fact that someone who repeats what is said does not need to distort consciously, but will still change the meaning of what has been said. Even in the most everyday speech, there appears an element of speculative reflection, namely the intangibility of that which is the purest reproduction of meaning (Gadamer, 1960/1993, p. 469).

The speculativity of language, which among other things expresses a relation to the whole of the totality of what exists, or, in other words, lets factual relationship come to speech in relation to other relationships, shows itself, says Gadamer (1960/1963), in the example of ordinary conversation between people that understand one another; i.e., in that what is said is more than what is spoken and in that what is understood is not what is spoken but what is said with these words in the situation that is shared by the speaker and the listener in their common understanding of the world. All that is said and understood with language, which per definition has the power to encompass everything that can be experienced, said and understood, is, thus, really ordered by a larger sense of meaning in a common world that both parties share.

What is encountered in understanding and disclosed in explicit interpretation is, following Gadamer (1960/1963), not a projection of subjectivity, but the being of something that acts on one's understanding in presenting itself in a language that can be understood. Thinking that man's relation to the world is absolutely and fundamentally verbal in nature, and hence intelligible, he says also that it is the language of whatever thing it now is that presents itself that is understood whenever understanding takes place. He also says that, whenever meaning is grasped and made manifest in explicit linguistic interpretation it is so done in the interpreter's language.

The insight that being is self-presentation and that all understanding presents an event-character, is in Gadamer an insight that transcends

the metaphysics of substance as well as the transformation of the same in the modern concepts of subjectivity and scientific objectivity. It is also his meaning that one can use the metaphysics of the beautiful to establish an ontological background for the hermeneutical experience of the world. Because in the light of the metaphysics of the beautiful, which – as has been mentioned before – Gadamer uses to explain how the understanding being and the being that unfolds itself to be understood belong to one another, and how it becomes possible to realise that understanding presents the character of an encounter with being in language. Hence:

> What is evident…is always something that is said – a proposal, a plan, a conjecture, an argument, or something of the sort. …what is evident has not been proved and is not absolutely certain, but it asserts itself by reason of its own merit within the realm of the possible and the probable. Thus we can even admit that an argument has something evidently true about it, even though we are presenting a counter argument. How it is to be reconciled with the whole of what we ourselves consider correct is left open. It is only said that it is evident "in itself" – i.e., that there is something in its favour. The connection with the beautiful is manifest. The beautiful charms us, without its being immediately integrated with the whole of our orientations and evaluations. Indeed, just as the beautiful is a kind of experience that stands out like an enchantment and an adventure within the whole of our experience and presents a special task of hermeneutical integration, what is evident is always something surprising as well, like a new light being turned on, expanding the range of what we can take into consideration. (Gadamer, 1960/1993, p. 485 f.)

Understanding is, then, an encounter with being in language that can be understood. It is a genuine experience. It is a language event. It is an occurrence in one's being in the world. It is a happening where one on the basis of one's previous experiences of particular being in the world, projects oneself according to one's possibilities for being toward that being as being that presents this or that character, and where that being in power of being different than one expects it to be, presents a for oneself hitherto unknown aspect of itself. It is an occurrence where one experiences particular limitations of previous experience.

Understanding is also thus, an occurrence where what presents itself not only presents itself as being different than what one expected it to be, but also asserts itself as being a particular being that presents the character of something that has to be understood differently than it has

been understood so far. It is experience within understanding that creates a meaning difference between new and previous experience that calls for and eventually also may result in an understanding interpretation that can bridge the distance between the partly different forms of experience, can resolve the meaning differences between them, and can integrate them into new and more inclusive and specific forms of consciousness. Understanding is, thus, an occurrence in the world that means a new rebuilding of one's possibilities for being in the world toward that being that is and can be understood differently now and in the future than it used to be understood.

THE SPECIFIC PURPOSE OF THE STUDY

> *...the path of all knowledge leads through the question…"(Gadamer, 1960/1993, p. 363)*

The present chapter is intended to fill the dual purpose of establishing the research situation and presenting the more specific purpose of the study. In the first part a summary of what has emerged from first three chapters is provided. In the second, these observations are forged into an account of the research situation. In the third there is an attempt to present a delineation of purpose of the study. This is in many senses similar to the presentation that was included in Chapter 1, but also goes beyond this presentation in the sense that the new illumination is now given also against the backcloth of Chapter 2 and Chapter 3.

RECAPITULATION OF THE DISCUSSION SO FAR

In the first chapter, it was noted that "understanding" is a prestigious word in education and that what one tends to understand with it functions as a means whereby one plans, carries out and evaluates, cognitive transactions, as parents and children, teachers and pupils/students in educational activities. It was also noted that teachers, among others, are often aware that "understanding" means something other than rote learning, but that proximally and for the

most part one is not consciously aware of what is really involved in understanding.

In trying to work out a preliminary definition of what understanding has been approached as in the study, it was pointed out that understanding should not so much be thought of as an achievement of desired knowledge, as it should be thought of as something that one exercises and undergoes whenever one arrives at understanding. In this sense, understanding was also conceived as something that takes place in one's participation in educational practices and in practices that involve elements of education, where what one tends to understand with understanding in such activities also guides one in one's role and influences what can be expected to develop in such activity. The overriding purpose of the present study was in the introductory chapter finally also determined as one of studying what studying persons tend to understand with understanding, what they tend to mean it takes to understand or, in other words, what (following their experience) is involved in understanding.

In Chapter 2, it emerged that despite *understanding* obviously not being a research object in its own right, there is still quite a lot of literature in psychology and education about *understanding.* And a sample of such literature that has been found relevant for this study was reviewed. The sample was drawn from research in educational psychology on conceptions of learning and understanding on the one hand, and on the development of thinking and speaking on the other.

In the review of the studies of conceptions of learning and understanding, one can ascertain that when participants ranging from preschool to university are called upon to explain what is meant with learning, they tend to understand and explain the meaning of learning in a number of different ways. In the light of the empirical evidence that is presented, what the participants tend to understand and explain with learning varies also with the context where they tend to locate learning. In the youngest participants' accounts of the meaning for learning, learning is sometimes not possible to differentiate from doing. In the little older participants' accounts, the meaning of understanding begins to be understood and explained as a particular

sort of activity and outcome of such activity, namely activity that aims and results in knowledge (Pramling, 1983).

In the accounts of participants' beyond pre-school age that tend to understand and explain learning as a successful completion of deliberate learning, understanding begins to be pointed out first as an outcome and then as both an aim and outcome of learning. In the accounts' of participants beyond both primary and also secondary school age, learning is sometimes also understood and explained as and activity that not only involves understanding as an aim, but that also involves understanding as a prerequisite for learning (Säljö, 1979; Marton et al., 1993; Marton, Watkins, et al., 1997).

The review of the literature on previous studies on understandings of understanding revealed similar understandings and explanations of understanding in the context of sixth grade chemistry (Burns et al., 1991) and in the context of revision for final examination at the university (Entwistle & Entwistle, 1992). In addition, the review of the studies of understandings of understanding ascertained also that students' that have developed clear orientations towards understanding are often more successful in examinations and grades than students that are more oriented toward "learning". It revealed finally also that students that have developed orientations toward "understanding" sometimes find that this is obviously not what their teachers call for, and that they therefore sometimes also bring their approach in line with the perceived requirements.

In spite of the obvious similarities between the discussed research on conceptions of learning and understanding and the research on the development of thinking and speaking, one has in this research – as far as it is known here – hitherto never tried to relate it to the research on the development of thinking and speaking (Vygotskij, 1930/1978, 1934/1987; Leont'ev, 1959/1977; Lurija, 1979). This is an annoying limitation of the research.

It is certainly true that the previous studies give some insight into the direction of the development of understanding of learning and understanding, but in so far as this research has not been related to

other types of research about the same and similar objects, and as long as the development of understandings of learning and understanding as an integrated part of the over all development of intellectual abilities is not conceived of, the possible scope will be restricted.[1] There is an absence of an explicit theory of the character of the structure where understandings of learning and understanding develop. this must attend to, the conditions for the development of understanding and explaining learning, what generates, propels and guides the development of understanding and explanations of learning. Without it one can hardly say anything about why understandings of learning and understanding develop and why they develop in the way the do. What is called for is, thus, a move towards a more explicitly theoretical approach for studies of understandings in general and for understandings of understanding as a phenomenon in particular.

Another limitation of the discussed research is that learning and understanding proximally and for the most part seems to be understood as an outcome of successful completion of deliberate goal oriented action aimed at understanding the meaning of something to the extent that one also can explain it to someone else in a way satisfying for both parties. If understood in this way, understanding presents first and foremost the character of an achievement. It is something that a person is believed to achieve through "the connecting of facts, the relating of newly acquired information to what is already known, the weaving of bits of knowledge into an integrated and cohesive whole" (Nickerson, 1985, p. 234). And as an achievement of coherence, it is believed to be recognised both by oneself and by others, which is a conception of understanding that can be compared with what one has understood and explained understanding as in philosophy.

---

[1] It is true that Marton, Watkins, et al. (1997) touches upon this issue when it is suggested that it is the increase in the amount of literature between secondary and tertiary education that explain corresponding changes in approach to learning among students between these forms of education, but it is only mentioned in passing.

In the account about understandings of understanding in philosophy in Chapter 3, there was a concentration on the writings of four of the major theorists in the hermeneutic tradition, namely Schleiermacher, Dilthey, Heidegger and Gadamer. In this review it has emerged that whereas the first two of these philosophers seem to have limited their quest to the epistemological prerequisites for the understanding of language and/or human experience, the two later have not limited their quest to this, but seem rather to have tried to expand the perspective to general ontological and epistemological prerequisites for all understanding.

Schleiermacher's understanding of understanding is first and foremost thought of as a reconstruction of the meaning that is believed to have been expressed by a particular person through a particular linguistic utterance. In this perspective, understanding typically takes place in a dialogical relationship in which there is speaker who constructs a sentence to express a meaning about a particular being, and a hearer that listens to what is uttered with the intention to understand what is said. A necessary prerequisite for the conversation is that the hearer shares at least some initial understanding with the speaker.

The point is, thus, that a listener never starts to listen with a blank openness, but always with some prior understanding. This prior understanding represents the listeners initial understanding of the sentence as a whole and presuppose a meaning for the sentence as a whole. The listener can, however, only receive one word at the time. As soon as the meaning of some of the words are understood in reference to the understood meaning for the sentence as a whole, the meaning for the sentence as a whole is revised. This gives an explanation of understanding as a partly comparative and partly intuitive and divinatory process where the meaning of the part and the whole are constructed by the speaker and reconstructed by the art of dialectical listening by the hearer.

Dilthey's understanding was also conceived of as a reconstruction. In this perspective, understanding is also believed to take place in a dialogical relationship, but whilst Schleiermacher appears to have limited the quest to prerequisites for understanding of linguistic ut-

terances, Dilthey is more open to prerequisites for understanding human experience in a broader sense, no matter what medium it is expressed in. In comparison with the account of Schleiermacher, the account of Dilthey suggests also that what the understander brings to the understanding situation is not only certain pre understandings, but also prior experiences and interests in a much broader sense than has appeared to be the case with Schleiermacher. In spite of this obvious consciousness of the historicity of all understanding, it seems however, as if Dilthey could never let go of the ideal of correct interpretation as a norm for all interpretation.

In Heidegger's works, understanding was not so much conceived of as a subjective achievement of objectivity as a mode of being in the world that creates prerequisites for all understanding whatsoever. Rather, the beings for whom being can become a problem are actively engaged in the world and project themselves according to their possibilities. As such, one encounters a variety of presentations of being in a variety of ways in these activities. In so far as these presentations reveal new aspects of that being for the understanding beings, they can also give rise to new experience, which in turn creates possibilities for new understanding. There is no sense to try to go beyond the obviously irrefutable fact that since the being for whom being can become a problem is fallible, so are the being's understandings; and in this limitation lies partly also the possibilities for being.

So if Dilthey's account of the epistemological prerequisites for understanding in the human sciences is more radical than Schleiermacher's account of understanding of linguistic utterances, Heidegger's account of the philosophical prerequisites for all understanding whatsoever can be considered more radical than both Schleiermacher's and Dilthey's, for it is not restricted to particular forms of understanding and it gives a positive assurance that there can be no understandings that are not relative to particular modes of being in the world. In this, Heidegger's account cleared the way for Gadamer's account of the philosophical prerequisites not only for understanding of aesthetical and historical being, but for all understanding as it is developed in *Truth and Method,* which is an encounter

with the being of understanding that takes it point of departure in the facticity of the philosophical prerequisites for understanding.

In *Truth and Method,* Gadamer has, as pointed out, gone deeply into Heidegger's phenomenological hermeneutics, or, in other words, existential interpretation of man's being in the world; the historicity and linguistic character of his understandings; and developed it into a speculative hermeneutic, which in relation to his most influential teacher means an ontological and linguistic emphasis. Unlike, Schleiermacher and Dilthey, Gadamer does not restrict hermeneutics to the epistemological and methodological foundation for the sciences that have historical human being as research object, but reinterprets the concept of a universal hermeneutic into a conception of hermeneutic as the phenomenology of there-being (*Dasein)* and of existential, ontological understanding of being of any mode of being. Gadamer asserts the linguistic character of human reality itself and draws hermeneutics into a general philosophical hermeneutical discussion of the relationship of language to being, understanding, existence and reality.

Understanding is, not primarily seen as an operation wherein an individual mind grasps that of another by Gadamer, but rather firstly as the basic way wherein one is in the world, and secondly as the linguistic event wherein reality takes shape as a new truth for oneself. Understanding is always manifesting itself as a historical, dialectical and linguistic event, and is never an achievement of absolute knowledge of an absolute object nor an accomplishment of a subject that constructs the world after its own fancies, nor a combination of these two absurdities. Rather, understanding is an ontological linguistic disclosure of the being of being in the world to the degree that it is known. In the light of the concept of play, understanding has the character of a linguistic event, a language game, a play of language wherein something comes to language and asserts itself as truth.

Ontologically seen, understanding has its ground thus in the finitude of our human existence and in the linguistic character of being. It involves the genuine experience which comes of orientations towards the world on the basis of one's previous experience and which

essentially has the character of a productive negation and confirmation of one's expectations. It means that a subject matter is disclosed in a new and more penetrating light, that reveals a hitherto unforeseen aspect of it for oneself as one finds oneself there together with that something as it presents itself to oneself on the basis of being other than one had expected it to be. What is understood in understanding is language that belongs to what is played out. The language that addresses understanding interpretation has basically the structure of a question. It presents itself, in other words, as something that calls for an answer that mediates between previous understanding and new experience. The meaning of what one encounters can be fulfilled in explicit linguistic interpretation that corresponds to and reveals the meaning of what is understood in language that relates to being like a copy resembles an original.

In sum one can say, that the review of the four philosophers' understandings of understanding showed that while Schleiermacher and Dilthey, appear to have limited the scope of their discourses to the prerequisites for and the processes whereby the meaning of linguistic utterances or expressions of human experience of human conditions become an object for understanding, the two other, Heidegger and Gadamer, appear to have opened up to explain how understanding is in general at all possible. In the account, whereas the first two mainly appeared to have conceived understanding as a subjective reconstruction of objective meaning, the latter two appeared more open to conceive it as a language event, i.e. as a happening in active circumspective being in the world, whereby being takes shape as language that can be understood, and where such language also is/can be understood through the dialectic of questions and answers resulting in pertinent resolution of disagreement between and integration of emergent and remnant experience.

RESEARCH SITUATION

In the review of the research on understanding in psychology and education there was a special attention to studies of conceptions of

learning and understanding on the one hand and to a historical perspective on the other. Comparing, the prerequisites for these approaches to with those for the approaches to understanding of understanding in philosophy in Chapter 3, gives at least one common similarity and several differences.

In each case, understanding has been approached as a human experience, but whereas in the first it has been heard and treated as a desired achievement in pedagogical practice, or as a function of the development of one's participation in and performance of activities that involve the development of meaning, in the second it has rather been approached as what takes place whenever an utterance, expression or being becomes an object for understanding in any kind of activity. Another difference is that, where as in the first case the aim has usually been to understand and explain what pre-schoolgoing, schoolgoing and/or studying persons call learning or understanding and how one's understanding and explaining of the general meaning for words develops as a function of the development of one's participation in and performance of educational activities, in the second the intention seems rather to understand and explain what understanding essentially is, consists or involves. That is, in other words what it is that in general characterises understanding as a human experience.

Bringing these things together, the research situation is such that what one tends to understand with understanding seems to function as a means whereby one plans, carries out and evaluates co-operation with educators and persons under education. But it is also such, that what one tends to mean with understanding varies systematically with one's experiences of understandings ways of being. Moreover, the previous research on conceptions of learning and understanding has thrown some light over this variation, at least as it presents itself among young children, late teenagers and students at the university, even if the light it has manage to shed over the circumstances in, the conditions for and the mechanisms of development of understanding is quite dim.

Over against this research stands the long standing historical research on the development of thinking and speaking, understanding and

explaining of the meaning for words in individual history on the one hand, and the even more long standing inquiry in the philosophy of interpretation on the general philosophical prerequisites for elementary mechanisms in understanding no matter within what activity it plays itself out in. This has not only provided well versed accounts of objects of research that are close to those of the present study, but that can also provide guidance for a more informed approached to this project.

SPECIFIC PURPOSE

This study resembles in at least some sense all of the previously discussed studies of experiences of learning/understanding in education, the historical studies of the development of speaking and thinking and studies of understanding in the philosophy of interpretation, in that it has also approached understanding as a human experience. In power of that, it has meant an approach to understanding as whatever takes place whenever one understands, and deviates from the previous studies of understanding in education, as in these studies understanding seems primarily to have been approached as an achievement. In so far as it deviates from these studies in this respect, it draws at the same time closer to the historical perspective on the development of understanding and the studies of understanding in the philosophy of interpretation.

The present investigation deviates also however from the previously discussed studies of philosophy of interpretation as well, in that it does not have the general philosophical interest in all understanding as a research object, but only those understandings of understanding considered as a phenomenon. In so far as it deviates from these studies in this respect, it draws at the same time closer both to the studies in education of understandings of learning and understanding among participants in various forms of education and to the historical studies, because it is also conceived as a study of understandings.

Assuming that what one tends to understand with understanding is a function of one's previous experience of understanding, what one

tends to understand with understanding tends then to develop as one grows more experienced with understandings ways of being. This applies in that such understanding represents one's immediate personal possibilities to engage in learning activity that involve the development of better understanding as an objective. On this basis the purpose of the study can now be specified as that of seeking to explicate the foundations for better understanding and what persons in various ages and with varying educational background tend to understand and explain with understanding as a phenomenon they grow more experienced with understandings ways of being. All this in order to if possible thereby also workout and provide an insight that can eventually make persons more consciously aware of what understanding might mean to them such that they thereby can also improve their activity in various rolls where it is important to develop more advanced understanding.

The specific purpose of the study has, thus, been to investigate: 1) what understanding as a phenomenon is understood as by persons of various ages and with varying lengths of formal education; and on the basis of this also investigate 2) what different understandings of understanding mean for possibilities to engage in and carry out learning activity that aims at the development of more advanced understanding as an objective in it own right.

In addition to this, the purpose of the study has also been to make a move in the direction towards formulation of a theory of the development of understanding of understanding and its significance as a prerequisite for developmental learning, i.e. activity that involve productive transformation of less advanced systematic understanding into more advanced.

PART II

METHODOLOGY

RESEARCH TRADITION

> *...science is a way of life; it is a praxis... To the student in the field of human sciences the human being is a... "subject-object"... the object of research is not entirely different from the researcher... all students in those fields... communicate with their subjects-objects... do not reify them... consider themselves part of the social, historical, cultural world which they study. (Strasser, 1985, p. 56, 67, 73)*

The present study is an example of pedagogical research on learning and understanding that formed the core of the INOM-group tradition (Marton & Svensson, 1970; Marton et al., 1977; Marton, 1981; Svensson, 1985; Marton, 1992a; Marton & Booth, 1997). In this chapter, the origin and development (and some of the general characteristics) of this research tradition will be discussed. The chapter commences with a consideration of its origins and development. After that follows an account of some of the basic assumptions and guiding concepts that make up the sense of the research approach. The chapter is concluded with a consideration of the tradition as a part of the human science movement (cf. Strasser, 1985).

GENESIS OF THE RESEARCH TRADITION

The research tradition has its roots in a research project on study skill and learning in higher education that was carried out by Marton and Svensson at the *Department of Education, Göteborg University* in the

beginning of the seventies (Marton & Svensson, 1970; Svensson, 1976; Marton & Svensson, 1978). Marton and Svensson, who had both been trained as psychologists, turned to education research in the late sixties and had a common interest in studying the kind of learning that is common at the university (Marton et al., 1977), particularly the learning which comes out of participation in particular "higher" forms of spoken or written discourse (ibid.).

The purpose of their research project was threefold (Svensson, 1985). They wanted to learn:

1. How knowledge can be observed and described in a fruitful way?
2. How study skill and learning can be observed and described?
3. How study skill and learning be influenced? (p. 3).

In order to constitute the necessary data to answer these questions, Marton and Svensson arranged experimental learning situations wherein university students where asked to read texts about things that they could be expected to be familiar with.[1] They were then asked questions about how they had read the texts and how they usually learn from reading (Svensson, 1976).

When it came to their first question, how can knowledge be observed and described in a fruitful way, Marton and Svensson found that what the students learned could be described in a limited "number of clearly distinguishable ways of interpreting" the message of the texts that had been read (Marton & Wenestam, 1984, p. 11; my translation). When it came to the second question, how can study skill and learning be described, they discovered "…two different and relatively easily identified ways to approach and perform a learning or study task" (ibid., p. 11; my translation).

In the first of these two ways of approaching and solving a study task, the learners were found to "…conceive that which is to be learnt as a whole and view its different parts in relation to one another as well as to the whole", and thereby to also "…focus… the message that a

---

[1] See Svensson (1976, p. 86 ff.) for a complete description of the experiments.

spoken or written account is meant to convey or the phenomenon that the spoken or written language intends to explain"(Marton & Wenestam, 1984, p. 11; my translation). In the second approach, the learners were found to have directed "…their attention to various parts of the presentation, which are delimited from one another… to put that which [they] see or hear [or read] in their memory" (ibid., p. 11 f.; my translation). This often meant that they thereby often missed the very point of the oral or written presentation

The two main results of research on study skill and learning were thereafter turned into descriptions of two different, but closely related ways of conducting research on learning. In the first, which was proposed by Svensson (1976) and which was later called *contextual analysis* (Svensson, 1983, 1985), the main emphasis was on studies of learning as study skill (cf. Säljö, 1975, 1982). In the second, which was proposed by Marton (1978; Marton & Svensson, 1978) and which became called *phenomenography* (Marton, 1981), the focus was to begin with no longer on study activity as a whole (Svensson, 1984b), but rather on descriptions of the outcome of such activity (Dahlgren, 1975; Hasselgren, 1981; Hasselgren & Beach, 1997).

The aim of this research was conceived in terms of description and systematisation of descriptions of qualitatively different conceptions of socially significant objects in the surrounding world. The obvious rationale for the research was that one through description, analysis, and understanding of differing ways wherein people, experience things could also find keys to grasp and explain critical differences in concrete cases of human functioning. The term *phenomenography* has thereafter, however, also been employed to denote both the first and the second proposed way of conducting research on learning (Svensson, 1985); as well all the other ways of doing research on learning that has developed under the influence and guidance of Marton, and associates at *Göteborg University* and elsewhere since then (Alexandersson, 1985; Ahlberg, 1992; Booth, 1992; Ekeblad, 1996; Lindahl, 1996; Marton, Hounsell, et al., 1984, 1997; Hasselgren & Beach, 1997; Åberg-Bengtsson, 1998).

"Phenomenographic research" has, in other words, become a quite broad and diverse research tradition and has not only come to concern study activity, educational effects on ways wherein various categories of persons tend to understand and explain particular being, and in terms of transitions between qualitatively different conceptions of particular being considered as whole. It has also come to concern a variety of more or less closely related issues like: *teachers' meaning for pedagogical significant concepts* (Larsson, 1982; Andersson & Lawenius, 1983; Hesslefors Arktoft, 1996); *children's conception of reading and numbers* (Dahlgren & Olsson, 1985; Neuman, 1987); *phenomenographic didactics* (Kroksmark, 1987); *schoolchildren's map-reading and way-finding* (Ottosson, 1987); *how people relate their life with asthma/allergy* (Hansson Scherman, 1994); and: *differences in teachers' goal-orientation and ways of teaching pupils things that are subject for teaching and learning in a particular school subject* (Alexandersson, 1994; Runesson, 1999), just to mention some of the studies that has been carried out at the *Department of Education, Göteborg University.*[1]

SOME GENERAL CHARACTERISTICS

In the original project on study skill and learning in higher education, learning was approached as a study activity (Marton & Svensson, 1970). The purpose of the research was to describe such activity in terms of its content and to gain insight into how such activity could be improved. This is research in education that can be characterised in terms of three typical characteristics, namely:

1. a relational perspective on learning,

2. a focus on description of qualitatively different ways of interpreting particular objects, and:

---

[1] Cf. Hasselgren (1999) for an overview; and Marton and Both (1997) for Marton's personal account of the genesis, development and character of the research tradition.

3. a systematisation of descriptions of such interpretations by means of the development of descriptive categories and a rational system for the organisation of these.

These characteristics will be discussed in the mentioned order.

A RELATIONAL PERSPECTIVE

The initial Marton and Svensson (1970) experiment was set up in part in polemic with dominant research in education at the time which tended, they felt, to emphasise the ability to memorise, retain, and repeat previously memorised information or acquired behaviours (Marton et al., 1977). Against this obviously rather atomistic and mechanistic view of knowledge, learning and study skill, Marton and Svensson tried to place a more holistic, organic interpretation. However, according to the understanding that is sustained in the present study, knowledge can be understood and explained as a person's or a group of persons' cumulated experience of particular being and learning can be understood and explained as a change in the learner's experience of this being. This means that study skill can be understood and explained as one's acquired ability to develop more advanced understanding through deliberate study activity.

In this discourse, learning tends, thus, always to mean that someone learns something in relation to something else, through some learning activity. A as a conclusion that can be drawn from this is that learning – as well as some other phenomena – ought to be studied in terms of their structure as lived experience or as historical activities rather than as things or processes with certain properties. This is different to the contextual and de-contextual research which developed initially and within the INOM-group tradition (Marton & Booth, 1997).

The relational view of learning which has developed through the above research, has however has made it possible to acknowledge the fact that learning can mean several different things. these vary from the relatively successful completion of deliberate goal oriented learning activity and an achievement of knowledge in doing some-

thing, to an achievement of knowledge about a previously unknown aspect of a given phenomenon, or an achievement of knowledge in doing something in a better way than before. The learning that has been of interest here has thus not been learning in "traditional" senses, but rather learning as a realisation of new ways of conceiving and relating to given objects in particular types of situation and within particular kinds of activities.

In this sense, learning has been studied in at least four ways. In the first of these, it has been studied in terms of how and what people learn from reading a given text about a given phenomenon (Säljö, 1982). In the second, it has been studied in terms of qualitatively different ways wherein people have come to conceive and explain particular being (Theman, 1983). In the third, it has been studied in terms of what people have learnt with regards to changes in their ways of conceiving and explaining aspects of life after having participated in a certain form of education and teaching (Alexandersson, 1985). In the fourth, it has been studied in terms of the ways wherein people's ability to conceive and explain tends to develop over time as they grow more and more experienced of ways of being in the world (Marton et al., 1993).

The understanding of ways wherein people tend to understand and explain given objects that are sustained in the discussed research has become more and more differentiated and sophisticated through these studies (Marton, 1981; Marton & Booth, 1997). The understanding of how people's ability to conceive and explain given phenomena has also changed or, perhaps rather, developed (Åberg-Bengtsson, 1998). It is, however, only quite recently that there have been explicit attempts to give more general description of the structure of the studied form of learning (Marton, 1992b; Marton et al., 1993; Marton et al., 1997; Marton & Booth, 1997). So despite a lot of work on trying to account for what often is referred to as qualitatively different conceptions of various phenomena, and a lot of work on trying to better understand and explain how various people's ability to understand and explain phenomena tend to develop as they grow more and more "educated", it has not meant equally large efforts to describe the general structure

of the type of learning that has been studied and there has been little work in trying to understand why people's ability to conceive and explain given phenomena develop the ways they appear to develop and not in other ways.

This is one of the things that has not been focused on in the research as it has been developed so far, but which perhaps will be focused on in the future. In order to do so however, it seems necessary to shift focus from merely trying to describe people's conceptions of things toward trying to account for things like the concrete prerequisites for the development of learning activity and the various characters of the contexts wherein learning and understanding develops. It is in other words, necessary to move beyond mere "phenomenography" toward what one can call a more informed hermeneutic phenomenological approach to research on learning as it takes place in educational activity.[1]

INTERPRETATION OF UNDERSTANDINGS

If the relational view on knowledge, learning, study skill, and all other phenomena is one of the main characteristics of the discussed research tradition, the focus on interpretation of qualitatively different ways of understanding and explaining can be considered as another characteristic. However, it must not be overlooked that the research has hardly ever settled with this as an end in itself, as the studies as a rule have involved interpretation of what has often been called qualitatively different conceptions as a means to something else, rather than as an ends in itself. However, it is still of some importance to try to clarify what seems to have been meant with what has been called conceptions. Not the least because of the ways the meaning of the term conception seems to have shifted over the years.

---

[1] Sharp (1986) has delivered a similar critique against self-contained ethnography in educational research.

At the beginning of the research tradition, Marton and Svensson (1978) wrote that:

> *Conception* stands often for that which is assumed, that which is not necessary to say since it never has been subject for reflection. They make up the frame of reference within which we have gathered our pieces of knowledge or the ground upon which we build our reasoning. (p. 20; my emphasis and translation)

However, on a latter occasion, Marton (1981) wrote that:

> A conception… [is] a mental act and it is exhibited by someone who does something in a certain setting. (p. 196)

Two years latter, Theman (1983) explained that:

> A conception is a form of understanding, that is an intentional way of configuring a phenomenon. (p. 163; my translation)

And a year after that Svensson (1984a) wrote the following:

> The conception is a relation between man and a part of the surrounding world that is created through the activity of man. The activity means a delimitation of, a differentiation within, and a sample and an organisation of meaning content of a part of the world. (p. 20)

Marton has since then tried to develop this notion further. In Marton (1992a), for instance, he makes an explicit reference to Svensson (1984a) as he presents the following explanation of the meaning of the concept of *conception:*

> An experience or a conception of a phenomenon – the internal relation between subject and object – is a way of delimiting an object from its context and relating it to the same or other contexts and it is a way of delimiting component parts of the phenomenon and relating them to each other and to the whole… (Marton, 1992a, p. 5)[1]

---

[1] In Marton (1992) the words *conception* and *experience,* as well as the words *perceive, apprehend, understand, conceptualise,* are used interchangeably (p. 4 f.). The object of research is there also put as "the differing ways in which people experience…" or the differing ways in which a certain phenomenon appears to people no matter what the character of the activity that they deal with it in (Marton, 1992, p. 4). This is not to say that there is no difference between experiencing, perceiving, understanding, etc., but to say that the focus in the research perspective first and foremost is the variant and invariant meaning in and between differing ways wherein the being of particular being tends to be presented and present itself as when the being of that is dealt with and encountered.

Under the influence of his reading of *The Field of Consciousness* by Aron Gurwitsch from 1964, Marton has (together with Booth) in 1997, also presented the following definition of the related and gradually developing understanding of the being of that is under consideration*:*

> "A way of experiencing something" is experiencing something *as* something, experiencing a meaning that is dialectically intertwined with a structure. "A way of experiencing something" is a way of discerning something from, and relating it to a context. The meaning of something for something for someone at a particular point in time corresponds to the pattern of parts or aspects that are discerned and are simultaneous objects of focal awareness…. an aspect that is discerned and held in focus is associated with a dimension of explicit or implicit. What *is* the case is explicitly or implicitly seen against the background of what *could be* the case. (Marton & Booth, 1997, p. 112)

To further articulate the proposed meaning for the discussed key expression, Marton and Booth (1997) also provide an example:

> … discerning and being focally aware that something is in uniform motion implies an awareness of a dimension of variation with two (or possibly more) states: uniform movement (including rest) and non uniform motion (acceleration or deceleration). When an aspect is not discerned and not held in focal awareness – say, for instance, that something is at rest and we are not particularly conscious that it is so – we can either say that this aspect is absent altogether or that it is taken for granted and no alternatives are being explicitly considered. (p. 112)

 A "conception" is there, in other words, interpreted as a dynamic and meaningful relation between a particular person and a particular part of the world. It is the person that is held responsible for the creation of the relation, but since it is done in relation to particular being it is co-dependent on both parts of the relation.

The preferred term for the object of investigation has, as can be read out of the quotations, changed. So too has to a certain extent also the understanding of the general object of research, but the fact remains that the research still involves interpretation of qualitatively different understandings as a significant element.

SYSTEMATISATION OF INTERPRETATIONS
OF UNDERSTANDINGS

The immediate results of the research tradition discussed here have, as suggested before, been systematic presentation of descriptions of what have emerged as typical ways wherein people can be said to have interpreted definite objects in particular situations. These descriptions have been given in terms of categories of interpretation and systems of such categories which have typically been worked out through what Svensson (1985) has called *contextual analysis.* They represent deliberate attempts to relate general meaning structure of ways of interpreting given phenomena in relation to the general meaning structure of other ways.

The purpose of the research has, however, as a rule never been limited to description and systematisation of descriptions of qualitatively different ways of understanding the same phenomena as a thing in itself. In so far as it has dealt with this, it has been done so in the hope of thereby perhaps also providing knowledge that can used to improve related and relevant elements of pedagogical praxis (Marton, 1992a; Marton & Booth, 1997). This is perhaps particularly the case in work by Pramling and her associates (Pramling, 1994; Pramling, Davidsson, Fors & Johansson, 1995; see also: Hasselgren, 1981; Lybeck, 1981; Johansson, Marton & Svensson, 1985; Alexandersson, 1985; Alexandersson, 1994; Rovio-Johansson, 1999). The discussed research could thereby perhaps also be characterised in terms of an immanent dedication to the improvement of pedagogical praxis.

DEDICATION TO IMPROVEMENT OF PEDAGOGICAL PRAXIS

The notion of learning as the process whereby persons develop relatively more advanced ways of relating to things spring from an assumption that one's experience of (and one's ability to conceive and further deal with) things in the world, represent deeper layers of meaning in meaningful relations to ways of being in the world, than those that often are referred to as "knowledge" and "skills" (Marton, 1988). Moreover, whereas one in conceiving learning as acquisition of

facts, procedures, etc., tends to presuppose that the object for learning is already known in advance, in learning considered as realisation of relatively more advanced ways of relating to ways of being in meaningful action, one makes no such claims (Marton & Booth, 1997). Instead of presupposing this, one tends rather to presuppose that the object for learning is constituted in the learning activity itself and thus that learning involves a partly unforeseen productive transformation of ways of being. Furthermore, one has also tried to influence teaching and learning in direction toward more advanced ways of understanding (Lybeck, 1981; Marton, Svensson & Johansson, 1985; Pramling, 1994; Pramling, Davidsson, Fors & Johansson, 1995).

Even the studies of typical ways wherein people tend to conceive and explain various phenomena may be seen as an expression of the desire to make a contribution to the improvement of pedagogical praxis (cf. Theman, 1983). Because these studies are only meaningful to the extent that what is made the subject for conceptions has also been, is, or can also be made subject for teaching and learning as well. The turning to the things themselves in the particular fashion that appears characteristic for the discussed research can, thus, be interpreted as an attempt to learn and communicate something that eventually might prove useful to be aware of in attempts to improve pedagogical praxis in relation to these phenomena.

This doesn't mean, however, that the results of the research have necessarily have been immediately applicable in educational praxis. Nor does it mean that it will be possible to draw clear cut conclusions concerning how to organise teaching and learning from the research. It does mean though, that at least the research has been and continues to involve a hope for generating knowledge about human understanding and functioning in pedagogical practice, that can prove useful to guide a future development of the fundamental values and objectives that are sustained and obtained in such practice (Bowden & Marton, 1998; Kroksmark, 1987; Marton & Booth, 1997; Strasser, 1985).

SUMMARY AND PERSPECTIVE

In sum, the research tradition that this study is a part of originates as, from a research project on study skill and learning in higher education (Marton & Svensson, 1970; Svensson, 1976; Marton, 1992a). The research project concerned learning from reading writings. But since then the tradition has come to involve research on a variety of phenomena. The common denominator has from the beginning, however, always been the relational perspective on learning, as well as any other phenomena and the interpretation of understandings of particular ways of being. Added to these is always the systematisation of description of differing ways of understanding and the dedication to the improvement of pedagogical praxis. In a broader perspective, this research can be considered as a movement towards a transformation from behavioural or social science domination towards the inclusion of human science educational research and extra scientific praxis (Strasser, 1985) which also appears to parallel a corresponding movement in psychology (Giorgi, 1967, 1970, 1975, 1985; cf. Alexandersson, 1981, and Karlsson, 1993, for introductions).[1]

In the attempts to work out the philosophical grounds for the research tradition discussed in this chapter, inspiration was first sought in Bradley (1846–1924) and Moore (1873–1958) (Svensson, 1984a) and then in Gurwitsch (1901–1973) (Marton & Booth, 1997). However, my own feeling is that it is more fruitful to locate the tradition within the human science movement (Strasser, 1985) and to try to articulate its philosophical assumptions relative to Heidegger (1927/1993), Vygotskij (1934/1987), Leont'ev (1959/1977), and Gadamer (1960/1993). This is because in the perspectives developed by these agents, one is "dedicated to the human being as a concrete spiritual

---

[1] If interpreted as such, it must however not be forgotten that whereas the phenomenological psychology that Giorgi advocates was started as an explicit attempt to achieve the transformation of psychology on phenomenological grounds, the research in education that Marton (1981), Svensson (1985), and Marton and Booth (1997) advocate evolved from concrete research on study skill and learning in higher education. As the research tradition has evolved however, it has become more and more important to clarify its philosophical assumptions (Svensson, 1984a; Marton, 1992b; Marton & Booth, 1997).

material entity and to the concrete realisations of this entity" (Strasser, 1985, p. 66). This means that the research involves an acknowledgement of the fact that human beings and human life has its ground in the humanity that is the origin of and the organiser of the world that human beings live in. Something which offers an acknowledgement that the world under consideration presents historical, cultural, social, religious and pedagogical aspects, and that it does so through the human and for humans.[1]

The human scientifically of the research is thus manifest in that the research is assumed possible just because of the language that belongs to what is studied and the situations this is part of and through which it becomes possible to approach and objectify things through communication. This also shines through in that the assumption that communication with persons about subject-objects is the main source of information, and that the ways of delimiting and studying the subject-objects is not the only way to do so, but only the best way so far "seen" given the values that are striven for in research practice.[2]

The present research has been carried out within the discussed research tradition and presents, as suggested before, not only human scientific but also pedagogical aspects. This is, as suggested before, first of all believed manifest in that it involves a commitment to the

---

[1] This approach acknowledges that the research object is not "things", but rather subject-objects. This is an aim at objectification through communication without reification of what is under consideration as a research object and implies an acknowledgement that the research objects are not entirely different from the researcher, but are shared in attempts to objectify them through communication with self and others.

[2] The research also presents a human scientific character however in that it involves acknowledgement of that the results that emerge from the same are never independent of the researchers foreknowledge of the research objects and the ways of delimiting, studying and describing them. It is also human scientific in that it involves the conviction that research with advantage involves the need to, at least to a certain extent, address ontological as well epistemological, methodological and existential questions concerning the work. It is also human scientific in that it involves an acknowledgement that what is done and achieved have implications not only for future research, but also for extra scientific pedagogical praxis.

improvement of pedagogy. This both as a particular form of practical human science and as a particular form of extra scientific practice.

The education potential of the research is in this respect perhaps most clearly manifest in the early works concerning the how and what of people's learning (Svensson, 1976; Säljö, 1975, 1982), the works concerning teacher thinking (Larsson, 1982) and student thinking and learning (Hasselgren, 1981; Renström, 1988; Johansson, Marton & Svensson, 1985), and in the works concerning the development of definite abilities in teaching and learning in education (Alexandersson, 1994; Pramling, 1994; Pramling, Davidsson, Fors & Johansson, 1995; Runesson, 1999; Rovio-Johansson, 1999). This is because in these works it is obvious that the research is conceived as a means to work out a systematic knowledge that can provide parts of a theoretical basis for the improvement of relevant aspects of pedagogical praxis.

Moreover, the "educativity" of the research is also believed to be manifest in the works that concerns conceptions of learning and teaching (Säljö, 1979; Pramling, 1983; Marton et al., 1993; Marton, Watkins, et al., 1997) and teaching (Larsson, 1982; Andersson & Lawenius, 1983), because these seem also to have been conceived in order to develop pedagogical relevant understandings of these issues. This applies even to works such as Theman's (1983), which at first sight perhaps do not look so "pedagogical". This is because the phenomenon that is dealt with there are of great social importance, not the least from the point of view of democracy and popular education. Works like that have as a rule also served the purpose of developing the research approach.

If what has been suggested above holds, the discussed research tradition can be interpreted as a movement in contemporary research in education towards a transformation of education as a behavioural or social into it as a practical human science. This includes the transformation of extra scientific pedagogical practice into practice that is more in line with the fundamental values and notions that such practice is intended to sustain and develop (Strasser, 1985).

Being research in pedagogy that typically involves studies and accounts of ways wherein various categories of people tend to understand and explain ways of being in the world and how ways of understanding develop with experience it can perhaps also be interpreted as hermeneutical, phenomenological research in pedagogy and understood as a part of the more comprehensive project of developing the humanity of the human science in general and pedagogy as a practical human science in particular. This is, also the perspective that the present work has come to be conceived in.

OUTLINE AND PROCEDURES OF THE STUDY

> *[The study] is an inquiry process of understanding… that explore[s] a …human problem. The researcher builds a complex, holistic picture, analyzes words, reports detailed views of informants (Creswell, 1998, p. 15)*

In addition to the work attended to in the analysis of previous work in psychology, philosophy and educational research, the research activities of the present study have comprised four empirical studies. The first three however, mainly served the purpose of finding a way to constitute a research situation for the forth and a method for studying ways wherein a particular category of people tend to understand and explain understanding in such a way that could help me learn something about how such understandings develop.

The present chapter has been divided into two major parts. In the first, there is a presentation of the three preparatory studies. After this follows a presentation of the main study. In this some descriptions are given of participants, the constitution of data and results and the character of the results. This is intended to give a sense of the constitution of the method of the study.

PREPARATORY STUDIES

In the first of the three preparatory studies, which was carried out in 1983–1984, about twenty adults with various educational background

and occupation were interviewed (Helmstad, 1984). The interviews were divided into three parts. In the first, which concerned everyday experience of understanding, the participants were asked to recall and describe an occasion when they had experienced that they understood, grasped, or comprehended something. In the second, which concerned similarities and differences in the meaning of various concepts, the participants were invited to express their views regarding concepts such as: knowing, believing and understanding. In the third, which concerned experience of understanding in a problem solving setting, finally, the participants were invited to participate in one or two simple teaching/learning "experiments".

The first of these "experiments" was intended as a replica of Wertheimer's (1945) problem about finding the structure of the area of the parallelogram. The second "experiment" was a replica of a reading situation that Bransford and MacCarell (1977) used for studying inferences in reading. The purpose of these "experiments" was to evoke experiences of understanding, which thereafter could be used as points of departure for further discussion of the meaning of understanding.

The purpose of the study was to:

1. find out if it would be possible to study and describe conceptions of understanding,

2. discover some of the difficulties that one can run into in a study of this kind, and:

3. to gain more insight into how a more encompassing study of conceptions of understanding could be designed.

The interviews were tape recorded and selected parts of the recordings were transcribed into verbatim interview protocols. This was the parts that contained accounts of experiences of understanding.

As an immediate result, it was found that the participants as a rule found it very difficult to recall and describe experiences of understanding. In spite of this, nine of the altogether twenty participants could recall and relate at least one or two such experiences. It was also found that as a rule it was quite difficult to follow up on the

participants oral accounts in order to learn more precisely what could be said to have taken place on the described occasion.

Contemplating the reasons for this, it emerged that one reason was that it was often quite difficult to grasp what it was they felt they had understood. Another reason was that they often didn't seem to have much more to say about the event than what they had already captured in a few phrases. Further, it also occurred that questions about what took place led to new reconstruction rather than an articulation of previously presented reconstruction.

This study also revealed that the participants found it as a rule very difficult to give explicit verbal accounts of their meaning for understanding, knowing, believing and that the attempts to evoke understanding didn't work. Indeed the effect on participants who had initially been unable to voice assumed and expected experiences of understanding, was that they became annoyed, frustrated, and embarrassed by then. The study resulted finally also in a preliminary description of similarities and differences between various accounts of instances of understanding (Helmstad, 1984).

The second preparatory study was carried out in 1985. In this five different school-classes in grade six of the Swedish compulsory school from two different schools, were invited to write one or several essays over one of three themes. In my order of preferences the themes were: 1) When I understood…, 2) When I did not understand, and finally, 3) Something which I would like to understand (Helmstad, 1985a).

The purpose of this second preparatory study was similar to the first and aimed at learning more about how a future study of people's conceptions of understanding could be designed. It aimed more precisely, at finding out whether twelve year old could be expected to recall and write down accounts of instances of understanding, but it was also intended as an attempt to study and describe ways wherein persons in this age tend to understand and explain the meaning of understanding as phenomenon.

The participants were contacted through their teachers and the task was introduced. This involved an explanation of the purpose of the study, an explanation of the task and an plea to the participants to try to write something that applied to the first theme. The participants were given 40–60 minutes to complete the assigned task. About 80 of the altogether 100 pupils wrote about the first theme, 15 wrote about the second, and 23 wrote about the third theme. Some of the participants wrote about more than one of the themes.

The length of the participants written accounts varied from three lines to one and a half A4-sized pages. Against the background of the previously observed difficulties whereby adults had recalled and described instances of understanding, it was quite surprising that as many as 2/3 of the participants had written about the first of the three topics, i.e. "When I understood…".

At a closer inspection, however, it was found that the majority of the essays were not really accounts of instances of understanding, but rather accounts of things that the story-tellers claimed they understood. It was also found that those accounts that were not judged to represent accounts of instances of understanding, could be divided up into two different groups. On the one hand, there were accounts that merely contained a listing of things that the narrators claimed they had understood. For instance, how to behave when sport-fishing, what spoon-bates to use, where to fling the bait, and how to crank the reel in order to catch the big fishes, etc. On the other hand, there were accounts wherein the narrators typically mentioned what they used to think about something and what they tend to think about it now. The following account may serve as an exemplification of this kind of accounts:

> When I was little I thought you could fly like a helicopter if you swung a rope over your head. Now I know that the propeller is formed so that it sucks itself through the air. (Helmstad, 1985a, p. 3)

The narrator, a twelve year old boy, relates about something he used to think was the case when he was younger, but which he now knows is wrong, because now he knows that something else is the case. The account is, as in the previous mentioned types of accounts, not a

description of an experience of understanding, but rather an account of something that the narrator thinks he knows. This is because there is no account in the story of how he came to understand what was understood.

Understanding was, in other words, in these cases, not dealt with in the intended sense. Instead of giving an account of an occasion when the narrator experienced he or she came to understand something, these participants gave accounts of things they meant they had learnt and thereby achieved knowledge of.

There was however, as suggested before, also a category of essays that was identified as what had been asked for. Namely, accounts of occasions when one had experienced that one had understood, grasped, or realised something. The following account may serve as an example of this category of accounts:

> It was a perfectly normal summers day. All of a sudden the phone rang and mom answered. It was grandmother. I sat down in the stairs and mom said: "Has Ivan passed away?" Then I understood that grandfather was dead. (Helmstad, 1985a, p. 9)

In this particular case, the narrator, a twelve year old girl, tells about an occasion when she understood that her grandfather had died by apprehending the significance of what her mother said as a response to what grandmother told her on the phone.

An attempt was made to describe the typical ways wherein the participants appeared to have understood understanding in the composition of these narratives. The experience that was gained from the study showed that at least some persons as young as twelve, at least in part, are capable of recalling and giving written descriptions of instances of understanding, which was the main thing which this part of the investigation aimed to find out about.

The third preliminary study of conceptions of understanding on the basis of a concordance containing all the entries of the verb *förstå* (to

understand) (Helmstad, 1985b).[1] The concordance had been gathered by *Department of Swedish, Göteborg University* (Språkdata, 1982/1983) and consisted of an alphabetical listing of all words in their immediate context from all the novels published in 1981 and 1982 by a particular publishing house (Helmstad, 1985b).

The purpose of this study was twofold. On the one hand, it was intended as a means to become more consciously aware of the various senses of the verb *to understand* and the noun *understanding* in the Swedish language. On the other, it aimed at finding out the extent to which the material analysed could provide a ground for an analysis of conceptions of understanding.

The sample from the database consisted of about 50 A4-sized pages with about 60 lines on each page. Each line consisted of about 10 to 20 words with the key word in the middle. The extracts were, however, not always as meaningful as one could have hoped. The context the key word was presented in was sometimes, namely, so narrow or so incomplete that it was difficult to determine the sense made of the verb. This meant that many lines had to be ruled out as data.

The analysis was carried out on what then was thought of as three different levels of analysis and description: The 1) word level, 2) conception level, and: 3) conceptual level. The analysis was carried out on the two first levels at the same time in a series of successive steps. These steps were: 1) two free readings of the material as a whole, 2) one reading of the material as a whole marking what appeared as typical uses of the key word, 3) a transcription of these lines, and finally: 4) a reading of the material in an attempt to describe the various uses on the two levels. All told this meant an end to the analysis on the first level and it resulted in a description of about twenty different senses of the verb *to understand.*

This phase of the analysis was followed by an attempt to improve the first version of the categories of description. And an attempt at finding

---

[1] This study was inspired by Allwood (1984).

out what the different kinds of categories of description meant with reference to understanding as a phenomenon was also made. The attempt resulted in part in a smaller number of categories of description and in part in a limited number of significant propositions about understanding as a phenomenon. These significant propositions, which included sentences such as "Understanding appears in different forms and on different levels" or "One may think one understands something and at the same time be aware of that one doesn't understand it completely", was also exemplified with significant quotes from the database that appeared to confirm these sentences. The first sentence was, for instance, exemplified by the following quotation: "If people that don't understand one another, understand that they don't understand one another, then they understand one another better than if they don't understand that they don't understand one another…". The second sentence was, for instance, exemplified with the following quotation: "Ellen both understood and did not understand" (Helmstad, 1985b, p. 9).

The above analysis is also provided as an answer to the first part of the main study, which will be discussed in the next section. And after it had been completed, the concordance data was finally also analysed with respect to what understandings, types and conceptions of understanding can be said to have appeared in the reading of this material. The results of this analysis are presented in Appendix 3.

In sum, the three preparatory studies revealed some interesting things both about understanding as a human experience and about one's possibilities to study understandings of understanding. The main insight was that understandings of understanding can be studied and that one can find access to understandings of understanding through interpretation of peoples' narratives about occasions when they have experienced that they have understood. The conclusion was that the main study could involve narratives about experiences of having come to understand (something).

MAIN STUDY

The main study has been carried out through two major interpretative turns. In the first turn, which for the most part took place between 1986 and 1991, the focus was on trying to study, describe and systematise descriptions of typical ways wherein participants have understood understanding as a phenomenon into categories and on trying to fit their contributions to this system of categories. In the second turn, which for the most part took place between 1992–1995, the focus was on trying to explore the significance of understanding understanding in these ways. This part of the study has also developed into an attempt to draw up an account of how and why understanding of understanding develops in the ways it seems to. The research situation and the data in the first turn were constituted initially during the school year 1986/1987 and with respect to the second phase between 1992 and 1998. The constitution of the method and the results was with respect to the first part mainly carried out between 1988 and 1991, but this part has continued further since then and in parallel with the constitution with the research situation.

A preliminary account of parts of the result from the first turn has, as mentioned before, been discussed earlier in Helmstad and Marton (1992). The constitution of the interpretation and communication of the results and interpretation that is presented here has with respect to the first turn, for the most part been worked out between 1993 and 1996. The constitution of the interpretation and communication of the result of the second turn has been worked out between 1995 up until the writing of *Preface* in April 1999.

PARTICIPANTS

The study involved altogether 101 persons in four different age groups. The four groups were: A) twelve-year old children; B) fifteen-year old adolescents; C) eighteen-year old young adults and, D) adults that with few exceptions had less than nine years of formal schooling. The first three groups belonged to one grade six school-class, one grade eight class, and one class in the second year of the *Social Sciences*

programme in the gymnasium. The adults came from two study groups for active workers, one study group for retired workers, and two adult municipal school-classes. The age of the participants varied between 12 and 75 years. The length of formal education varied between 6 and 12,5 years. The adults had, as a rule, participated in less than ten years of formal schooling. There was only one of them that had studied at the university, but that person had only studied there for one term. Most of them could therefore be said to have undergone a rather short period of formal education.

The participants can also be divided into a group that only participated in terms of providing one or more written accounts for the research and a group who also participated in interviews. The participants were divided over groups and the extent to which they participated as follows in the table below:

Table 1. Number of participants over groups and the extent to which they participated in the study

	Group				
Status as participant:	A	B	C	D	Total
written	13	11	18	25	67
written plus interviews	8	8	8	10	34
Total	21	19	26	35	101

14 of the 34 participants that participated in the interviews were male and the remaining 20 were females. This sex distribution was about the same as in the group as a whole (cf. Table 1 in Appendix 2 for the exact numbers).

CONSTITUTION OF DATA

The participants were initially contacted by telephone or after contact with the school teacher or head teacher, and personal contact in their own class-rooms. A short introduction was given. This involved a presentation of myself and my view of the education science. The project was presented as one aiming at description of how people in

various ages tend to understand understanding. And the participants were invited to give a written account of an occasion when they experienced they understood something.

They were instructed to write the account under the title of: "When I understood….". They were informed that some of them on a latter occasion would be invited to participate in a following research interview. They were also told that in these following interviews their essays would be discussed and that they would also be asked some questions about what they usually tend to understand with understanding.

The participants that were engaged in the various forms of formal schooling, were thereafter allowed to use one or two school hours in the following week to write down their accounts. The participants that were engaged in the adult study circles were invited to write their accounts at home and then return them to their study circle leader within two weeks.

This step of the first part of the study, resulted in 101 of the altogether about 150 persons handing in one or several written accounts. The procedure yielded about 130 accounts. These were read with the explicit purpose to make a selection of accounts and narrators to the subsequent interview, that could be said to representative for each age group and for the material and group of narrators as a whole. Out of each group 8–10 persons were called upon to participate in the research interview. The selected were contacted either through their teacher's or directly by telephone. All but two of them were interviewed. The ones that were not interviewed were simply not present in school the day or days when the interviews were conducted.

The immediate aim and the plan for the interviews was to:

1. Follow up on the written description. Try to get a more extended description of the described instance of understanding. Discuss the meaning of understanding in this particular case with them. Ask for further examples of occasions when they experienced that they understood. And, if possible, follow up on these accounts too. Discuss the meaning of understanding in each of these cases. Discuss similarities and differences between these instances of understanding.

2. Invite the participants to give some examples of how they use the key word. Discuss these sentences in terms of different meanings for understanding.

3. Try to find out what they preferably intend with understanding by inviting them to imagine what they would say to someone who one day all of a sudden would ask them what is meant with "understanding".

The interviews with the school pupils were conducted in a secluded room at their school. The interviews with the rest of the participants were carried out in their homes. The interviews were, as a rule, carried out according to the plan. However as, they were carried out, it was noticed that the attempt to follow up on the participants written accounts often either lead to them bringing in new information that appeared to change the meaning of the event that they had accounted for, or to them not being able to say more about it than what had already been said. Quite a few of the participants could, however, come up with more examples of instances of understanding, but when trying to follow up on these it was my experience that it was often difficult to get the chronological order between various events in the narration straight.

The attempt to discuss differences and similarities between various descriptions was, to the extent it was possible at all not found very fruitful. In connection to the second of the three moments in the interviews, asking for example of sentences that make use of the word understanding, it was found that the participants often had difficulties in giving more than a few examples. And the attempt to discuss differences and similarities between the suggested sentences with reference to the use of the word understanding was not as fruitful as expected either.

In connection to the third of the three moments, it appeared that while the younger participants often had only a few words to say, the older participants had more to say, but still had great difficulties to deal with the explicit question. It was as a rule only some of the participants, mainly the young and mature that could deal with this question.

The interviews, which lasted from about 25 minutes to 2 hours, were recorded on audio tapes and thereafter transcribed into verbatim interview protocols. The transcriptions were, with exception of seven of the interviews, carried out by the researcher himself. The remaining interview recordings were transcribed by an assistant, but to the extent that these have been quoted they have also been checked for accuracy against the audio recordings by the researcher.

The written accounts of instances of understanding and the interview protocols cover about 600 machine written A4-sized pages. Each interview protocol covers between 10 to 36 pages. This gives thus a total data for this part of the investigation of, on the one hand, 130 written accounts of instances of understanding from 99 participants and 600 machine typed pages from 34 interviews. These comprised eight participants from each of the first three groups and ten from the forth group of the part study. The interview protocols contain about 40 additional accounts of instances of understanding when compared to the written accounts.

CONSTITUTION OF THE RESULTS

The constitution of the results is allied with the two major interpretative turns. In the first of these, which represents a rather uninformed straight forward approach, and which for the most part is centred around analyses of the previously mentioned narratives, the aim has been to work out a systematic account of the different ways wherein the participants appear to have understood and explained understanding as a phenomenon. In the second, which represents a relatively more informed round about approach centred around an analysis of the cumulated contributions of a choice of participants, the aim has been to work out a systematic interpretation of the

significance of the ways of understanding and explaining represented by the contributions of the members of the select group. In the aim of this analysis has been to forge the data into a preliminary account of the prerequisites for the development of understanding of understanding with respect to both how and why certain kinds of understandings develop rather than others.

INTERPRETATIVE TURN ONE

The first turn began with several rounds of gradually more successful attempts to discern, relate and systematise discernment and relations of forms of consciousness of understanding on the basis of written accounts and has been presented previously (Helmstad & Marton, 1992). Moreover, the version of the interpretation of understandings of understanding that is under presentation in the present thesis has, unlike the previous, presentation however, not only included interpretations of written accounts but also the accounts that emerged from the interview transcriptions. Since the later rounds of reading of these data were carried out parallel and relative to the play of the second interpretative turn, they profited not only from the additional ingredients that were brought in through the reading of the additional data, but also from the things that came out of the second interpretative turn and from additional reading of literature.[1]

This iterative and reflective data differs in at least two respects from the materials that have been used earlier in the research tradition which the present project is a part of. It differs for one thing in that where as the earlier studies (with few exceptions) have been based on interview protocols, the discussed analysis has (for the most part) been based on written accounts. And it differs for secondly, in that where as the earlier studies (with few exceptions) have been based on analyses of people's answers to explicit questions about the general meaning of a particular object, here the analyses have almost exclusively been based on consideration of what people have answered to an implicit

---

[1] The differences between the two interpretations are explained in Appendix 4.

question about when they have experience and what they feel understanding means.

This has its strengths but would have been a real drawback if the data had been conceived of and used as some sort of window to what really took place when understanding took place. However, data have not been interpreted in this sense. Nor have they been interpreted and used as a window to what the participants really mean with understanding – as if meaning where some fixed and finished free floating idea in people's minds (Kvale, 1996). Rather the data have been interpreted as accounts of experiences of understanding that a given group of people composed when called upon to describe an instance of understanding that could be used for a subsequent analysis of qualitatively different ways wherein people tend to explain understanding as a human experience.

The interpretation of data was in this interpretative turn driven by the intention to work out descriptive accounts of ways wherein participants appeared to have understood and explained understanding as event and provide a systematisation of these descriptions. The aim of the analysis was thus to work out an account of what, until further notice could be considered as (a) the different ways of conceiving understanding that have been manifest, (b) what characterises each of them in relation to each and all of the others, (c) what accounts represent these ways of understanding and explaining understanding as a phenomenon, (d) how many times these ways of understanding/explaining have been expressed and (e) how these expressions are distributed over categories of descriptions and groups of participants.

As indicated above, the data and analysis procedure can be described as a form of iterative and reflexive reading of parts of the material and the material as a whole, with the intent to discern and describe meanings. The questions to be answered through the contextual analysis were rather straightforward and like the following:

Which accounts express the same meaning of understanding as a phenomenon? How can the essence of these meanings be described in relation to each other? Which accounts express which meanings and which participants and groups of participants can be said to have expressed which meaning with which accounts?

A guiding principle for the interpretation was from the beginning the previously developed notion of "understanding" as "a certain delimitation of a phenomenon from the context or background, and of its component parts and the relations between them" (Marton et al., 1993, p. 278; Svensson, 1984a). But as this guiding understanding of understanding developed – partly from the influence of the proceeding studies of the philosophy of interpretation and partly from the influence of the meaning about understanding that was brought out of interpretative turn two and put into the later rounds of reading of interpretative one – the interpretation came to be guided by another concept, namely the concept of understanding as a pre-reflexive consciousness that precedes any conceptualisation.

This is a construct that reminds of what Dilthey referred to as *Erlebnis:* "a lived experience encompassing a unity of parts of life bound together through a common meaning for the course of life" (Palmer, 1969, p. 107).[1] In this perspective one's lived experience or understanding, of for instance loneliness, is not so much what one encounters when one finds oneself lonely as it is what loneliness has come to mean for as a result of the ways one has encountered it. This is a result of one's encounters with instances of various types of loneliness, at different times, and in different situations, and places. It includes – and perhaps most emphatically – other persons narratives about loneliness (and of course most importantly) one's dominant meta-narratives of loneliness as carved in one's major/main official discourses.

It presents in other words, the character of a contraction of meaning; an operative consciousness that reaches out and encompasses both

---

[1] Gesammelte Schriften, VII, p. 194.

recollections of the past and anticipation of the future in the total context of meaning that could be said to make up one's life world (Palmer, 1969). This is a conception of understanding that is believed to steer away from the tendency to make visual perception into a paradigm for understanding of consciousness. It is also a conception that has been developed further in Heidegger (1927/1990) and in Gadamer (1960/1993). The meaning of the conception is that consciousness is not so much a question of having grasped a particular object in a particular sense, as it is a question of orienting oneself towards "being in the present", as being that has presented this or that character for in the past and that – at least in part – also is expected to do so in the future.

In the light of this, the objective of the research shifted in the later rounds of interpretative turn one from trying to describe conceptions of understanding toward trying to infer forms of consciousness of understanding as a whole, that could be rendered as the experiential ground where one can relate to understanding as being that presents this or that character rather than another character.

A second guiding principle for the interpretation of understandings of understanding in interpretative turn one, was to begin with the previously developed notion of that conceptions are logically related to one another (Marton, 1981; Svensson, 1984a, Marton et al., 1993). As the guiding understanding of understanding for this interpretative turn continued to develop, however, not only from the influence of the reading of philosophy of interpretation and from the influence of the meaning about understanding that was brought out from interpretative turn two, but also from the reading about historical interpretations of the development of thinking and speaking, it occurred that conceptions can also be said to be related to individual and collective developmental history.

A third guiding principle for the first rounds of interpretative turn one, was the previously developed notion that since conceptions are obviously logically related, i.e. that there are different ways of making sense of the same things, they ought to thereby also reveal different facets of the same (Svensson, 1984a; Marton, 1992a). However, this

notion has now been abandoned. This has been because of ideas developing in the wake of the reading of philosophy of interpretation and historical psychology, where it became clear that the truth of this notion is relative to the very understanding of a conception as "a relation between man and the surrounding world that is created through the activity of man" and where "[t]he activity means a delimitation of, a differentiation within, and a sample and an organisation of meaning content of a part of the world (Svensson, 1984a, p, 20). Instead of conceiving the object of research in this sense, it was re-conceived in the thesis work as relating to a particular being that presents a particular character, that presupposes more fundamental and more encompassing experience than what is contained in that particular way of relating and that can also be understood as the personal experiential ground for relating to it in this way (Heidegger, 1927/1990; Gadamer, 1960/1993).

Once the new and alternative system of categories of description had been worked out, the various accounts of experiences of understanding was thereafter classified according to it. This procedure, which in itself can be conceived as test of the fit between the system of categories of description of understandings, types and conceptions, and the data from which it has been generated resulted in lists of frequencies. These lists have finally also been used as a means to further order the system of categories of description and as a means to try to find out at least something about how understandings of understanding seem to develop in individual history.

The tenability of the emergent interpretation that has been worked out through this interpretative turn shines first and foremost through in the relationship between the presentation of categories of description and exemplification and categorisations of data. The usability of the emergent interpretation has in a certain sense also been put into practice in the application of the categories and the system of categories to the previously described concordance material (cf. Appendix 3).

INTERPRETATIVE TURN TWO

The second turn differs from the first with respect to approach, aim, material and procedure. It represents, as mentioned before, an attempt to work out a systematic interpretation of the significance of different understandings, types and conceptions as represented by the collected contribution of the participants in both the first and the second round of the constitution. It also represent to a certain extent however, an attempt to drive the emergent results of the first and the first part of the second turn into a preliminary account of what until further notice can be considered as what the development of understanding of understanding is like and why it develops as it does. This has been done with the aid of the culture historical respectively philosophical hermeneutic concept of understanding, the results of previous studies, the available data from the participants and from the concordance, and the available interpretations

The analysis began with a consideration of the individual patterns of categorisations of participants' narratives with respect to under-standings, types and conceptions and the purpose to identify such participants' who had contributed with more than one narrative and whose narratives had appeared to distinctively consistently express the same form of understanding. On the basis of this, one participant's collected contribution was chosen to represent the significance of understanding understanding as a receiving of knowledge. Another participant's contribution was chosen to represent the significance of understanding as an achieving of desired knowledge or skill. A third participant's contribution was chosen to represent the significance of understanding understanding as a realising of new comprehension. A fourth participant's contribution was also chosen to represent this form of understanding, but whereas the previous' contribution was chosen to represent relatively under developed understanding of understanding as a realisation, the later's contribution was chosen to represent a more developed one.

The data consisted in this turn primarily only of the contributions from four of the participants. However, to compensate the contributions were not narrowed down to spoken narratives only, but consisted of

both written and orally expressed narratives in relation to the rest of the interview transcripts from the recordings of the interviews with these participants. Once this choice had been made, the collected contributions of these participants were made objects for several gradually more informed rounds of reading.

These readings proceeded in the second turn, from the assumption that the results of the first turn gave a relatively good picture of the ways wherein the participants tended to understand understanding as event. These readings proceeded also however, from the assumption that the interpretation and categorisation had only revealed what until further notice could be considered as a partial truth about how these groups tended to understand understanding, and that the further readings of these contributions could be expected to reveal more about this. The readings of these data proceeded also from the assumption that one through such reading could also generate at least some light over what such understandings can say about possibilities to participate in, plan, perform and evaluate study activity that involves the development of better understanding of whatever is made the object for study.

These somewhat more informed, focused and profound readings of four separate participants' contribution as a whole can, thus, be said to have been driven by a desire to work out answers to questions such as:

What does it mean to understand understanding as X, Y or Z obviously tended to understand it as? What do these data say about the possibilities these participants' at that time had to understand and explain what understanding is as event and how and why understanding comes about? What do these data say about how understanding of understanding can be said to develop as one grows more experienced with the ways of being of understanding?

A basic guiding principle for these readings has, thus, been the assumption that different experiences of understanding provide persons with different possibilities to understand and explain understanding? Another guiding principle has been the assumption that the richer experience of understanding a person has gained, the better are the possibilities to understand and explain understanding as events that

are available to the person. A third guiding principle for these readings has been the assumption that consciousness of understanding can be expected to expand as one grows more and more experienced as a practitioner of understanding and interpretation, and that the development of consciousness of understanding as an event can therefore be considered as a function of gradually more insightful participation in activities where the development of better understanding tends to present itself as a significant objective in its own right.

In accordance with these principles, each of the four particular participants' collected contributions was thus read as a coherent narrative about what understanding as phenomenon tends to be understood and explained as, from within the corresponding stances and perspectives as understood from the interpretation of their contributions. This analysis began with a consideration of what the least experienced participants' contributions say about understanding as a reception of knowledge and it continued with a consideration of what the next least experienced participants' contribution say about understanding as an achievement of desired knowledge. Thereafter followed a consideration of what the next most experienced participant's can say about understanding as a realisation of a new comprehension as truth. After this followed a consideration of what the most experienced participant's say about more advanced realisation understanding of understanding as a phenomenon.[1]

This analysis was in the light shed by the gradually developed understanding of understanding as a phenomenon on the being under consideration. This was finally also forged into a preliminary account of the developmental course of understanding of understanding and why it unfolds as it does.

---

[1] This is also the order wherein the significance of the different understandings as represented by the understandings and interpretations of these participants contributions are considered and discussed in the result section of this thesis.

CHARACTER OF THE RESULTS

In this section, the subsequent presentation and discussion of the results of the interpretations will be foreshadowed by a consideration of what types of interpretation we are dealing with and which methods have been proposed and used to check their quality. In the effort to determine more precisely which types of interpretation and which methods have been and are proposed to be used to try out the quality of the interpretations, one can, for example, with Hermerén (1983) begin by noticing that there are obviously many different types and that there are several different methods for checking interpretations. In the schema for analysis that Hermerén (1983) offers, interpretations differ at least with reference to: 1) author, 2) object, 3) aspect, 4) addressee, and 5) the purpose of interpretation.

Applying this schema to the two interpretative turns of the main study, one can start by noticing that there is a difference between the two interpretations with respect to: object, aspect, and the purpose or interpretation, but no difference with respect to: author and addressee. Continuing the comparison in this schema, one can with respect to the second variable say that where as the object for interpretation in the first case is a set of descriptive texts and transcribed recordings of narratives about experiences of understanding, in the second case it is a selection of descriptive texts about experiences of understandings and transcriptions of recordings of subsequent interviews with the authors of these. In the first case the data were interpreted as expressions of different forms, types and conceptions of understanding. In the second case the data were interpreted as examples of what persons that consistently tend to understand understanding from within different forms of understandings of understanding say about what it means to understand, what gets understood, when that takes place and how, and what this in turn may mean for their possibilities to participate, initiate and carry out learning activities that aim at the development of understanding. With respect to, *purpose,* one can say that whereas the main objective of the first interpretation was to understand and explain the character of the forms, types and conceptions of understanding as a phenomenon that can be assumed to have come into expression in the narratives, the

objective of the second was to understand and explain what it can mean to consistently tend to understand understanding in one or another of these senses.

Hermerén (1983) also offers a list of eleven *ideal types of interpretations.* This list be used to further determine the character of the discussed interpretations. The types are in the mentioned order called:
1) Emendation, 2) Linguistic (semantic) interpretation,
3) Interpretation of the author's meaning, 4) Interpretation of intentions, 5. Psychological extrapolation, 6. Application (demonstration of relevance), 7. Theoretical (or allegorical) re-interpretation,
8. Interpretation of symptoms, 9. Historic reconstruction,
10. Augmentation of value (aesthetic interpretation), and
11) Performance (p. 146 ff.). These ideal types are understood as "sorts of idealisations which only approximately correspond to the types of interpretation proposed in the actual practice of scholars and critics" (Hermerén, 1983, p. 157). Each ideal type is believed to involve its own task/s and basic question/s.

In *emendation,* which can be interpretation of corrupt or cryptic texts in order to reconstruct the original, the basic question is: What words and sentences did the original contain. In *linguistic (semantic) interpretation,* which can be interpretation of text in order to establish its meaning, the basic question is: What do the words and sentences which constitute the original mean? In *interpretation of the author's meaning,* which can be interpretation of utterances in order to determine what the author meant with the utterance made, the basic question is: What did the person mean about what with this utterance? In *interpretation of intentions,* which can be interpretation of utterances in order to determine what the author intended to say or said about a particular object, the basic question is: What did the author mean to say or said in and by what he/she uttered in what situation? In *psychological extrapolation,* which can be interpretation of a part of a narrative in order to give a more complete picture of the part than the one that is explicitly explained in the text, the basic question is: What does this part of the narrative mean? In *application (demonstration of relevance),* which can be interpretation of a passage in order to learn what it can

tell about a particular situation, the basic question is: What does this tell about its object? In *theoretical (or allegorical) re-interpretation,* which can be interpretation of a text in order to show that the theory the interpreter favours can be found in or read into the text, the basic question is: What does this text tell when it is read from within these points of departure?

In *interpretations of symptoms,* which can be interpretation of a work in order to show that certain features of the same are symptoms of conflicts in the historical author, the basic question is: What does this mean from this point of view? In *historic reconstruction,* which can mean interpretation of various documents or remains from the past in order to reconstruct what happened there, the basic question is: What happened when and why? Who did what, when and why? In *augmentation of value (aesthetic interpretation),* which can be interpretation of a work in order to demonstrate what is vital and original in it, the main question is: What is it that makes this work interesting? In *performance,* finally, which can be interpretation of a score or script in order to communicate a particular feeling, idea, etc., the basic question is: What is the (aesthetically, morally and/or politically) proper or best way of rendering this score or script given these intentions?

If one applies these ideal types (with corresponding characteristic task/s and problem/s) to the problem of characterising the two inter-pretations of the study more precisely, one can start by noticing that both the first and the second presuppose emendation to the extent that they have involved transcriptions of audio-recordings of oral utterances. This is because there is no way to come around that such procedures with necessity involve linguistic complementation. However, emendation has not been involved as an active ingredient in neither the first nor the second interpretation, because this took place before the interpretations began. One can perhaps also say that the first reminds more about linguistic (semantic) interpretation, interpretation of the author's meaning and interpretation of intentions than the second, and that the second reminds more of psychological extrapolation, application, theoretical interpretation, interpretation of

symptoms and augmentation of value than the first, but also that neither the first nor the second remind very much of historical reconstruction and performance. If this is accepted as a relatively satisfying characterisation of the two interpretations, one can thereby also go on to consider which arguments can be, have been and should be used to check their quality.

In the discussion that Hermerén (1983) provides, it is assumed that historical truth seeking interpretations, represent one form of interpretations and that other kinds of interpretations represent another forms. The ground for this distinction is not made explicit, but if one reads between the lines, one can learn that the main difference between the first and the second form has to do with what one can presuppose is true about the being of the object for interpretation and what one, on the basis of this, can also believe possible to accomplish in interpretation. Because where as one in the first form presupposes that the object for interpretation is distinct, unitary and finished, and that there can be only one correct interpretation of this, which it is also desirable and possible to work out on the basis of systematic appreciation of characteristics relative a limited catalogue of criteria, in the second form one makes no such strong presuppositions and does not seek to reach such definite ends.

When it comes to the question of what standards can be and should be used to check the quality of interpretations, Hermerén (1983) suggests, thus, that it depends on which form of interpretation one is involved in. More precisely, Hermerén suggests different methods to check the quality of proposed interpretations depending on what type of interpretation it is question of.

When it comes to the first type, historical truth-seeking interpretations, he suggests the following:

> 1) the proposed interpretation should be compatible with all (essential) known circumstances and well-established hypothesis, and possibly also

> 2) the proposed interpretation should be the only one that is compatible with these circumstances and hypothesis. In addition to these criteria of correspondence, criteria of coherence of the following type are also used:

3) the proposed interpretation should be consistent (internally coherent) and demonstrate how events, actions and structural changes hang together. (Hermerén, 1983, p. 152)

What is proposed here is, thus a), that correct historical, truth seeking interpretations are 1) compatible 2) unique and 3) consistent; b) that the presence of these properties can be established; c) that the presence of these properties should be demonstrated by presentation of evidence and d), that one can and should accept any interpretation that has live up to these criteria as potentially true.

When it comes to checking the quality of interpretations of the second type, Hermerén is not equally certain, because what he proposes here is not so much one particular method but several depending on what type of interpretation it is question of:

> In my view it is fairly obvious that there cannot be any definite or correct interpretations, if "interpretations" is used to refer to application (demonstration of relevance), theoretical re-interpretation and value aug-mentation. But the situation becomes quite different, if one is referring to the kinds of interpretation I have called linguistic interpretation, interpretation of the author's meaning and interpretation of intentions. Here it is at least in principle possible to demonstrate that certain proposed interpretations are incorrect – and sometimes that others are correct. (Hermerén, 1983, p. 152)

Hermerén also offers a list of nine different sorts of such arguments that he thinks can be and should be used. These are:

1. Linguistic…
2. Biographic …
3. (Other) historic…
4. Contextual…
5. Psychological…
6. Object-oriented …
7. Receiver-oriented…
8. Normative… [and:]
9. Arguments of fruitfulness. (ibid., p. 153 f.)

These arguments are also systematised in a model that is intended to facilitate explorations of the logical relations between them. This model is shown in Figure 1.
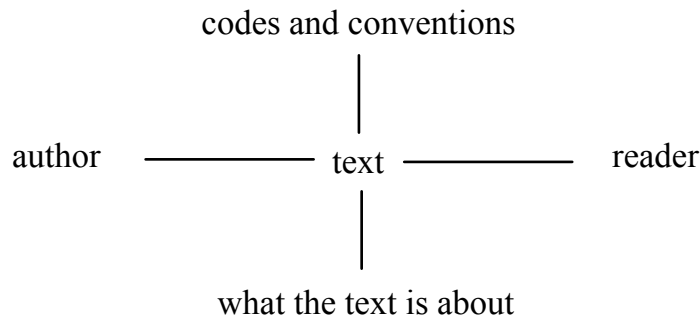
codes and conventions

author —————— text —————— reader

what the text is about

Figure 1. A model for survey and exploration of relations between arguments for meaning developing interpretations (Hermerén, 1983, p. 158).

If the model is applied to categorise arguments along its dimensions, one will find that each argument has its own place; "some arguments are related to the author, others to the receivers, still others to the codes and conventions, and some to what the text describes, symbolises, and so forth." (Hermerén, 1983, p. 155).

The argument is here, thus, that the meaning and reference of "correct" (as in the expression "correct interpretation") may vary with form and type of interpretation, but also that there are types of interpretations whose quality can probably can be better appreciated in terms of: *truthfulness, plausibility, probability, fruitfulness, value, "insightfulness", decisiveness, usefulness, emancipation,* etc. than in terms of *correctness.* The argument for this is that truth with these (and perhaps also with the other) interpretations is not so much a question of an indubitable objective demonstration of what really is, as it is, a question of resolutions of dispute among persons with varying, but in all cases limited experience.

Correspondingly, with these interpretations one is therefore not so much called upon to set up and check the quality of relative clear and precise criteria of correctness, as one is called upon to bring out relevant arguments for proposed interpretations which are discussed as openly and decisively as possible. This is because truth is, with these (and perhaps also with the other) interpretations, first of all neither subjective nor objective, but rather dialogical and emergent.

The message is, thus, that there are different types of arguments for different types of interpretations, that different interpretations consist

of combinations of several different types, that one as interpreter makes (and/or on theoretical and normative principles should make) a selection of arguments, declare these and should make relatively intelligent and defensible use of them. This should be done whenever interpretations and knowledge claims are made and should always include one indication of one's understanding of their relative advantages and disadvantages, and their limitations and possibilities.

If one applies this line of reasoning, one can in the light of what has already been said, start by establishing that both the type of interpretation and the arguments of the present study have written and orally presented, audio recorded and transcribed narratives about occasions "When I understood…" as objects for interpretation. However, in addition to this, the second interpretations have also used additional interview data about usage of the verb to understand and data concerning similarities and differences between narratives about experiences of understanding.

In the first interpretation, the purpose of the interpretation was to understand the meaning of narratives as expressions of different understandings of understanding as a phenomenon. That is to discern, describe and systematise descriptions of understandings and types and conceptions of understanding as a phenomenon. Since this interpretation is basically semantic the arguments that have been used and should be used to check its quality are first and foremost linguistic, contextual, biographical and object oriented. This means that the quality of the interpretations has first and foremost been (and should be) checked with reference to its compatibility with the rules of language, the emergent coherence that has been created by the interpretation, the known facts about the knowledge and interests of the author, and the known facts and hypotheses about the objects the texts are about, describes, reefer to and symbolises.

In the second interpretation, which presupposes and involves the results of the first as a tool to make an appropriate selection of data, the purpose of the interpretation was to understand the meaning of understanding understanding as it had appeared with reference to possibilities to participate in, initiate and carry out learning activities

in general and learning activities that aim at the development of more advanced theoretical understandings of certain objects in particular. Since this interpretation likens psychological extrapolation rather than linguistic interpretation of the authors meaning and intentions; and also more focused on the object than the text; the arguments that have been and should be used to check its quality of this are more psychological than semantic. This means that the quality of the interpretation has not so much been (and should not so much be) checked with reference to its compatibility with linguistic rules, the author's meaning and the author's intentions, as with reference to its compatibility with common sense psychology and known facts about the historic, social, cultural and psychological context of the object.

In sum, one can with respect to the character of the results say that the outcome of the first interpretation is a system of categories of descriptions and categorisations of narratives about "literally" experiences of understandings as phenomenon. The quality of this interpretation has been and should be checked with reference to its compatibility with linguistic rules, its coherence, the fit between categories of description and interpretations and categorisations of data. The outcome of the second interpretation is an application of the results of the first interpretation to the complete contribution of four participants with reference to what these data tell about the meaning of the understandings of understanding that are represented by these participants. The quality of this interpretation is nested with the quality of the first, but has in addition to this also been (and should also be) checked with reference to what it reveals about understandings of understanding and the significance of such as represented by four individual cases.

In each case, it is a question of contextual interpretation, but the interpretations vary with respect to object, purpose, and argument. In the first interpretation, the object is first and foremost what understanding is understood as in a particular narrative in relation to other narratives that have involved understanding in the same sense, those that have involved understanding in other senses. In the second, the object is first and foremost the meaning of understanding

understanding in one as opposed to other possible senses. In the first interpretation, the purpose has first and foremost been to work out a systematic interpretation of what understanding has been understood as in the discussed narratives about instances of understanding. In the second the purpose has first and foremost been to work out an interpretation of the significance of understanding in one sense rather than in others as this has come into expression in particular participants' complete contributions of data to the study. In the first interpretation the arguments that have been and should be used to balance the interpretations are first of all semantic. In the second the arguments that have been and should be used to balance the interpretation are first of all psychological. In a wider perspective, however, the interpretations are two parts of the same interpretation of understandings of understanding as personal prerequisites for an active engagement in learning activity that aims at the development of better understanding. It worth essentially lies in how educative it can become.

PART III

RESULTS

FORMS OF CONSCIOUSNESS OF UNDERSTANDING AS A PHENOMENON

> *Understanding the words of others also requires understanding their thoughts. And even this is incomplete without understanding their motives or why they expressed their thoughts. (Vygotskij, 1934/1987, p. 283)*

The study has first and foremost involved an analysis of the participants accounts of experiences of understanding and has led to an identification of three different types, which have in their turn led to a discernment and description of three different forms of consciousness of understanding. These have been forged into a system of categories of description of the three different understandings of understanding and the accounts have then been categorised with respect to the meaning for understanding that they appear to represent. The distributions of the categorised accounts have also been analysed with respect to how frequently each type has been expressed and how common they are for each group of participants.

The results that are presented in this chapter consists of both an interpretation and categorisation of the available data as expressions of different understandings of understanding and of an analysis of the numeral aspects of the categorisation. Their presentation starts with an account of the first part of the analysis which is followed by an account

for the second part. The chapter is concluded with a summary of these results.

THREE UNDERSTANDINGS OF UNDERSTANDING

The study has resulted in a discernment of three qualitatively different understandings of understanding as a phenomenon. Trying to catch what can be considered as the essences of these in a few words these has led to them being called: Understanding as: I. *a reception,* II. *an acquisition,* and III. *a realisation.* The three different forms of consciousness of understanding will be described, exemplified, compared and discussed below. This will be done under the following headings: *Understanding as a reception, Understanding as an acquisition,* and: *Understanding as a realisation.*

UNDERSTANDING AS A RECEPTION

In the first form of consciousness of understanding, understanding is understood as a reception of knowledge about a particular being in the world the knowledge as given either by observation or by the communication of information. The understander is typically understood as a more or less passive recipient of knowledge about something that is accepted to be the case with a particular and otherwise relatively familiar being and is typically understood as something that the understander didn't know in advance, but accidentally ran into, found, learnt, etc., when he/she all of a sudden simply noticed or was informed about it. This can be seen in examples such as the following :

> When I understood that I needed an appendix operation
>
> One night I and my friends were to meet in church. We meet at 4.30 PM and everything was fine. At five o'clock we had some refreshments and ate some sweets. Then my tummy began to ache very badly. Our meeting was over so I went home. It was a Tuesday so I should actually have gone to a choir rehearsal, but I didn't. When I arrived home, my sister asked me how I was. She saw that I didn't feel well. I checked my temperature, but I had no fever. Oh, I had such a pain in my tummy, at the side of my tummy. I went to bed

early that night. It was about 8.30. But I didn't sleep. I lay awake all the time and I suffered from the pain in my tummy. The morning came and I was exhausted. What should I do. Mummy said that I had to go to the school nurse that she could check me. I did like she told me and I did not bring any school bag with me. I suffered so badly from pain in my tummy that I cried, but I had to go to the school nurse. When I got to the school nurse's place it was not the nurse we used to have before, but another. She touched the tummy were it ached. When she was done she said that we should phone mummy at her work place. I wondered what was wrong with me. The sister said that I was to have appendix operation. Sister also called the hospital. Some hours later I was signed in at the hospital and was about to be operated. (Alexandra 22:1w)[1]

The story-teller describes a situation where she learns that she is going to be operated due to some problem with her appendix and that she learns this by being told by the school nurse. The account resembles the previously discussed example of the second type of accounts about what was earlier referred to as *Getting to know* with respect to what becomes an object for understanding. But whereas the given matter of fact in that account is said to have become an object for understanding through an experience of a lack of knowledge that led one to take to actions to achieve it, in this case it is described as a receipt of knowledge as given information. The understander appears to be conceived of as a receiver of knowledge. This can also be exemplified with the following account:

When I understood…

When I understood that my stick insects had died. I had owned three such for about a half year. It was in the evening when I was to feed them. I kept them in a big ginger-bread can with a lot of sticks, sand and weed in. I became sad and didn't think so much about them any more. (A 15w)

Understanding is also here discussed as the reception of knowledge of something through simple perception. But whereas the previous example suggests that the knowledge was received via a second person, this example suggests that it was received through the subjects

---

[1] The original name has been replaced with a pseudonym. This is also the case with every other name in the quotations that follows in this and the next chapter. All persons that were interviewed has thus been given "new" names. The twelve year old has been given name that starts with "A". Girls have been given even numbers. The numbers after the colons indicate which account it is. And "w" signals that the account was written.

own identifications. In spite of the obvious difference between the two examples, it is still argued that both can be interpreted as expressions of a form of consciousness of understanding as a simple reception of knowledge of matters of fact through observation or by information.

UNDERSTANDING AS AN ACQUISITION

In the second form of consciousness of understanding as phenomenon, understanding is discussed or presented as an achieving of desired knowledge through a relatively successful completion of a deliberate learning activity. The understander is given as an active achiever of desired knowledge or skill within a socially constituted context that typically involves a learner acting in relation to more proficient others that are believed to facilitate the desired learning. The achieved knowledge is typically understood as a personally and socially significant knowledge or skill, with new knowledge or skill being typically understood as something that the understander knows more experienced, proficient, significant others have already achieved. Understanding is in this respect something that one managed to achieve first and foremost through the power of one's own effort, even though this may be due to one's successful co-operation with more experienced others. In this form of consciousness of understanding, understanding is a personal achievement of desired knowledge.

In some accounts the achieved knowledge or skill is presented as something that one managed to achieve *in spite of* the unfavourable circumstances and/or in spite of relatively poor communication between oneself and the more experienced other. In each of these types of cases, the presence or absence of the more experienced other appears to be conceived as a significant part of the context from within which understanding is conceived. For as the examples indicates, the context for understanding always involves a less or more understanding person in relation to other people that share in and/or interfere with one's learning.

This form of understanding of understanding can be exemplified with the following account:

In the year of 1984, I began to become interested in wind surfing. Previously I had sailed quite a lot, but now my friends began to devote themselves to wind surfing. I had a friend called John who had an extra job in a sports shop that sold wind surfing boards. We were often there during the spring and one day, just before school was out for the term we made up our minds: We should wind-surf on our own. We were allowed to borrow wind surfing boards, wet suits and everything else that was necessary and set of for Lake Round. We were left alone on the beach to set the sails, it took about a couple of hours before everything was put together fairly acceptably. It was calm, but we didn't care about that. We threw ourselves into the wet suits, put up the rigging and messed about out in the ice-cold water.

I stood carefully on the board, bent down to pull out the rigging from the water, whereupon I fell flop down backwards into the water. After a while I nonetheless learnt to pull up the rigging out of the water, even stand there with a cramp-like grip around the boom, I was very proud. The only problem was that I didn't get anywhere. At last, even I realised that it was not the right day for wind surfing. We gathered our things together and set off for home.

Next time I stood on a wind surfing board was in the fall. During the summer I had devoted myself to "ordinary" sailing since I was so bad at surfing. Some time in September I bought a wind surfing board that you could barely stand on and "pull rigging", a so called semi-sinker. The first time I tried it out was a rather windy and half overcast September day. I froze when I saw the cold lake, but I had made up my mind to make it. John, my friend, had of course learnt to wind-surf and was now with me as a "first-class instructor". After having set the sail and crawled into the wet suit there was no turning back. All of a sudden I found myself out there in the water. The board was slippery and rickety, I could hardly stand on it before I fell into the water again. Although John stood on the bridge and instructed me, it just didn't work. When the belly of my suit was full of water and my toes and hands where blue and white, I gave up and swam towards land with the board in tow. I was depressed and thought about giving in, but John kept on encouraging me: "Stand here on the edge, direct the board toward the way you intend to sail, hold the sail over your head…". It sounded good and I stood on the edge with the board in the right direction, gripped firmly around the boom, the sail over my head. I carefully placed one foot upon the board, when the next wind puff came I suddenly understood. I had managed it.

The board got going, the wind blowing in my ears, the water foaming around my feet, what a fantastic feeling. Carefully I turned my face backwards in order to see Johns face, when all of a sudden without notice, I was thrown head over heels forward due to a strong wind puff.

I did not get up on the board any more out there in the water, but had to swim back, no problem, I understood. (C 7w)

In this account, understanding an achieving of desired knowledge that the understander brings about through relatively successful

completion of deliberate goal-oriented learning. From within this form of consciousness, what one achieves knowledge of or skill in tends to be conceived of as an already established matter of fact or possibility known or mastered by others, but not by oneself. This reminds of the previously discussed form of consciousness, but differs from it with respect to how the understander tends to be conceived. Because whereas the understander previously appeared as a relatively passive part of the person-object-others relation, here the understander tends to be conceived as the most active part.

UNDERSTANDING AS A REALISATION

In the third form of understanding of understanding as phenomenon, understanding is a realising of something through experience and interpretation of experience that presents this or that character. The emergent objects for understanding are the meaning, significance, structure, etc. that experientially encountered being takes on for the understander. The object for knowledge is also understood as new truth that comes to stand over and above old on the basis of partial negation or confirmation of pre-conceptions and the integration of experience in a way that transcends previous understanding.

This form of consciousness of understanding has also appeared to involve the possibility for the persons that sustain it, to understand and explain what become objects for understanding and how that appears to take place in one or several different senses. The different ways wherein this has appeared understood will be described, ex-emplified and discussed in the subsequent section.

DIFFERENT TYPES OF REALISING

The analysis of the accounts found to represent understanding of understanding as a realisation of something through experience and interpretation has resulted in a discernment of three different types.

The first type is represented by accounts that indicate that under-standing involves a change of the understander's meaningful relation

to the world and experience of it in some global sense. This type of understanding has been found manifest in two different conceptions with respect to what becomes object for understanding. Since what become object for understanding appears to be experienced as matters of fact, this type of understanding as a realisation of something has been called *factual understanding*.

The second type is represented by accounts that imply that the realisation of something involves an expansive change of the understander's meaningful relation to the understood. This means that the understander experiences that he/she understands the meaning of the understood or the meaning of the understood better than he/she has been able to understand it before. This type has manifested itself in three different conceptions. Since what is experienced as understood is the meaning of something as a realisation through experience and interpretation, this understanding has been called *referential understanding*.

In the types mentioned so far, the object for understanding presents the character of an unbroken whole, but in the third type of understanding the object for understanding presents the character of an essential structure or a functional system. This indicates that objects for understanding are constituted through the experience of successive encounters with the understood. This type has been found to manifest itself in three different conceptions.

Since these conceptions imply that both the understood and what becomes an object for understanding presents the character of a system, this type has been called *systemic understanding.* The different types and conceptions of understanding as a realisation will be discussed and exemplified below.

A. Factual understanding

Factual understanding is represented by accounts that imply that both the understood and what becomes the object for understanding present the character of a fact and is manifest in two different conceptions. In the first of these, understanding means that one comes

to believe that something is the case and that one takes this to one's heart and soul as a matter of fact. In the second, understanding means that one realises what really is the case as opposed to what appeared to be the case. The two different conceptions are explained and exemplified below.

A1. That something is the case

According to this conception, understanding is the understanding of a true state of affairs, a conclusion about what a situation is like or what ought to be done. The object for understanding is often of great personal significance. The temporal structure of this conception implies that experience of what comes to be understood precedes its realisation. For as understanding is described here, there is always some delay between the experience and the realisation of its meaning, even though this delay may be very short. Furthermore, the understanding projects itself into the future, the realisation has important implications for time to come.

A recurring episode which reflects this meaning of understanding was mentioned earlier. When a child is learning to ride a bicycle a more capable or experienced other is running behind, holding it for the sake of balance. After a while the child notices a change (in his bodily relation to the bicycle). Shortly thereafter he turns around and discovers that the more experienced other is not holding the bicycle any longer, and since he apparently rides the bicycle on his own he realises that this means that he has learnt to ride.

In the following example there is another element, a conclusion about how one should behave. The structure is, however, very similar to that of the bicycle example. For here something which "was there" prior to its realisation is appropriated:

> When I understood that it was dangerous to ride through a red light
>
> It was almost two months ago. I was on my way home from the chess club and I rode through a red light. A car drove into my bicycle and I flew up onto its bonnet. The bicycle-frame was twisted. But at least I had no injuries. (A 13:6w)

Of course, it was true even before the accident that it was dangerous to ride through a red light. After the accident, however, the previous carelessness emerges as an understanding that what was said to be the case really is the case; it is dangerous to ride through a red light.

There are some instances within this category which are of a special kind. Here, "understanding that something is the case", has the form of a two-stage process. These stages are (a) that the person becomes aware of something on one level, and later (b) grasps or experiences that this is *really* the case:

> When I understood!
>
> The telephone rang and I got slowly out of bed. Hello! The voice on the other end of the line was low and sad. I sat a long while before I got up and thought: She's only on holiday.
>
> A week pass, when I saw the notice in the newspaper it felt more real.
>
> The air is clear and cold, the sun shines on the white church. I walk slowly up the gravel path towards the crowd of people standing outside the church door. A church warden shows me to the seventh row. Everything is still. The clock which stands at the front of the right hand pew ticks loudly. People are crying. I am getting knots in my stomach. I want to go outside.
>
> The priest is speaking but I'm locked in my own thoughts and can't concentrate on what he says. Flowers, the whole church is full of flowers. Is she lying there at the front in the coffin? Yes it must be so. Why would everybody be crying otherwise, it must be so.
>
> In the car on the way home all of a sudden everything bursts and the tears begin to flood.
>
> We will never see her again, never again be infected by her laughter, nor feel the confidence she radiated. Her fun, her inventiveness. Just egocentric thoughts really. Now I feel I understand that she is dead. Life will go on, even if it feels unfair. And the knot in my stomach will loosen. We will laugh loudly when we talk about her and remember her. (D 14:1w)

Understanding means in this sense, thus, not that one gets to know something about something, but that one realises that what one has heard or seen actually is the case. It means that one, as it were, makes something one has learnt about, but not grasped real for oneself. It is realised through that one, as it were, takes what through experience and interpretation of has present itself as a given fact of a matter to one's heart and lets it be real.

A2. What really is the case

In the previously discussed conception, *That something is the case,* what became the object for understanding was what was experienced about something in particular. In this second conception, understanding means that one experiences that one discovers what really is; the true or real identity of something as opposed to what previously appeared to be true. The focus is on the contrast between the perceived and the true identity (appearance and reality). The paradigmatic case is the rather frequently described episode of when *the true identity* of *Santa Claus* was realised. There are, however, some seemingly quite different examples of this conception too. As an example, we may consider the following account:

> When I understood
>
> The alarm clock rang, I turned it off and turned round. After a while I sat up with a start. The children were playing in the sitting room, why hadn't they woken me! I rushed up and washed, threw my clothes on, ran down to the kitchen and began to prepare breakfast. Typical! When autumn comes I always have problems with getting up. Now I will be late again. The third time this term. I put the corn flakes and milk on the table and called the children, poured coffee for me and Mike. "Mike!". He was still in bed. I ran up the stairs and into the bedroom. "Mike!", I shouted, "we've slept in". He woke and looked around sleepily. It was eight o'clock already and he'd usually worked for an hour by this time. He lay down and sighed, looked at me unsympathetically.
>
> "What day is it today?" he said calmly.
>
> I sat on the edge of the bed. Of course, now I understood, it was Saturday.
>
> You become a bit distracted when you go to KomVux. (D 10:1w)[1]

What is understood or becomes the object for understanding in this particular case is what day it really is as opposed to what day one thought it was. This was realised by the understander finding reasons to question her belief of the situation, questioning it and realising her mistake. When this took place, everything else made sense, why the children had begun to play without waking them, why the husband was sleeping etc. The situation is not only experienced to take on a different meaning, but that meaning is also the true or the inter-

---

[1] "KomVux" is an abbreviation for "Municipal Adult Education".

subjective as opposed to the apparent meaning. Understanding means here thus, that one experiences a realisation of what is the case as opposed to what appeared to be the case.

B. Referential understanding

Referential understanding is represented by accounts that imply that both the understood and what becomes the object for understanding presents the character of a meaning. This type of understanding has been found manifest in three different conceptions. These conceptions are discussed and exemplified below.

B1. The existential meaning

In the first type and group of conceptions, understanding concerned a relation between the individual, reality and the individual's different perception of reality. In this and the two next conceptions, understanding means that one experiences the meaning of something in one sense or another either for oneself, or for others, or, as it were, independently.

Understanding is here, in other words, primarily conceived and interpreted as a question of a relation between two perceptions of something; one which has been taken for granted and another which has been discovered to reflect that something from another perspective. This means that one experiences for instance, what it means to be poor, what it means to have a functioning mouth, something's importance for oneself, etc. This is understanding that is often said to have evolved from a personal experience of that which is understood, but can also be understanding that has evolved from reflecting over one's experience of something or from reflecting over someone else's description of how they live or have lived a certain experience or situation in another and more profound sense than before. The focus here is, unlike in the two earlier described conceptions, thus neither on the forward projected conclusion of what one has understood nor on the contrast between reality and

appearance. It is rather on the meaning of that which has been understood.

The conception could be exemplified with the following account:

> When I understood
>
> Last summer during the school break I worked a few weeks. The hours were inconvenient. I was forced to work every other weekend. It was three weeks altogether. The weekends I worked my husband and children were in the country. I was on my own in town. It was great. I am rarely alone, and for that reason I enjoyed it tremendously. It was quiet and peaceful when I woke up in the mornings. I could eat breakfast in peace and quiet while I read the morning papers. When I came home after my day's work I was completely shattered. I was used to sitting at a school desk. Now I had a job where I moved around a lot. I treated myself to something nice to eat on those days, preferably something which didn't take too much getting ready. And then I read or watched the TV before going to bed fairly early so I could get up for my next day's work.
>
> But by the third weekend having my family away in the country was no longer such a pleasure. No, after I got home from work on the Saturday and had relaxed a while I began to walk up and down restlessly. And I actually felt alone. This was a new experience. I was usually never alone. Yes, I felt terribly lonesome. Then I understood how all those people who genuinely were alone felt. And that they don't have an easy time of it. Therefore I try to think of them sometimes and make contact with them from time to time. Because I understand how much that can mean. (D 48:1w)

What is described as understood in this particular case is first and foremost what it means to be "alone" without one's family and/or friends. It is an understanding which is said to have evolved from an experience of loneliness which in turn led to a more generalised realisation. This leads over to the next conception.

B2 How something appears for someone else

Understanding in this conception means that one experiences that one understands how something appears for someone else and is expressed as a relation between two perceptions of reality. One of which has been taken for granted and the other of which has been discovered to reflect a given object or situation as seen from someone else's perspective. This is an object for understanding that is reached by experience of not understanding the other's behaviour, wanting to

understand the reason why the other behaves or behaved in a certain way in a particular situation, gaining experience that makes it possible for oneself to take on the perspective of the other, finding that the other's behaviour makes sense and experiencing that this is obviously how the other apparently lives or lived a particular situation.

The conception will be illustrated by two examples. In the first of these, the object for understanding is what another person and group of persons apparently experience in a particular object. The account is stated as follows:

I'm going to write about when I understood why my friends, who had just moved house, spoke so much about their new home. They live in Uppsala. Before they bought their new house they lived in a fairly ordinary house on a housing estate. Now that they live in Uppsala we can't get together as often as before, most of our contact is by phone or through letters.

One day, it was sometime in August, their daughter rang me. She told me they were going to move. It wasn't planned in any way. They had just seen an advertisement for a house for sale and went out to look at it. The advertisement described the old house so clearly, and they went mainly because it would be fun to see the house. Most people have a built-in interest for old things. Whatever the case may be, she described to me how all the family had been so captivated by the house that they had decided to buy it. During the conversation I was infected by her enthusiasm and listened carefully to her description.

Days and weeks went by and life went on as usual. All contact with the family in Uppsala centred on talk about their home, about moving problems and decorating. I must confess that each time I talked to them I understood less and less how their interest could be so totally dominated by an old house. Of course I was happy for them. Listening to these people who I liked very much talk so warmly about the house and how happy they felt at the prospect of moving into it naturally pleased me. Nevertheless I felt they "went on a bit".

At the end of October I had my seventeenth birthday. In the evening the girl from Uppsala rang. She just talked and talked about their house.

"Aren't you going to congratulate me?" I asked a little sullenly.

I think she was a bit ashamed. She asked herself how she could forget to congratulate me when that was why she had called in the first place.

Last weekend we finally went up to Uppsala to visit them. We drove through Uppsala and out into the country. With the help of a long description of the route we managed to find the famous house. When I saw it I understood why they had talked so much about it. We drove up the drive to the house, turned off the engine and climbed out. It felt a bit strange at the same time as it didn't feel strange at all. There stood a family we knew so well on their veranda and

welcomed us to the house which was now their home. What made me understand all their talk about the house was my seeing it. It was so incredibly beautiful. If I don't remember wrongly I think I said out loud: "Now I understand".

The more I saw of the house and its garden the more the feeling that I understood their "talk" grew. But I suppose that it was also all those beautiful things in and around the house that filled me. I, Carol, a human being on earth stood there and I was full of confidence at life and all that it had to offer me. (C 12:1w)

In this example, the object for understanding is said to have been reached first after finding the behaviour of the other person and group of persons strange. It then took the following "passage". First not understanding how they could go on talking about a particular object like they did, then gaining first hand experience of the object they had talked so much about and being given the opportunity to experience it as the others did and then finally finding it so charming that it felt as though it made sense to talk so much about it as the others did. When the beauty of the house and its surroundings stood clear for her, Carol also felt she understood and sympathised with them. She felt it was OK for them to talk so much about their house, because it appears praiseworthy. She was able to empathise with them.

In the next example, the understanding is not described as something that was understood all of a sudden, but rather after a long time of trying to make sense of why an other party had behaved like he did:

I sat in my bed with the telephone receiver in my hand and understood that it was too late to try to speak with my father. I hung up and felt powerless, because no one can overcome death.

It has taken many years for me to understand why he drank. But I think it is like this: He felt inferior to his wife, he couldn't bear to see how strong she was. There was nothing that she did not manage. While he always failed. He could not take it and let her help him. The only way to build his self confidence was the bottle, then he was always very talkative and promised a lot of things that he could not fulfil. I understand that he must have suffered terribly the last years of his life. When I visited him he just didn't have the strength to be sober.

What I wish many times is to be able to hug him and say: "I love you anyway", but it is to late now. You often only understand these kinds of things when it is too late. (Doris 46:1w)

This account has, like some other accounts, been found to express more than one sense of understanding with respect to what is said to have become the object for understanding and how this is said to have been reached. The one focused on here has been interpreted as suggesting that what was said to have become the object for understanding was how the father lived his situation. When the main character of the narration experienced she understood this, she also felt that she could understand why her father drank. But not through a flash of insight. Rather, through growing more and more aware of the fact that her father appeared to have had an inferiority complex, that he was alcoholic and what that means. This involved working out of a social psychological theory that at least to some extent explained his behaviour in what appears to be experienced as a relatively satisfying manner.

This is understanding fulfilled by experience and explanation. It is understanding worked out as a quasi-causal or perhaps rather teleological explanation of the other's behaviour. It is the kind of understanding of a person's behaviour that a psychologist or psychotherapist might also develop. However, it is also interesting to notice that the narrative explicitly states that this is the way the subject thinks it was. That this is the way she has made sense of something that used to be more or less incomprehensible for her and can thereby also indirectly be understood as an understanding of why the father drank in relation to a future possibly more profound understanding of the same thing.

Understanding appears in this case, thus not so much as a question of all or nothing, as a question of a relatively sufficient and improvable insight. It represents thereby also an openness for future experiences of alcoholism as a psycho-social phenomenon in an even more inclusive and distinctive sense than the one that serves as current for the time being.

B3. What is meant with something

In *What is meant with something* the object for understanding is either experienced as what someone meant with what they said, signed, wrote, etc., or what is meant with a certain word. On the one hand, it implies a distinction between what someone uttered for instance and what that person obviously also appears to have intended to communicate by this. On the other, it implies a distinction between what one thought was meant with a given word as opposed to what one now understands is meant with it. To understand means here, thus, not just that one hears what someone, says, it also means that one makes out a meaning which is experienced to be valid for it.

The focus here is on the relationship between an expression and its meaning. And understanding means either that one experiences one apprehends the meaning of what is said, or that one experiences that one makes sense of what is said in a relatively satisfying sense. In the first case the focus is on what a given expression means in a particular situation that comprises both the speaker and the understander and it is realised by the understander first making an unsuccessful attempt to understand. In the second case the focus is on what a certain word refers to independently of the particular situation where the understander develops a relatively more advanced understanding of the meaning of the given word than the he or she had developed hitherto.

The first case of this conception may be illustrated with the following account:

> One day someone came to school who was going to be a doctor of something. He said he wanted us to write an essay about when we understood. I understood nothing then. What was it we were supposed to understand actually? I couldn't understand why we should write something which we did not understand. But then I understood that I only had to write about when I understood or learnt something. (A 1:1w)

In this case understanding is implied to have been realised through a reinterpretation or restructuring of the meaning of the situation wherein a statement was made. This suggest that understanding was reached by trying to understand a statement, finding that one had

failed to do so and then searching for another way of taking what was uttered. That is, looking for and finding, as it were, an appropriate context for an utterance, or a context wherein it can make sense.

This is clear in that the writer makes a distinction between what someone expressed and what the person meant with it. In the second case of this conception, a distinction is made between what one used to understand with a given word and what one tends to understand with it now. Understanding means then, thus, that one experiences one realises what is meant with an expression, or, that one experiences one understands it better than previously.

The accounts that have been understood to express the second type are sometimes quite difficult to differentiate from those accounts of understanding as *I. a reception* on the one hand, and *II. an acquisition* on the other. At least in the sense that these suggest that what appeared as the meaning of a word was replaced by the correct meaning of it. (See the example about "Safety first" in Appendix 4.) There too, understanding may mean an experience that one learns what a given expression means! But whereas the subject in those accounts for the most part appears to say that this type of object for understanding was reached either through being told, or through relatively successful completion of deliberate goal oriented action, in the present case understanding is implied to have been reached through some sort of productive transformation of one understanding of an expression into what appears as a better understanding of it.

If *understanding* is a process that consists of "no idea at all" or a "false idea" of a given word being replaced by "the true meaning", it occurs through a process in which the "wrong meaning" simply is pushed out by the "correct meaning" by new information. This differs from the present case which means rather that a previous understanding of the meaning of a definite word or expression is replaced by a more advanced understanding of it through a process in which the understander has an experience of the meaning of the expression which only in part negates the previous experience of the thing in question, and which allows him/her to realise the limitations of the

previous understanding and to develop a more comprehensive and exclusive understanding of the meaning of the term.

This case of the conception is given in the following account:

> When I understood what a divorce between mom and dad meant

> I will start from the beginning: When we moved to Part of town I was eight years old and went in the second grade. I sensed that dad lived with us there, which mom has explained that he didn't. My best friend during these years was my cousin Christina. She and I talked about everything, yes such things one speaks about when one is 8-9 years old. And naturally I told her a "very big secret". It was that my mom and dad were to divorce one another. Christina was absolutely not allowed to tell it to her parents or anyone else. I/we did not grasp that Christina's parents were naturally involved and knew about the divorce. It was not so strange either. But one day when I and Christina's younger brother and my second cousin Carl were outdoors on our own I just had to tell it to him too. So I explained that my parents were divorced. I thought that I was the only one that knew since it was me and my family that was concerned. But Carl asked then if they really were *divorced.* "It's obvious that they are divorced, dad does not live with us any longer!", I said. "True, but they need not to be divorced you see just for that", Carl answered. Until then I had believed that one was divorced from one's partner by not sharing the same home. Think that I the "all-knower", had been so wrong! But later I realised that they were to divorce one another!

> Then when I was to start in the third grade, we moved back to Suburb. We had lived there before we moved to Part of town, and therefore I did not have to change school. This time we moved on our own, my mother, my two brothers and I. At Part of town dad had his own apartment, but had been with us quite often. Now he only helped us move. We should have stayed with him every weekend, but later on we only wanted to come every second weekend.

> This divorce has meant more than what is written here. I could write a whole book about it. It was the nice part of the story, that which my father wanted to appear outwards. But the backside was much more unpleasant. The nightly quarrels with mother, etc.

> Nowadays I have very little contact with him, which I don't suffer that much from. The story maybe doesn't fit so well with the title, but still… (Barbara 6:1w)

In this particular perspective, the object for understanding is the meaning of the word *divorce,* where a previously partly inadequate understanding of the word is transformed into what is experienced as a more adequate one. This is described to have been reached through a process in which a previous experience of the meaning of the word is described to have been transformed in a conversation with a slightly

older relative, where the subject had used the word in a particular sense and on the basis of the response to this usage experienced what appeared to be a more advanced meaning of the word. This led her to realise the inadequacy of her previously taken for granted understanding and to integrate new and previous understandings into a more correct conception.

So if the first exemplification of this conception merely suggests that understanding is experienced as a transformation of what is meant with an expression, the second example suggests rather that understanding means that what was experienced as understanding was developed into a better understanding. It is also interesting to notice how the participant, by means of her account, differentiates between developing a more advanced understanding on the one hand and gaining fresh and first hand insight into what a divorce between mom and dad means through experiencing it on the other. However, it is also interesting to notice how she, as it was, puts them to into a contradictory relationship to one another and thereby indicates that a person may understand what is meant with an expression and yet not have any experience of the event or situation which the expression may refer to.

This conception of what is meant with an expression as an object for understanding, presents understanding not so much as a transition from not understanding to understanding, as it does a transition between what appear as weaker and more advanced understandings respectively. This is a point that also can be illustrated with the following account:

> Where we lived when I was a child… some one had bought a Mercedes 190, a sports car and then I had heard that it somehow had 150 horse power… an incredible amount of horsepower's at that time when cars usually had about 20, 30, 40. And I remember that we children always used horsepower as a measure of cars. The more horsepower the faster it went. But I did not know what horsepower was, what aspect of the car that was measurable in horsepower… I had then at least understood that it was something generally positive… and so I stood there one day beside my father and spoke with him about the car… and then I said… I don't remember exactly how, but I said something about like "That car over there has 150 horsepower, so it must be very thick sheet"… I thought thus that it somehow was a strength in a global

sense, some sort of muscle really, you see… And my father sad: "Well, it doesn't have thicker sheet than a regular car" or he sad something like that. Yes, but then I thought… then I said: "Yes, but it does have 150 horsepower doesn't it" and then he explained that it was the effect of its engine that was 150 horsepower and that it was that which made it go very fast…, I recalled, that then I grasped that… previously I had somehow experienced that it was a bit strange… that big cars could have different engine power, while small cars could have the other way around… there was no relation between size and engine power… then I grasped that it was the engine and the engine power that was the aspect that one could measure in horsepower… while I earlier had a very global strength oriented… I think… sheet and generally sturdy. What I then understood was that a car could be very fragile and still have a high amount of horsepower. Somehow it was a decontextualisation. I grasped what aspect is reasonable to designate in horsepower. I moved from a very rough picture of something to a somewhat more precise picture… (Helmstad, 1984, episode 11)

In this case, what becomes an object for understanding is also understood as the meaning of a given expression which is arrived at through a conversation with a more experienced other about a particular object that can be considered in terms of the particular expression. This involved using the expression in accordance with known possibilities, finding that the other uses it in what appears to be a better way and then searching for and developing language that has the power to integrate new and previous experience into what is experienced as a better understanding of what is meant with the particular expression.

One difference between this account and the previous one is that the author also tries to explain how he conceives the nature of the process. Another difference is that while what was understood in the first case was the meaning of a word that refers to something that concerns the relations between human beings, in the second it was understanding of the meaning of a word that refers to something that concerns the relationship between the power that a given engine can deliver and a unit for measurement of the amount of that power.

Notwithstanding these differences, the accounts imply that understanding means a development of one understanding into what is experienced as a better understanding of an expression. They also suggest that development of what is experienced as a better under-

standing of the meaning of an expression typically takes place on the basis of new experience of what is meant with particular expressions as they are played out in constructive or creative conversation with others about the things that lend themselves to be discussed in terms of these expressions.

In contradistinction to the first variation of the conception, understanding means in the second case, thus, not so much that the understander experiences that he or she understands, as it means that he or she experiences that he or she understands what is meant with an expression better than before.

C. Systemic understanding

In the remaining three conceptions of what becomes an object for understanding and how understanding is understood as a realisation of something through experience and interpretation, focus is on the discernment of component parts and relations between parts of a given phenomenon, which give an inherent structure or regularity in a given phenomenon. These three conceptions thus represent "systemic" rather than "factual" and "referential understanding".

C1. How something works

In the first case of the present conception, the object for understanding is *how something works* in terms of its essential constitutive functional structure, and it is also implied that a shift of awareness takes place. The direction of this is from one's own relation to the thing in question, to a consideration of the thing in terms of what appears as its own structure. This is a kind of understanding that is experienced to involve a discernment of the component parts and the functional relations between them in the phenomenon considered as a systemic whole. It is also said to mean a feeling that one is able to give a relatively coherent account of the phenomenon in question in terms of its essential parts and their functional relations as an aspect of a functional whole that presents the character of system. This conception can be exemplified with the following account by Donald:

When I understood…

Where I work there is a "variator", a continuously variable gearbox. It was a grey box with a shaft through both of its short sides. What it does is that when the shaft at one side, called the input shaft, rotates, the shaft at the other end, the output shaft, also rotates. What's so good about it, however, is that the pace of the output shaft can be varied from still to full speed. This is done through a lever on one of the long sides. It worked well so there was no problem. What did give me a problem, though, was that I began to wonder what it looked like inside.

First I asked the people who had bought it, but they seemed totally uninterested. Then I got all the brochures and instruction manuals. They didn't help much either, funnily enough. What do you do then?

My worrying about what the thing looked like inside overshadowed all my other everyday worries. I had to do something. When the boss went away on business I took my chance.

I unscrewed the sides of the box and opened it up. It wasn't so easy. I got a couple of litres of oil down my trousers when I tried to open the lid. But my persistence was rewarded. The lid came off and there was the construction for me to see. It was built up around a number of cogs, that is bearings which can only rotate in one direction, and this together with the centre discrepancy between the attachment of the lever point formed the transmission. Everything controlled by the lever on the long side. (Donald 7:1w)

In this particular case, understanding is arrived at through experiencing a frustration about a particular device in terms of its structure as a functional whole of essential parts and the functional relations between them, trying to figure this out, and finally gaining new experience that contributes to discerning and explaining this structure. This means a development of gradually more insightful discernment of an interrelation of essential parts and functional relations within a device considered as a system of working parts.

To have achieved understanding of a definite system means, in other words, that one has tried to and succeeded in giving a coherent principal explanation of how the system or function under consideration essentially works. This can be compared with the following account by a twelve year old boy in grade six:

When I understood how a jet engine functioned. I had for a long time wondered over how a jet-engine functioned. At one occasion when I watched the TV they showed jet-engines and jet-aircraft, [and] a factory where they make jet-engines. A jet-engine consists of turbine which consists of a lot of

> connected wings. And then I understood what a jet-engine was. (Helmstad, 1985, p. 6)

In the beginning of the narrative, the teller gives the impression that he is going to tell a story about when he understood how a jet-engine worked, and he informs us that he had been wondering about this for some time. One day when he was watching a TV-program from a jet-engine factory, from watching and listening to this program, he gathered that "a jet-engine consists of a turbine made up of a lot of connected wings".

As the previously discussed account suggests, this type of understanding should not be reduced to getting to know more about how a particular thing works, because it also implies integration of what one gets to know into what is experienced as the coherent structure. Such an understanding involves not only a belief in the ability to give a relatively satisfying explanation of how a thing works, it also involves the experience that one can actually explain it to the extent that someone else can also understand how it works.

C2. An inherent regularity or structure

In *An inherent regularity or structure,* the object for understanding presents itself either as an obvious regularity or pattern in a particular way of being or as what a particular being obviously is in terms of its inherent structure or inherent regularity or essence. This implies that the development or constitution of this particular object for understanding is reached through a course of events that involves development of some understanding of a particular thing, relating to the thing in question as a thing that presents a particular structure, an experience of particular limitations and an integration of new or previous understanding into what is experienced as a systemic understanding of that something in terms of its inherent structure. This can be exemplified with the following account:

> Now I'm going to tell you about my sport tennis and about when I learnt how to read the game. It was the summer of 1984. I, Mike and Perry practised at the gravel court down by the lake. As usual we warmed up outside the court. Then we played ball for ten minutes, before an exercise called "the tough one". I

saw a good ball duel between Mike and Perry. I paid attention to how Mike held the racket in a particular way on his forehand. When I played against him later on, I saw that he held the racket in the same manner as previously, so I was prepared for the forehand stroke and "whoops" I was right. He held the racket in a certain way when he hit forehand, and then I thought that he must hold the racket in a particular way when he hit backhand as well. Next ball I played against him I tried to move slightly to the left when he hit backhand, and then I understood that you have a different grip for different strokes. I tried this manner of moving on forehand in certain directions in the volley too, and it worked. When I grew older and met better opposition, I noticed that this did not always succeed. Some players mask their strokes very well. But for the most part I went in the right direction. This "discovery" to read the game has meant an important part in my playing of tennis. (C 1w)

In this particular case, understanding has been interpreted as a course of events that essentially consists in the discernment of what appears as a recurring structure of the way that tennis player's usually hit their shots. This is an object for understanding that has been constituted through engaged participation in the practice. It is participation that is said to have involved an implicit desire to improve one's performance, experiencing a particular regularity in the way that a particular practitioner carries out his actions in the practice, trying to figure out what this regularity comprises, formulation of a preliminary principle about what at least so far has appeared as the obvious regularity, application of the principle as a means to interpret the structure of a more advanced participation, experiencing limitations in the formulation of the principle, revision of the formulation of the principle, new application, etc. This can also be exemplified with the following account:

It was three, four years ago or so, when the word apartheid began to be used more frequently, particularly in mass media, but I could not really figure out what was meant by it. The only thing I knew was that it took place in south Africa. But in time more and more emerged about it and I got to know it naturally.

I understood all of a sudden what it was and it felt good. The word's meaning changed in next to no time a part of my life view. Distinction between blacks and whites. But did it mean that I understood? Someone had explained the word, but I did not understand apartheid just because of this. Many let it stop with understanding the word only, and so did I until a year ago. Then I got hold of a book by James A Michener that was called "The lake of freedom" and dealt with the history of South Africa in the shape of a novel. I read it and pondered quite a lot about it, and as time went by it occurred to me what

apartheid really was. It was not just distinction between blacks and whites but a religion, Calvinism in such an extreme form that it oppressed other races and the blacks in particular. I realised that it is not so simple this problem. One thinks that the Afrikaans ought to be able to accept the demands that the surrounding world has posed. But it is not so easy, they have as we know a several hundred years tradition built-up through religion as a hot bed and a law.

Even though I now say that I understand, this must not be misinterpreted to that I accept because I do not.

But when I understood this, when it dawned upon me, it felt terribly good. I knew about the ground for the problem and could assert my opinion and show my knowledge in discussions and it led to a certain advantage. To understand brings a certain advantage with it, and has meant that my view of the surrounding world changed to a certain extent.

But to refer back to the heading, it all happened rather slowly, the most of it perhaps unconsciously. And when I sat and watched The News one night there was a report about apartheid I understood more fully what it was, meant and implied. I could with the help of what I had read, connect my knowledge to the pictures and understand. And I felt that the connection was important and it felt good.

Finally I will allow myself to "analyse" when I understood. There were three decisive occasions, three different senses of what I understood, but yet they gave me the same. And the, at least similar, "aha-experiences" taken together meant that I changed as person. (Camilla 2:1w)

This account can be interpreted as an expression of more than one type and conception of understanding as a realisation of something. As it is interpreted here, the account is taken as one that suggests that what becomes the object for understanding presents itself as the general meaning or structure of a particular practice. This is described as understanding that was not reached through a sudden flash of insight, but rather through having an experience of what it essentially is or at least how it could be seen. This implies a distinction between what a word means on the one hand and what a general word and its main meaning refer to, or at least could be said to refer to from a certain perspective.

The object for understanding is experienced as the obvious general structure or meaning of the phenomenon under consideration. It is described to have been arrived at through a process that involved a pre understanding of the phenomenon in question, an encounter with

it, expansive new experience of what it is and interpretation of it in a certain sense that is believed to represent a certain general structure.

C3. What something is

In *What something is*, what becomes the object for understanding is a relatively sufficient and coherent understanding and explanation either of a particular object in terms of its meaning or function as an integrated part of a determinative system of functionally interrelated objects on the one hand, or of a particular phenomenon or practice in terms of its existence and character on the other. In the first variation of the conception, the object for understanding appears as the meaning or function that a particular object has come to have as a part of the determinative system. This can be related as a result of an experience one didn't understand the function of, but which one sought for, found and worked out as a part of the whole that it was found to be a part of.

In the second variation, the object for understanding appears as the obvious general structure of the particular being or practice, its relation to other phenomena within a particular societal and historical situation and the context that sustains, explains and determines its existence. This is a conception, that suggests that the object for understanding is a comprehensive and exclusive awareness of one's experiential encounters in the play of questions and answers that make up one's meaningful relationship to the understood object.

In the first variation of the conception, it seems thus that the object for understanding presents itself as an understanding of a particular object as an integrated part of a more encompassing functional whole that is experienced to determine its function. In the second case, the object for understanding is believed to be constituted through an experiential course of events that includes pre understanding of the phenomenon in question and new encounters with it in a theoretical as opposed to a practical context. This presents the object of understanding in terms of having an experience and a formation of an

explanation of it in terms of its structure and its relatedness to an even larger structure, such as a societal and historical situation and context.

The first sense of the conception can be illustrated with the following example:

> When I understood
>
> It was a couple of years ago. I had worked the night shift. In the morning the children went to school, and I went to bed. I was so tired that I did not hear the phone, it had rung many times. About two a clock in the afternoon I woke up, and heard the telephone. It was my nephew that called, and he told me that my boy was at the hospital, he had damaged his leg. The ambulance came and picked him up, and they placed his leg in a plastic bag.
>
> I did not know what to do then, probably I just sat and starred up in the ceiling, before the thought came that I could call the hospital.
>
> I was then given to hear that it was not so bad. But the plastic bag continued to haunt me, so I took the car and went to the hospital.
>
> There I could see my son lying in the bed. I took and lifted up the quilt and touched his legs, both of them were where they should be. What a feeling I turned absolutely feeble, had to sit down.
>
> That plastic bag you know was a pillow that the ambulance man had placed under his leg so it wouldn't shake or move about.
>
> It is not easy to know everything, when one is ten years old. But my nephew really scared me. (D 22w)

This account has been interpreted as a conception of understanding as a realisation of what something is. As an account of this kind, it suggests more precisely that understanding means that the understander realises what function a given object had filled as a part of a whole in a given context. Unfortunately the account does not describe the way whereby the understanding of the given object as a part of a whole is believed to have been achieved. But it has been assumed here that it means that understanding was achieved in a process that involved finding a proper context for the information available; i.e. a perception of the situation that could be used to fuse given pieces of factual information into a systematic and intelligible whole.

The second variation of the discussed conception, can be exemplified with the following account:

> The short story of understanding I intend to write down for you can be split into two parts; it is partly the actual "experience" and partly when I understood

what I had experienced. There was a considerable time lag between these and it is not at all certain that I really do understand as I am not an expert on the social question concerned. My story is in fragments because of the time discrepancy so you will have to phone to fill in any questions you have.

At 17 I got the chance to fulfil a dream, to see the world, or at least parts of it. For a working class lad there was only one possibility, to go to sea. I had luck and got the first boat to Central and northern South America. The trip took three months. We left Gothenburg and drew into our South American port 14 days later. All through the crossing I was introduced to what would happen by stories from different members of the crew, and pretty vulgar they were too.

Once in port a number of "old hands" and innocent old me went ashore, took a taxi and went up into the hills outside the town somewhere in Columbia. After about an hour in the taxi we came to a deserted spot, a plateau with just one big house, a house with no walls. It was just a huge bar with its assembly of whores. The whole establishment was one huge whorehouse. We sat round a table, ordered a beer each and straight away there was a woman in each of our laps.

With my background the experience was quite a shock, but I became used to such things after a while without wondering too much about them. Perhaps the experience also changed my view of women as until then I had only met "nice girls".

Ten or twelve years later I found out more about the continent's problems through books and TV programmes and got answers to a number of questions I had never thought about before. For example, how girls from the inland areas go to the coast to prostitute themselves and earn money to live, to support families and to provide themselves with a dowry. Then they go home, get married, and have daughters who in their turn go to the coast and become prostitutes, and so on and so on. (Douglas 3:1w)

Understanding means here, that the person experiences insight into the relations that explain the character, the existence and the factors that sustain the existence of a given phenomenon in a certain historical and societal context. It means also that he experiences that he becomes aware of things he had not been able to see before. The phenomenon in question presents itself as a part of a larger whole. The understander experiences also that he gets answers to questions that he had never asked before and that he as a result thereof became able to explain – at least in one sense and to some extent – things in relation to the understood that he had not been able to explain before. As examples of such things, the account mentions, why it is the case that the phenomenon in question appears as it does in this particular setting.

The object for understanding is implied to have been arrived at by the understander, on the basis of what he already knew about the thing in question and on what was revealed to him about it as he learned more about the place and the circumstances where it exists, worked out a coherent description of a set of generating and sustaining circumstances that gives a principle explanation of a kind of existence. This is also implied as attained in terms of what the understood obviously essentially is as well as what causes and sustains it.

It is interesting to notice that the account suggests that although the understander experiences that he has gained insight into the relations that explain the existence of the phenomenon in question, the account also suggests that he is aware that he is "not an expert" on the phenomenon under consideration. Being experienced in what it means to understand in this sense, however, the understander is also aware of that human understanding is limited, that there is more to "being" than what is present to him as a historical subject. Consequently, he is open for the possibility of new experience and for the possibility of developing even more advanced understandings of the phenomenon under consideration than the one he has developed so far.

QUANTITATIVE ASPECTS OF THE QUALITATIVE RESULTS

In the following, a consideration of how many accounts were given altogether, how many were given by each group of participants, and what was the average number accounts given per participant, will be made. There will also be a consideration of how many times each conception has been expressed, which conceptions were the most and least frequently expressed in the material as a whole and which was most or least frequently expressed by each group. Finally, there will also be a consideration of what extracts have been taken to express what conceptions and how the extracts are distributed over categories of descriptions of these assumed conceptions.

There was, as mentioned previously, altogether 101 participants in the study. Of these 67 participated in terms of providing one or more written accounts of what they considered as an instance of

understanding whilst the remaining 34 also participated in a following interview. The 101 participants contributed with altogether 173 accounts, 132 of these were written accounts and the remaining 41 were composed in the following interview.

About one seventh (24) of the accounts could not be categorised. The reason for this was either that they did not refer to recognisable descriptions of instances of either learning or understanding or that they were so obscure that it were not possible to figure out what meaning of understanding they expressed. The following account may serve as an example:

> When I understood how one played ice hockey
>
> I was 11 years old when I began and now I am twelve. When I got there it was rather difficult, but then it went better and better. When I got there the second time [it went] very well, at least I thought so. I had of course skated on a lake back home where I live. The week after we were to play at a place called Grästorp. It is obvious that it was a little nervous in the dressing room. When the game began. All on the ice skated so fast. I only had the puck twice and I didn't score. Luckily we won the game with 3–2. On the way home we all sang on the bus. That year we won the league and were promoted. We are in the third place. (A 17w)

As follows from the heading, the author, a boy, signals that he is going to give an account of when he learnt how to play ice-hockey. On the basis of this one could perhaps have expected that he would at least tell us something about what he understood in relation hereto, but he doesn't, at least not explicitly. It could be the case, that he meant that he learnt how to play ice-hockey through practice or participation in training, and that the ice-hockey game led him to experience that he understood the existential meaning of playing ice-hockey, but the data does not hold for either of these interpretations.

Accounts from 89 participants have been categorised. The result of this categorisation is presented in Table 2. Some accounts have been found to express more than one conception. Consequently, they have been categorised into more than one category, which also explains why the numbers in the table sometimes don't match the number of accounts categorised.

Table 2. Distribution of accounts over categories

Categories:	n
Understanding as:	
I. a reception of knowledge	16
II. an acquisition of desired knowledge	14
III. a realisation of	
a. factual understanding of	
1. that something is the case	60
2. what really is the case	16
b. referential understanding of	
1. the existential meaning	7
2. how something appears	14
3. what an expression means	12
c. systemic understanding of	
1. how something works	3
2. inherent regularity or structure	6
3. what something is	4
$\sum$	152

The numbers in this table may among other things show that about three fifths of the episodes are considered to deal with understanding as it was defined above. Furthermore, over one third of the episodes represent the same conception of understanding, namely, that called *Understanding as a realisation of that something is the case.* The distribution of the episodes across the different categories within each of the four groups of participants (twelve, fifteen and eighteen year old school pupils and adult students) is presented in Table 3.

Table 3. Distribution of episodes across categories within groups of participants

| | Groups | | | | |
Categories:	12	15	18	ad	∑
Understanding as					
I. a reception of knowledge	14	-	-	2	16
II. an acquisition of desired knowledge	3	6	2	3	14
III. realisation of					
a. factual understanding of					
1. that something is the case	21	10	12	17	60
2. what really is the case	9	1	3	3	16
b. referential understanding of					
1. the existential meaning	-	1	2	4	7
2. how something appear	-	1	4	9	14
3. what an expression means	2	2	2	6	12
c. systemic understanding of					
1. how something works	-	-	1	2	3
2. inherent regularity	-	-	6	-	6
3. what something is	-	-	1	3	4
∑	49	21	33	49	152

A reading of Table 3 can suggest that there is some covariance between frequencies of applicable categories and groups of participants. In order to make this relationship clearer, the different categories of conceptions has been collapsed into the three types of understanding as a realisation.

Table 4. Distribution of episodes across types in % within groups of participants

	Groups			
Categories:	12	15	18	ad
Understanding as				
I. a reception of knowledge	29	-	-	4
II. an acquisition of desired knowledge	6	29	6	6
III. a realisation of				
a. factual	61	52	45	41
b. referential	4	19	24	39
c. systemic understanding	-	-	24	10

These percentages lend support to the previously advanced observation that it seems as if the idea of understanding becomes developmentally differentiated from the idea of learning. This is supported because more than 1/3 of the accounts by the twelve year old are void of this differentiation. The most frequent type of understanding as a realisation is that labelled *Factual understanding.* This holds for all the groups, but the percentages suggest that it tends to become less and less dominant the older and more formally educated and experienced the participants are.

The percentages also suggest that *Referential understanding* tends to become more frequently expressed the older/the more educated/the more experienced the participants are. It is also interesting to notice that the last category, *Systemic understanding,* is only expressed by participants from the last two groups, namely the eighteen year old high school students and the adults. Furthermore, it is relatively more commonly expressed by the members of the first of these two groups, which also is the group with the most advanced formal education.

SUMMARY OF THE RESULTS OF TURN ONE

The study has concerned studying persons' understandings of understanding as a personal experiential prerequisite for engagement in learning activity that aim at the development of better understanding.

It resulted first and foremost in an account of three different understandings of understanding. In an attempt to in a few words catch the essence of these forms of consciousness of understanding as a phenomenon they were called: Understanding as: I. *a reception,* II. *an acquisition*, and III. *a realisation.*

With respect to the assumed third form of understanding, the study also resulted in a discernment of three different types of understanding with respect to what can be said to have become the object for understanding as realisation. These have been accounted for in terms of: a) *factual,* b) *relational,* and c) *systemic understanding.*

The results of the study indicates also that understanding understanding as a realisation means that the following can become object for understanding: A: 1) that something is the case; and; 2) what really is the case; or: B: 1) the existential meaning; 2) how something appears; and; 3) what an expression means; or: C: 1) how something works; 2) inherent regularity or structure; and: 3) why something is.

With respect, to the numerical results, the analysis of the distribution of narratives over categories resulted among other things in a notation that *the reception* respectively *the acquisition* forms of understanding appear to be represented by about one sixth each and that *the realisation* form appears to be represented by about four sixths of the participants' accounts. It also resulted however, in a notation that *the realisation* form appears to become more frequently expressed by older, more educated and experienced participants and that the relative proportion of participants' accounts that appeared to represent *the acquisition* form varied. Finally, the numerical analysis resulted in a notation that the relative proportion of participants' accounts with respect to representation of the three different *types of realisation* varied in terms of the following percentage patterns over the four groups: A. 38, 21, and 0%, B. 26, 21, and 5%, C. 53, 34, and 27%, D. 59, 35, and 11%.

SIGNIFICANCE OF THE DIFFERENT FORMS OF CONSCIOUSNESS OF UNDERSTANDING

> *Only within a system can the concept acquire conscious awareness and a voluntary nature. Conscious awareness and the presence of a system are synonymous when we are speaking of concepts, just as spontaneity, lack of conscious awareness, and the absence of a system are three different words for designating the nature of the child's concept. (Vygotskij, 1934/1987, p. 191 f.)*

In the previously presented results, the participants accounts of experiences of understanding were said to represent three different kinds of understandings of understanding as a phenomenon. In this chapter the significance of these different forms of consciousness will be explored further. This will be done by means of a more close up analysis of the cumulated contribution of four of the participants, whose contributions have been found especially significant as examples of what it may mean to understand understanding in each of the discussed senses.

The four participants are: Abraham, Bo, Constance, and Douglas. Abraham, a pupil in grade six, represents participants whose contributions have mainly appeared to express understanding as a reception of knowledge. Bo, a pupil in grade eight, represents participants whose contributions have mainly appeared to express understanding

as an achievement of desired knowledge. Constance, a student in the second year of the *Social Science programme* at the gymnasium and Douglas, finally, the only participant that had some experience of studies at the university, represent participants whose contributions mainly have appeared to express understanding as a realisation of something.

The significance of the different forms of consciousness of understanding as represented by these participants' contribution will be considered in the mentioned order.

RECEPTION UNDERSTANDING

The interview with Abraham, was, like the interview with the other interviewees, conducted according to the interview plan. This consisted of: 1) a follow up on the written accounts; 2) a probe for further accounts of occasions when the participants experienced that they understood; 3) a probe for examples out of their repertoire of sentences that involve the verb "to understand"; 4) a consideration of similarities and differences between the accounts and sentences with respect to what and how aspects of understanding; and 5) an invitation to explain what is meant with understanding as a phenomenon.

Abraham's written contribution to the investigation is as follows:

> When I understood…
>
> That 1–1 was 0 was when I was six years because my mother said so.
>
> That my father was "Santa" was when I was five years because I recognised his beard.
>
> That snow was not salt because I tasted the snow and the snow tasted better.
>
> How easy it was to whistle was when I inhaled and made my mouth look as though I was about to kiss somebody.
>
> That bicycling was easy when I got my first three-wheeler then I was three years because then I wanted to buy a big bicycle.
>
> That I learnt how to count was when I knew how much 3 times 1 was.
>
> That my spider was gone when I came from school. Then my mother said what have you done with the spider. Then I said "what spider". "Your spider". "O

that". I asked my mother if it had disappeared. Then she said don't play innocent I know that you have taken it to school. Then I understood that my brother had taken it. (Abraham 5:1–7w)

The interview with Abraham began with a follow up on the written accounts. The follow up began with the first "example". It continued with the second and the third. From there it jumped to the seventh and last example.

After this follow up, there was a probe for additional examples, but – as indicated in the extract from the interview protocol below – this didn't yield any more accounts from Abraham:

> I   Yes, exactly… well… have you, have you experienced any such event since you wrote this one about when you understood something…
>
> A   I don't think so…
>
> I   … that you can recall…
>
> A   I don't know, I don't think so, not that I can remember at least, not for the time being…
>
> I   No… is there any other thing beside those that you already have told me about… where you think that you really understood something…
>
> A   No, I don't think so… at least not one that I can recall

The probe for further accounts of instances of understanding was followed by a grasp after examples of sentences from Abraham's repertoire that involve the verb "to understand" (förstå), but this didn't yield much either. The same holds for the attempt to involve him in a discussion of similarities and differences between accounts and examples of meanings of the verb with respect to what and how aspects that followed after the grasp after significant sentences. The invitation to explain what is meant with understanding as a phenomenon, which concluded the interview, didn't yield much more either.

It may be the case that the observed difficulty to learn more about how Abraham tended to understand, explain and further relate to understanding as a phenomenon when called upon to do so in the subsequent interview, had more to do with my failure to establish good working relations with him than with his lack of consciousness

of understanding as a phenomenon. However, additional reading of Abraham's written contributions to the investigation in the light of what has been said about what has appeared to be characteristic of reception understanding has been found to give more support to this explanation. This is also a fruitful interpretation. Because if the meagre results of the interview with Abraham in the discussed respect actually is a result of a relative lack of consciousness of understanding as phenomenon, this further supports the idea that a relative lack of awareness of understanding as a phenomenon is a defining characteristic reception understanding of understanding as a phenomenon.

In the part of the interview protocol from the interview with Abraham that represents the attempt to follow up on the written accounts, it seems, moreover, also as if reception understanding of understanding as a phenomenon could quite easily be transformed into acquisition understanding. However, as long as reception understanding dominates over acquisition understanding, the discourse seems to often stop short. The reception understander's assertion is that to have understood means to have come to know what is.

The following extract from the part of the interview protocol from the interview with Abraham that represents the attempt to follow up on his last written account can illustrate this point:

> I   Okay… we could perhaps talk (there is a sound as from the siren of an ambulance in the background) here comes the ambulance… We could perhaps talk about that occasion when you discovered that your spider was gone? You said that you were on your way home from school. And when you came home you met your mother… and then she said: What have you done with your spider? Can you tell me a little more about what you thought then?
>
> A   I thought it had got out of the cage or something, so I went up and checked, and then there was nothing there in then… so it was my brother that had taken it. He had returned it to who we got it from…
>
> I   You had got it from someone?
>
> A   Yes, we had got it from someone that he knew.

I   A pal, but… if you try to… your mother said, thus, like this to you: What have you done with your spider… and then you wrote like this: I said: What spider? Your spider, she said … and then you asked your mother: Has it disappeared…

A   Then she said: Don't play innocent now. You have taken it with you to school…

I   She thought that you had taken it?

A   She did not know about it either…

I   And what did you do then?

A   I went up and looked in the room. It was not there.

I   And then you thought that it had escaped… out of the cage… had it done that before?

A   No…

I   And then when you came up you saw, you understood that it had not escaped then.

A   Yes, later on when my brother said it.

I   So it was when your brother came home that…

A   Yes.

I   Did you ask him then?

A   Yes.

I   Was that the first thing that you asked him then?

A   Yes. Where have you, if he had taken it somewhere…

I   And then he said?

A   I have returned it to my friend, because he thought it was boring…

I   Indeed… so he told you that then?

A   Hmm.

I   Well… so before your brother came home you thought that it was he who had taken it…

A   Yes.

I   So you had already…

A   No, first I thought that it had disappeared. And then I thought: Think if he has returned it. And then I asked him.

I   So you had already understood it before he came home?

A   No, I thought that just before I started to ask…

I   You thought that then?

A   Yes.

I   And then when he came home, then you no longer believed that because then you knew when you…

A   … mmm…

I   … once had asked him.

A   Yes.

Consciousness of understanding as a phenomenon that is dominated by reception understanding can, thus, involve the possibility to assert that what one has understood must mean that one has achieved definite knowledge of something that is the case, without for that sake including the possibility to assert that one has had a significant share in the achievement of this knowledge. The knowledge has simply been given and received. Notwithstanding that everything indicates that the understander has a fair share in the understanding that is achieved, it appears, thus, that one is not conscious of this in reception understanding.

ACQUISITION UNDERSTANDING

Bo's written contribution to the investigation is:

When I understood equations

I sat in the maths room and Steve tried to explain how to do equations. What he said sounded as letters and numbers completely mixed up. We got a maths homework in equations, but since I didn't understand anything, I could not do any. When I came home I sat down and looked through the homework. It looked completely incomprehensible. I asked my brother, but he could not explain that well. Then I remembered that my cousin was coming for a visit on Saturday and he is very good at explaining. He came on Saturday and we sat down. We sat for two hours and eventually I understood. After that we sat down to eat because we were very hungry. (Bo 9:1w)

This account has earlier been categorised as a clear example of understanding as an achievement of desired knowledge through successful completion of deliberate learning activity. In this case there were several attempts made to achieve the desired knowledge, but it was first in the obviously successful co-operation with the cousin that

the desired knowledge was achieved, namely the ability to do the equations Bo had been given to do as homework.

The interview with Bo began with an attempt to follow up on the written account. The follow up was followed by a probe for additional experiences of understanding and accounts of experiences of understanding:

> I Can't you try to recall an additional situation in which you have understood?
>
> B … no it was very difficult this to recall something… well, in itself, when I practice karate.... so then I had been in Spain for a week… and when I came back… I didn't get anything of what he was up to then… there was lots of different movements then. Then he demonstrated them and it took several weeks before I understood them really well, so that I could perform them properly…
>
> I You said that you were in Spain a couple of weeks and that you didn't understand a thing of what he did… what was it that you so to say, was it your instructor, trainer…
>
> B Yes, it was my instructor that demonstrated then…
>
> I He demonstrated a couple of things then…
>
> B And then the group that had been doing that those weeks that I had been gone, so I knew nothing about it, so I didn't understand anything…
>
> I But the others could do what he demonstrated?
>
> B Yes...
>
> I You could, thus, not do that… and then you did not understand how one should do… well… but then, the you worked on that for a couple of weeks…
>
> B So at last it went at least fairly well…
>
> I Then you could do it?
>
> B Yes.
>
> I So… what was the problem, why did you not understand when you came home? What was it that made you not understand? What difference was there between you and the others?
>
> B It looked strange and they had the chance to practice…

The presentation of the account above was followed by a probe for experienced similarities and differences between the two accounts. This gave following data:

I OK, do you think that there is… if we now are to take the two examples that you have brought forward… are there any differences… was it the same thing or was there any difference… in this example with maths, with equations and the other example, if one was to compare them…

B Yes, there is quite a lot of a difference… maths it was, you see, to think with your head and this was, you see, both, both and, it was thus both to think with your head and to do it bodily with…

I Do the movement too…

B Yes…

I But the maths it was more to think with your head…

B Yes…

I But this was more a motor skill, it was about learning to move oneself, to do this and that… that is purely bodily then… but it was also about, as you said…

B Yes, you had to think too...

I You needed also to think about how you should do it, but maths it was thus only with the head… so there was a difference then… In every day language one still says that one can, can you [do] equations? Yes, I can solve equations, I can figure them out. In the same manner one can also say can you do judo?… Well, I cannot do everything but I can do quite a few throws… or something like that… but notwithstanding there is still a difference between these… the one is…

B Mainly bodily and the other is…

I There one must think how one should do… well… that is the difference between these examples, as you see it… in maths it is about to grasping how one shall do…

Bo thinks to start with that the two examples were quite different, but as the conversation proceeded he became more an more open to the obvious similarities between the two with respect to the meaning for understanding expressed by them. The attempt to discuss experienced differences and similarities between the two examples was followed by an attempt at a conversation about what is meant with understanding. This began as follows:

I Well… if we say that you had a pal that didn't knew Swedish so well then your pal asked you this: What is it to understand? What would you say then…

B So that one can perform the thing so that one grasps a thing…

I   So that one can perform a thing, so that one grasps a thing… what do you mean with a thing; your friend says then…

B   …

I   A movement is that what you mean?

B   Yes, exactly just anything if one takes Swedish then if one says adjectives or things like that, so that one then understands… the different… well… things there…

I   In Swedish then?

B   Yes, lots of tenses and things like that there…

I   Mmm… so that is to understand then? But that is not really the same as to do then, as for instance to do a throw in judo then… so one can thus learn to do…

B   Yes, but one can say that to understand that is like that you know the thing so well that you can teach it or something like that… so that you become proficient in it…

I   So to understand something, that is then… if you have understood something then you can also teach, according to you…

B   Yes…

It also seems here as if Bo proximally and for the most part sticks to acquisition understanding of understanding as an achievement of desired knowledge through successful completion of a deliberate learning activity. The knowledge is something that is brought about through one's own activity. That is, one becomes an agent of knowledge. This means that if the if the implicit criteria for understanding in the previous understanding of understanding was certainty, one can say that "now" it is knowing or proficiency. However, further, with the discovery of oneself as an agent in understanding, it also seems likely that one thereby not only becomes able to relate to oneself and others as producers and as users of knowledge but that one can probably also learn to assess and grade one's own and others performances. This is something that is also believed to be an important ingredient in understanding of understanding as a realisation of something.

REALISATION UNDERSTANDING

The significance of *Realising understanding* will explored further by a consideration of two different participants contributions to the study. The first of these two participants is Constance. The other is Douglas. Each of them has been chosen to represent participants who throughout their contribution appears to have understood understanding in the discussed sense.

If one compares these two participants' contributions with one another with respect to what types and conceptions they have been found to express, one can, however, find that these differ from each other in several respects. One of the more conspicuous differences is that whereas Constance's contributions involve manifestations of *factual understanding* Douglas' doesn't, and whereas Douglas' contributions involves a manifestation of *systemic understanding* Constance's contributions don't.

The two contributions differ, thus, with respect to the pattern of types and conceptions of understanding that they show up. Assuming that the noticed difference indicate that the understanding of understanding that Constance has developed is less advanced than the understanding that Douglas has developed, the previous' contribution can be considered as a manifestation of early and the later's can be considered as a manifestation of a later form of advanced realising understanding.

EARLY REALISATION UNDERSTANDING

Exploring the significance of less as compared to more advanced consciousness of understanding as a realisation of something can begin by calling attention to Constance's first written account:

> It all began when I was four years old. I had had a cold over a longer period of time and had as a result got ear ache. Mom grew worried and took me to the hospital, to let me be examined. I was a little worried to begin with, but since the doctor was kind and nice I calmed down.

The physician looked at me and examined my ears with a lamp. Then he prescribed penicillin and after that mom and I were allowed to leave, happy over that the visit was over.

The days came and went and I ate my penicillin, and I recovered. After a month or so we had to go back to the physician for a new visit. The doctor examined me and said then that I was completely healthy and that I could leave.

Some years later, four more exactly, the whole class was to visit the nurse to examine their hearing.

When I was informed about this I became absolutely horrified. I cried several weeks prior to the visit to the nurse and said that I did not want to go there. Mom and dad were very worried, but they could not figure out why I was so frightened to visit the nurse.

No matter what, I had to go there anyway, and then there was nothing more to it, mom thought. But my fear to visit the nurse and have my hearing examined was not over.

In subsequent years my class had to go on another hearing examination, and the same scene took place this time as well. I cried and screamed and tried with all thinkable means not to have to go. But naturally I was not allowed miss that examination either. And it continued like this for quite a while. Mom and dad could not understand what was wrong with me. But then one day, I think I was about ten or so, when I sat in my room and read, all of a sudden the door opened and an angry mother looked in:

"Constance! You never hear what I say. I have called after you for fifteen minutes now, why do you not answer me?". "Mother, I did not hear that you called on me. I have impaired hearing you know", I said. Then mom understood why I had been so worried over all hearing controls. I had believed that I had poor hearing. Mom was absolutely in despair and asked me to sit down by her side. The she started to explain:

"Constance, you know, all the times I have said that you don't hear what I say, I don't mean that your hearing is impaired. The penicillin you got when you were four years old had nothing with what the ears do. Your hearing is perfectly OK. Do you understand?"

Then I understood that I did not have impaired hearing, and that there was no reason for me to worry over visiting the physician, and that the call back I had done to the physician's had nothing to do with my hearing, but was about my cold.

I felt tremendously relieved over getting rid of my fear and after a while I could even laugh over the whole thing. When I was eleven my class was about to make another visit to the nurse's to have their hearing examined. But this time, I didn't scream or cry. I had understood that I did not have impaired hearing and did not have to worry. (Constance 30:1w)

This account represents, like quite a few others, more than one type and conception of understanding as a realisation of something. As it has been interpreted here, it represents though first of all *factual understanding of what really is the case.*

The subsequent interview with Constance began with a follow up on the course of events that was related in the written account. In the reading of this the passage of the interview transcript, it has been noted that she thereby among other things meant that the object of fear, which initially was fear of the prospect of being "taken in" at the hospital, transformed as she grew more experienced. It has also emerged that she has thereby retold the story as experience of *referential understanding of how something appears for someone else.*

After the follow up, there was a probe for recollection of additional experiences of understanding. Constance could then not recall and recount any more experiences of understanding, but instead of this she began to develop an interesting reflection over what it is like when understanding takes place. In connection hereto, she said among other things the following:

> C   Yes, but it is only like when Dad explains a maths task for me and we sit there and calculate and I don't understand anything and he goes through it, but finally a light dawns on me then, and then I can sit there and solve just about the same kind of tasks over and over again and think that it is funny, but prior to that I perhaps, well… don't want to calculate at all, just yell at dad…

> I   But then… what kind of difference is there between you then, when you are angry and irritated towards your Dad then and then afterwards, what difference is there… yes, what difference is it…

> C   When I can't do anything or don't understand then I just sit there and let him explain. I'm like that, I don't really listen to what he says… but then, it might not work directly but… if it perhaps is a complicated task I perhaps understand a little then, that thing there and this thing here and then I understand what he says then… yes, but then after that I, you know, think that it is fun to calculate…

In this passage Constance describes a situation where she is doing some home work in mathematics, but finds difficulties with a particular task. She asks her father for help. He explains. She does not understand and this frustrates her. She cries out her frustration, but

her father continues to explain. All of a sudden what he says begins to make sense to her. She catches on and this leads to more understanding. New understanding motivates her to make a new effort. She solves the tasks she found difficulties with feels a joy over the achievement which spurs her to continue.

The is a description of understanding as a process which indicates a certain consciousness of understanding as a relative and relational phenomena. This dawning consciousness is also visible in the following passage:

C   I feel that when I understand it, it's as if it just comes, I can sit there and calculate the same kind of tasks and I don't understand anything and then all of a sudden it just… it just opens as it were you know. Just comes at once like that…

I   You are able to solve tasks…

C   Yes mechanically, in such a way that one does not think about what one does and then all of a sudden "Oh I see… that is why I do this and that", like that…

I   Oh I see, so you mean… there is a difference between calculating something mechanically and understanding?

C   Mmm.

I   Is there a difference between that?

C   Yes, I think there is…

I   What is it then?

C   Well, if you calculate mechanically you don't need to understand the tasks because then it is perhaps only a formulae that one writes down then… that and that and that…

I   One just learns to do it.

C   Yes, exactly. You don't need to understand in order to master a formula.

I   No, no, but one can also understand a formula?

C   Yes.

I   You can solve a task through using a formula… by merely calculating mechanically and one can also learn to understand it then?

C   Yes.

I   I see… ah… to calculate mechanically and… yes what is then the difference between two persons: A and person B. They have the same task to solve. Person A does it mechanically. Person B understands it. What is the difference between them?

C   In the first place if one calculates mechanically then… it runs by itself, but if one is to develop the task then it is more difficult for that person to understand it isn't it…

I   What do you mean "develop the task"?

C   Well, it becomes perhaps. Let's say we have a formula. And the first task, then it is like the formula, but then there can be texts that you are to put… add something to the formula, that there is no example about how you should do it then, but you have to think then too. If he does not understand the very formula. Why you do it. Then he can not easily continue with something more difficult…

In addition to a certain consciousness of the relativity of understanding, this passage also indicates a certain consciousness of the dialectical aspect of understanding. In the previously quoted passage, Constance spoke about understanding in order to solve a particular type of task. In the passage above, she speaks about solving a task in order to better understand, which could easily be considered as the antithesis to understand in order to solve. The realisation of this seems (like the consciousness of the relativity of understanding) not yet fully worked out.

After the probe for additional experiences of understanding, followed an additional attempt in this direction, but this didn't yield anything new. The second probe was followed by a probe for sentences from Constance vocabulary that involve the key verb. In this she amongst other things gave an example that involved the expression "I understand you" ("Jag förstår dig") and another that involved "understand something" ("förstår sig på en sak") in the sense of "being well versed in". In the follow up on these examples, the first was developed into an expression of a *referential* and the second into *systemic understanding.*

The follow up also involved a probe whether Constance felt that the different senses had anything in common. The probe and the response to it developed as follows:

I   Okay… if one now were to… do you think that there is any common denominator for these different senses, so to say any core…

C   For understanding?

I Yes… is there such a thing or isn't there a thing like that? If there is what is it then? If there isn't why isn't there any?

C There ought to be one…

I What could it be then?

C … I don't know any word or so here but if you understand something then it is just as if there is a light that dawns. It doesn't mater what it is that one understands or does, but it is always a… one understands…

I A light dawns… that is then something that appears to be common for the various examples then?

C Mmm...

I Could you say some thing more about that "a light dawns"… could you explicate the meaning of that… what does it mean… ?

C One understands…

I Could you if possible say something about what you mean when you say that?

C …it is then as if one perhaps almost walks in a dream world… No perhaps not like that… but a minor, mist, like that then, and when one understands then it becomes naturally at once much clearer…

I … but, I see… there is a haze, a kind of mist... haze..., something is unclear and all of a sudden it becomes clear and distinct then? As if when it is dark and somebody turns on a light… is that something common to… what is that one sees then?

C When one understands?

I Yes, for if one employs this simile then that "a light dawns" that there is a "mist" first so one can see clearly… what is it then that one sees that one earlier could not see or that one could not see clearly… is that something common to or is that contingent?

C But I think, it is common if you understand some thing, if you under-stands a thing or a person or how one should do something… it becomes much clearer at once. One understands then why one does things like this…

I Hmm… it becomes much clearer… what is it that… clears up?

C Well, when one is occupied with some complicated machine or what ever it is, then one understands perhaps not why it works or why something sits just as it does and so on, then one just understands later… I don't know how.

I If you should try to develop this example… a machine?

C A complicated… yes, one does not understand why… that sits there and that there… lots of wheels and…

I Why that part is located there and that there…

C   Yes… its just an apparatus you know. A machine, but if one looks more carefully and follows all these then one perhaps understand that later on then…

I   and what is it one does then?

C   ... one… yes one understands how it works… I don't know…

I   How it is connected, parts are interrelated…

C   Yes… how the very machine works and like that then…

I   Yes, exactly… how come it can work… well it works because that part fills that function and then that does so that like this and that… it is exactly this that they are placed in relation to one another in this manner then… if one changes one part then it [the machine as a whole] doesn't work… is that like what you mean?

C   Yes.

I   But first when one meets the machine "It's just a machine"…

C   Yes.

I   But then…

C   Yea, if one studies it, well one can even take it apart and look, if there is anyone that does that…

I   Okay, the common thing then that you have said… that should thus be that one conceives it as a happening like this you know… on this side one does not understand but all of a sudden one transcends a boarder and then one understands and when one does that then that which has been hazy or unclear, it becomes all of a sudden clear… Can you give an example of that…

C   Hhhh...

I   Something that you yourself have experienced or that somebody else has experienced?

C   … but it can you see… it is basically the same with a machine and a mathematical task and things like that… it is you see this that one as if… hazy then one in principle does exactly what others tell you to… mechanically and then when one understands then one can take one's own initiative and… understands why one does so…

I   … and here one merely does something because some one has told you to, one does not understand why one should and that is what you mean with doing it mechanically… but then one can also do something in another way…

> C   Yes, because if one understands it then one actually does it by free choice… yes… Yea if we say that I do maths again, and I don't understand anything. Then if I for instance have this much to do for homework. Then I only you know do that much. But if I understand then, for one thing I do think it's more fun, and then I want to continue… then I perhaps do some additional tasks …

In this passage, Constance returns to the experience of understanding as an enlightenment of something, but this is just about all she can say about what can be said to be involved in understanding. She had also difficulties to provide synonyms for "to understand":

> I   Do you think that there are any other words that are close relatives to the word understand… that one also can use?
>
> C   Comprehend.
>
> I   Comprehend, that one can also use… are there any other?
>
> C   … yea… I will probably not find any… comprehend… No I don't…

Constance has been identified as a participant that consistently seems to have understood understanding as a realisation of something through experience and interpretation. But since the ways in which she related to understanding in this sense appeared to be characterised by a relative lack of distance to the phenomenon as such, the understanding of understanding that came into expression has also been interpreted as an early form.

The understanding of understanding she has developed has however obviously made it possible for her to relate to understanding of understanding as a realisation of something through experiences and interpretation, without for that sake being able to give an explicit explanation of it as such yet. This is a mode of understanding of understanding as a realisation of something through experience and interpretation that can be appreciated further through a comparison of with realisation understanding of understanding as a phenomenon that has been found to be more advanced.

LATER REALISATION UNDERSTANDING

Douglas' contribution to the investigation is considered as an expression for realisation understanding of understanding as a phenomenon that is more advanced than the one presented by Constance. The initial identification of Douglas' understanding was made in relation to his written contribution. This is given on page 158.

Previously, this account was included as an expression of understanding of understanding as a realisation of something through experience and interpretation that appeared to suggest that the object for understanding is *systemic understanding of why something is the case.* This account will now together with the rest of Douglas' contribution to the study, be considered as an expression of a relatively advanced form of realisation understanding of understanding as a phenomenon.

Beginning with the written account, it is in this respect interesting to note that Douglas divides the story about this particular experience of understanding into two parts; "the experience" (of the concrete existence of apparently quite organised prostitution at a particular spot in South America) on the one hand and "the understanding" (of the special problems of the continent that were felt to explain the existence as well as the character of the experienced practice) on the other. Judging from the wording of the narrative, it seems obvious that Douglas means that "the understanding" of the relations and mechanisms that were felt to explain the experienced practice were not constituted through one single flash of insight, but rather through a series of insights into the special problems of the continent as mediated through media. These were brought together into a relatively coherent systemic explanation of the particular form of social practice in terms of underlying mechanisms and power relations.

In connection hereto, it also is interesting to note that the story not only indicates understanding of why prostitution exists and manifests itself and continues as it does, but also that this understanding developed over time for the understander as he brought the things he learnt about the particular problems of the continent to bear on what

he had experienced when he and his work mates visited a brothel. It also suggests the presence of an active consciousness that there may be more to understand about the being of that than he has been able to understood so far, and that other persons that have studied the particular practice more than he has have probably developed a better understanding of it than he has.

This implies that he recognises that the understanding he has developed is not absolute, but rather relative and developmental. these are the most distinguishing and effective characteristics of the more advanced realisation understanding of understanding.

The follow up interview with Douglas began with an attempt to learn more about the experience of understanding reported in the written account. In connection hereto, he was first asked to say some more about how talks about the brothel and the prostitutes went when he was on his way to South America. As a response to this, he said amongst other things the following:

D   Yea, one chatted you know then about what you should do, in port … and like that you know…

I   Hmm…

D   … and I had you see until then lived in rather protected…

I   … existence?

D   … world, you know… where nothing like that was a part of it…

I   Certainly not, can you then tell me something about what your mates said would happen when you arrived in South America, yea… can you say something about… how the chatter ran…

D   Yea, it was that you know that you were to be initiated in a sexual life then… that you hadn't been part of before, you know…

I   … it was like, if the old lads should take care of the young boy and…

D   … yes…

I   … and make sure that he had to go through some sort of rites…

D   Yea… it was a lot like that…

I   … and then you would…

D   Yes, but when I think it over, I don't mean that these guys were completely ignorant about what it was…

I   Certainly not…

> D ... but they had I guess more or less resigned... they were very well informed about why it was like it was... in South America, you know... but they had, they were double-sided... They had one, the vulgar side, then and then they had also a very intellectual conception of how...
>
> I ... how the problems...
>
> D ... about the problems there, but they reasoned like that it was something they could do nothing about. So, toot and drive on, you know...

In searching for indications of defining characteristics of advanced realisation understanding of understanding as phenomenon in the reading of this extract, it is interesting to notice how Douglas compares the crew members understanding of the relations both with his at that time relatively ignorant understanding and with his at the later time relatively insightful one, and that he does not want to give the impression that he thinks that his former colleagues were ignorant about the relations he came to understand. On the contrary, he seems to mean that he thinks they were both experienced and informed, even though he thinks that the understanding he came to develop later can be said to have transcended their understanding, as it was at the time when they brought him into contact with prostitution.

The line of reasoning that forms the basis for this judgement could be put as follows:

Whereas I (Douglas) at that time had merely experienced the way that prostitution manifested itself there and then, they had not only experienced it there, but also at other places at other times before that. In addition, they had without doubt also learnt a great deal about the particular problems of the continent and thereby also developed an intellectual understanding of the problem; the reason why the practice manifested itself as it did there. For some reason they had, however, apparently not integrated these two different forms of experience/understanding into the unitary systematic kind of understanding that I came to develop later, and which can be said to have meant a transcendence of their understandings, in that it integrated the two hitherto relatively separate experiences or understandings into one unitary coherent, comprehensive one.

The implied course of development of understanding has been:

1. learning about the practice and the place where it takes place from others that first of all have gained first hand knowledge of the practice through personal experience;

2. experiencing the practice;

3. learning about the problems of the society where the practice takes place and in the knowledge that is gained from this finding new questions to ask and new answers to these; and:

4. integration of this new learning with previous experience and the formation afterwards of a comprehensive and systemic understanding of the particular form of practice as an integrated and functional part of a more encompassing web of interrelated forms of practices, deeds, movements and transactions among persons and groups of persons at a particular place, time, society and period in individual and general history.

In addition, it is also interesting to notice how Douglas, as the interview proceeded, revealed more and more about what he understands with the relations in South America in general and about prostitution as it manifests itself there in particular than he had mentioned in the written account.

The obvious ease with which Douglas could develop his narrative has, thus, come to stand in sharp contrast to the obvious difficulties with the considerably less experienced participants spoke about their experiences. It is also interesting to notice that Douglas, especially in the interview, time after time came to say things that indicated that he meant that the experiences one makes in understanding presupposes previous experience, but that the important thing in them lies perhaps not so much in what is confirmed as in what is negated in them. Because is it not, he seems to ask, first of all this partial annihilation of previous experience that gives the necessary new *material* for the constitution of the understanding that comes next? Is it not so, he seems to say, that the partial annihilation of previous experience is at the same time also the partial coming into being of the potential new understanding?

This is at least the sense in which I have interpreted his talk about things like: 1) "with my background the experience was a minor

shock", "I had, you know, not experienced anything like that, I did not know that girls could be like that, you see… because I had only met the one side then… Yea, 'homely-girls' you know, the 'family-girls' as we called them at the sea, you see… So little by little one came to accept it as it was, and one became like the others then on the ship, one had the same, one had the same discourses, you know… 'Yea, now we are going up into the mountains to check out the whores…' you see, in that manner then, and one did not reflect over why it was as it was… but it was just like that… It was so and…", 2) "10-12 years later, I gained insight into the special problems of the continent through TV-programs and books and got answers to some questions I had never asked", 3) "Yes, I ended up in the same seat as many of my generation did, we received the world through the TV-apparatus. Now, I had been out for sometime before, so many things that were seen on 'the telly',… and so on, that was no news so to say, but I began to disentangle the interconnections, so to say of experts then, through 'the tube' and that resulted in several 'aha-experiences'… It was different documentary programmes… that discussed different countries and continents and in that way one began to understand you know… if, and it was even so that one sometimes thought that 'No, there you were wrong old man', one had thus ones own conception at the base, that one had never ventilated you know… ".

In the reading of these utterances, Douglas from time to time seems to say things that indicate that he meant that the activities and experiences need not necessarily led in the long run to a continuous development of gradually better understanding, but on the contrary can very well also led to a generative extinction. It is at least to this end that the following passage from the written account has been read:

> Against my background, the experience became a minor shock, but little by little one got used to such states without wondering over them…

A similar idea has also come into expression in the previously quoted passage, wherein Douglas relates to the dual understanding of the older crew members. They had obviously also learnt to know prostitution from first hand personal experience in their youth and with the help of more experienced others. They had, under the influence of the same or other more experienced others probably also

begun to develop systemic understanding of the practice in more
political terms, but they had for some reason or another obviously not
gone further in this. Douglas' explanation of why they had not done so
appears first of all to be that they simply could not. Because as long as
they continued to "check in the whores", intellectual understanding
could not develop further, for there was simply nothing that could
propel such development. On the contrary, all that they expected to
experience, were supposed to experience, and therefore, in a sense,
could and did experience while they were there, spoke rather very
well for the continuation of the sustentation of their participation in
the practice and thereby also "vulgar understanding" that they,
according to Douglas, also maintained.

The idea that participation in practice and the experiences one make
there can lead to "unhealthy" understandings continuing to flourish,
also came into expression in another passage of the interview. The
sentence that follows right after the above quoted sentence in the
written account runs as follows:

> Maybe the experience also affected my view of women though, I until then
> had only met "little angles".

What Douglas says here seems to be in response to something he said
earlier, that after a while he got so used to being there that he felt it
was natural. That is, that the milieu by then was so familiar to him that
it seemed as if there was nothing more for him to experience than he
already had or could imagine he could. This meant that though
continued visits to the brothel stopped to effecting the understanding
of the practice that he used to sustain. In the reading of this passage, it
seems as if Douglas here too means something like the experience one
makes in one's encounters with a particular practice do not necessarily
have a negational, but on the contrary can very well have a
confirmational effect on previous understandings, no matter how
twisted such understanding may appear in retrospect or from another
perspective. In addition to this, it also seems as if he not only meant
this, but also that what determines whether experience mainly will
have a negational or confirmational effect on previous understanding
has something to do with prior experience, the expectations that have
been projected on the basis of these and the manner wherein what one

encounters is inscribed and lends itself to be understood as it is encountered anew.

It is clear that Douglas not only means that understanding is relative to the present, past and future understanding of oneself and/or of others, but also to a thinking dialogue with oneself and/or others. This relational aspect of understanding may lead one to think that he thereby has also talked himself into a relativism (Bernstein, 1983). But there is no real support for this. On the contrary, he rather argues that the understanding that he has come to sustain can be considered as better than – at least some other understanding – for example, understanding that fails to take the historical conditions for the phenomenon into consideration.

After the attempt to follow up on the written account followed a probe for additional accounts of experiences of instances of understanding. In this Douglas presented one additional account that has been interpreted as an account of *referential understanding of how a situation appeared for someone else.* This account was found to stand close to what has been called systemic understanding. It also appeared to present close resemblance with the kind of understandings and explanations that researchers in political science might develop.

In the part of the interview that was intended as an attempt to encourage Douglas to give some example of sentences that involve the verb "to understand" a conversation developed and the previously discussed tendency of the interviewee to present understanding as relational phenomena shone through once again. Douglas also developed an additional account of what has been interpreted as an instance of *referential understanding of what an expression means.* This was interpreted as a kin to the kinds of understandings and explanations that human scientists might seek to develop.

The discussed third part of the interview came to involve an objection from the interviewee concerning whether the interviewer had "hung up" the interview about the meaning and nature of understanding a little to much on the very word "to understand" (förstå), and if it might not be wiser to move more into a joint exploration of

understanding. This passage has also been interpreted as an additional expression of active awareness of the relationality of understanding. In this particular context, it has come to mean an obvious openness towards understanding as a term which can mean different things to different persons depending on their previous experience, their language habits and the situations they find themselves in.

In the fourth part of the interview, Douglas was encourage to work out an explicit definition of what is meant with understanding. The passage of the transcript that represents this part of the interview involves among other things a rather long explication of the meaning, nature and constitutive elements in understanding.

Here Douglas is understood once again to emphasise a relationality of understanding that perhaps can also be called the dialogicality of understanding or even the historicity of understanding. In the reading of the discussed passage it even appears as if Douglas tends to divide the reference to this term into the history of the understander and the history of the understood as two developmental lines that are somehow brought together in understanding. It can also be of some interest to note the distinction that is made between the common understanding or meaning of a particular being, the being of that being, and the being of the being as it has lent or may lend itself to be understood in subsequent encounters.

In the above, Douglas first compares understanding with the completion of a jigsaw puzzle that one has not seen a model of and that nevertheless appears to take shape according to some sort of rule system or within a particular world view. The understanding means that a lot of hitherto relatively isolated experiences are brought together and organised into a pattern. Douglas also compares understanding to a triple-jump jump that involves the big leap first and the supporting steps afterwards. He also makes a comparison to nuclear fission and a subsequent chain reaction. Understanding is also presented as a course of events that not only involves a transformation of previous understanding into new understanding, but also appropriation of the truth that can be gathered from the understanding. This is said to be a less dramatic transformation than when

leaps that are experienced as the most decisive moments in understanding are involved.

In sum, it seems as if what distinguishes less from more advanced realisation understanding of understanding as a phenomenon, is that the latter involves an intellectual freedom over above that of the former. This makes it possible to not only recognise and "compose stories" about experiences of the event of relatively new comprehension, but also to make the structure of understanding explicit. This makes it possible to recognise and explicate the historical relational structure of understanding and makes self initiated deliberate development of more systematic understanding possible.

SUMMARY AND ELABORATION OF THE RESULTS OF TURN TWO

In this chapter, the collected contribution of four particular participants were analysed, whose contributions exemplify consistent: 1) reception, 2) acquisition, 3) early; respectively, 4) later realisation understanding. The purpose of the interpretation of these data was to explore the significance of understanding understanding in these ways.

Reception understanding appeared first and foremost to be marked by the understander's lack of reflection over his/her own role in understanding. *Acquisition understanding* appeared to be characterised by an active awareness that the object of understanding is achieved through successful completion of deliberate learning activity. And it also emerged that the understander tends to be well aware that the achieved knowing or proficiency is more and less relative to advanced knowing/proficiency. *Realisation understanding,* finally, appeared as an understanding of understanding as a phenomenon that involves a relative awareness of the understander's contribution to the constitution of the object of understanding, but that understanding as a rule involves partial negation and confirmation of previous experience of the understood as significant ingredient in coming to understand. It also emerged that one becomes more and more

conscious of what is involved in understanding as one becomes more an more experienced in the ways of being of understanding and that it is this that above all makes it possible for oneself to participate in, initiate and perform learning activity that involves the development of more advanced theoretical understandings.

In the sketch for a theory of the development of understandings of understanding that is to be proposed here, *understanding* is seen as a word, concept and phenomenon that one learns to understand like one learns to understand any other word, concept and phenomenon. It is something one learns to understand through one's participation in various forms of activities that involves oneself in linguistic communication with others about things like what is meant with particular words, what particular words refer to, how particular being is. This also concerns the similarities and differences between various ways of understanding particular words, concepts, phenomena, etc. that involve the word understanding and related words as vehicles for meaningful sense making about these and related objects in these and related activities.

The learning to understand understanding as a word, concept and phenomenon can be assumed to begin with one's participation in linguistic communication with others that involve the word and re-lated words in meaningful ways about particular things in particular activity contexts. It is a learning that begins much earlier than where the youngest and least experienced participants that participated in the discussed study were met. It is also a learning that is believed to give rise to the understanding of understanding that has been discussed as *reception understanding* of understanding as a phenomenon.

After the above follows the learning to understand understanding as a word, concept and phenomenon that can take place as one is drawn into and participates in linguistic communication with more experienced and knowledgeable others about differences in one's own and/or other persons' ability to perform particular activities as these are presented in various forms of pedagogical practices. It is a learning to understand understanding that can give rise to what has been called *achievement understanding* of understanding, namely the understanding

of understanding as a relatively successful completion of deliberate goal oriented learning activity or chains of such activities aimed at an acquisition of particular; and by the learner in advance; relatively clearly foreseen.

This understanding of understanding as a phenomenon seems to arise later than the previous one. In it the learner seems to be an agent rather than an object.[1] This understanding of understanding appears to develop alongside the previous understanding. But whereas the former form mainly seems to receive its support from one's experiences of understanding and one's participation in conversations about understanding as reception, the later form appears to receive its support from one's experiences of learning in more explicit pedagogical practices or practices that present elements of pedagogy as they are at least in part carried out for the explicit purpose of developing particular knowledge and performances etc.

The development of *realisation understanding* of understanding as a phenomenon appears to begin its development earlier in individual history than where one usually begins higher education. It appears also as a phase in the development of understanding as a phenomenon that seems to follow after *reception understanding* has reached a certain maturity and after the first development of *acquisition understanding* has begun. The genesis of *realisation understanding* seems, thus, to require both *reception understanding* and *acquisition understanding*.

One can perhaps even assume that the first *realisation understanding* emerges much more as a transformation of *reception understanding* under the influence of *acquisition understanding* than as an entirely new form of consciousness of understanding as a phenomenon rooted in one's activities. In so far as this is the case, one can perhaps also assume that the first development of *realisation understanding* is much

---

[1] It can be of some interest to point out that whereas the concordance, which was gathered from novels that a given publishing house published in 1981–1982, was found to involve usage of *understood* (förstod) that indicated *Reception,* it was not found to involve any indications of *Acquisition* (cf. Appendix 3).

more propelled by the experiences one makes in participation and performance of activities that involve communication about similarities and differences between various forms of performances of particular activities for the purpose of developing an ability to perform these, than it is by experiences made in participation in activities that involve communication about similarities and differences between various forms of understanding and explanation of particular being for the purpose of developing better understandings of such being.

In between these two types of activities are other activities that arise as answers to the perceived meaning differences of more experienced others and between their and our usage of particular words, expressions, ways of obviously understanding, etc. This involves communication about what one is to understand with particular words, expressions, etc. as objects for the purpose of replacing wrong with right or erroneous with correct, or false with true understanding of such subjects for understanding. Notwithstanding how important these in-between activities can be for the first development of *realisation understanding,* as represented by the accounts that have been read as expressions of absolute forms of factual, relational and perhaps also early forms of systematic realisation understanding, it is difficult to believe that these can have more than a preparatory function for the development of more advanced forms of realisation understanding of understanding as a phenomenon.

The hypothesis concerning the development of *realisation under-standing* that is presented here is, thus, that it is foregone by the development of reception understanding and acquisition understanding that appear to spring forth from activities that involve oneself in communication with others about what is meant with particular words, etc. on the one hand and obvious similarities and differences between various performances of particular activities on the other. It seems also as if the development of realisation understanding in itself appears to spring forth much more from one's participation in and performance of activities that involve relatively systematic communication about similarities and differences between particular systematic understandings of particular being for the explicit purpose

of developing better understanding of such being than from one's participation in and performance of activities that have involved or can involve conversation about what is meant with particular words, etc.

In so far as it is the case that the development of *realisation* is more propelled by the experiences one makes in activities that involve systematic discussion of systemic understanding, than by the experiences one makes in activities that involve discussions of what is meant with particular words, it can also mean that whereas one's participation in and performance of such activities can give rise to realisation understanding and can respond to the first development of that understanding, they can hardly be expected to have the power to develop such understanding into its more mature forms. The ripe form of realisation understanding only seems possible to reach the support of the development of realisation understanding of understanding as a phenomenon that comes from the participation in and performance of activities wherein the development of more advanced systemic understanding is a value or virtue in its own right.

PART IV

DISCUSSION

CONCLUDING REMARKS

*And say not now… : "I do not understand."
Or please say so, but not in the way you do
when you turn away. Because what we un-
derstand has already been incorporated in our
consciousness…. Future begins only at the
boarders of the unknown. It is first there it is
possible to go further than before. (Tunström,
1986, p. 211; my translation)*

The two foregoing chapters have presented the results of the study.
In this, the ninth and last chapter, the significance of these results
will be discussed. The discussion will begin with a consideration of
the significance of the study in relation to previous research. After
this follows an attempt to draw out some implications for further
research. The chapter is closed with an attempt to draw out some
possible implications of the study for education praxis.

SIGNIFICANCE OF THE STUDY

The study has, as was explained in Chapter 1, concerned under-
standings of understanding as experiential prerequisites for devel-
opmental learning with a general aim to come to a clearer awareness
of the ways participants in formal education tend to understand
understanding as a phenomenon. Understanding was explained as
what takes place whenever one comprehends or realises something.

A review of previous studies in education on understandings of learning and understanding has been given (Chapter 2). (This review focused works by Burns et al., 1991; Entwistle & Entwistle, 1992; Marton et al., 1993; Marton, Watkins, et al., 1997, Pramling, 1983; Säljö, 1979). From this review it became clear that participants in various forms of education tend to understand learning in different ways (Marton et al., 1993; Marton et al., 1997, Pramling, 1983; Säljö, 1979). These range from understanding it as an activity that concerns the acquisition of facts, definitions, methods, etc. toward a more relational understanding (Marton et al., 1993; Marton, Watkins, et al., 1997; Pramling, 1983; Säljö, 1979).

In addition to the above review, a review of studies of understandings of understanding was also given (Burns et al., 1991; Entwistle & Entwistle, 1992). This review revealed a similar pattern. But it also indicated that people that tend to understand learning as an activity that aims at the development of understanding of the subject for learning, also try to achieve this as a rule and tend to be more successful in their learning activities than others (Burns et al., 1991; Entwistle & Entwistle, 1992; Marton et al., 1993; Marton, Watkins et al., 1997).

In the subsequent reflection over the theoretical prerequisites for these studies, it emerged that they all tend to presuppose that development is either something that just happens or that it is an intellectual accomplishment that persons accomplish in education through their own effort as autonomous individuals. This is obviously an ahistorical individualistic and even mentalistic understanding of the prerequisites for understanding and was compared within the thesis with the historical understanding of the development of thinking and speaking as represented by for instance Vygotskij (1930/1978; 1934/1987), Leont'ev (1959/1977) and Lurija (1978).

The above reviews were extended in Chapter 3 by a review of understanding of understanding in the philosophy of interpretation. On the basis of this review it appeared that the previous research not only seems grounded on under-developed understandings of the social, cultural and historical aspects of understanding even at the

individual interpretative level (Heidegger, 1927/1990; Gadamer, 1960/1993; Palmer, 1969). This led me to develop a critique of the understanding of understanding privileged in these studies. This is the notion of understanding as a subjective accomplishment of objective and coherent knowledge. This critique was founded on examinations of Schleiermacher's and Dilthey's understanding of interpretation on the one hand (Palmer, 1969) and Heidegger's (1927/1990) and Gadamer's (1960/1993) on the other.

In this comparison, it appeared that a development of a more explicitly theoretical understanding could probably profit much from Schleiermacher and Dilthey's work (Palmer, 1969), since they can be seen as providing much more elaborate understandings of understanding at the individual level. However, in the long run this was considered less than prudent and the idea developed instead was that it would probably be much better to abandon this aim in favour of a development of understanding of understanding in relation to Heidegger (1927/1990) and Gadamer (1960/1993), who not only appear to have transcended the ideas of the two earlier philosophers of interpretation in that they have taken a clear step beyond objectivism and relativism (Bernstein, 1983), but also appear to be more consistent with the historical understanding previously mentioned (Vygotskij, 1930/1978, 1934/1987, Leont'ev, 1959/1977; Lurija, 1978).

The research situation was re-described in Chapter 4 in line with this idea and the other considerations brought out in Chapter 2 and Chapter 3, and the research situation was in a sense rehatched as one that set out to develop a more philosophically and socio-historically informed approach to the study and the development of understandings of understanding than had been apparent in the previous studies. Substantively, this purpose can also be described as an attempt to better understand the ways wherein studying persons' in various forms of education tend to understand understanding as a phenomenon and to comprehend how different understandings of understanding can develop. This is also how this purpose was expressed in Chapter 4. However, a further substantive interest was for the requirements of learning activities that involve a

development of more advanced systematic understanding of things (object and events) in the world, including the act or event of understanding itself. This intention was added to the others and described as one of forging the available data and interpretations of data into a first account of the developmental requirements of understanding of understanding in personal developmental history.

The study has, as was explained in Chapter 5 and as is clear from the above, evolved as a continuation and extension of existing educational research on study activity and understandings of learning and understanding. Much of this research has in Sweden evolved from Marton and Svensson (1970). And there has been a quite substantial amount. My work also fits in with this research tradition. But in so far as it has also profited from the phenomenological studies in the psychology of learning that Giorgi (1975, 1985) has conducted, the historical understanding of the development of thinking and speaking etc. that has been developed in Vygotskij (1930/1978, 1934/1987), and the philosophical understanding of understanding that has been developed in Heidegger (1927/1990) and Gadamer (1960/1993), it has also meant a more historical and human scientific hermeneutic approach than has otherwise been apparent.

The study has, as was also explained in Chapter 6, been worked out through a set and series of gradually more informed and encompassing attempts to study understandings of understanding on the basis of interpretations of linguistic accounts for experiences of having come to understand something. There have been many participants involved in the study. This was outlined in Chapter 6, as developed from a stratified sample of seven groups of participants in four different forms of educational practice in an average urban community in the western part of Sweden. The sample was drawn and investigated first in the middle of the 1980's, where the constitution of data took place through two activities.

The first of these activities was an invitation to a group of participants to write down an account of an occasion when they experienced they had understood something. In the second, a sub-sample was drawn from this group. This was made from pools of the twelve,

fifteen, and eighteen year old school pupils and the adult students in the original sample, whose contributions were considered representative for an identical conception on the one hand and for the general contributions of the members of the groups as wholes. These persons were invited to interviews. The interviews were tape recorded and the transcripts which where made from them and the first written accounts provided data which were then subject to two interpretative turns. The turns have been accounted for in Chapter 6.

The presentation of the results is given in Chapter 7 and Chapter 8 of the thesis. According to these results, the participants were first of all found to have understood understanding in three qualitatively different ways. Firstly understanding appeared either as an act or event of receiving knowledge, secondly as an act of acquiring something like a skill and thirdly as an activity or act of coming to realise something. In addition, when understood as an act of realising something (third form), the object for understanding was either presented as something of a factual, a relational or a systemic character.

The categorisation of the participants' accounts revealed that there was an apparent shift from understanding as receiving to under-standing as achieving and understanding as realising something according to the age and educational experience of the participants. At least to the extent that there seemed to be some possible correlation. In addition, in relation to the third category (realising), there was also a shift from factual towards relational and then finally systemic understanding, which also seemed to depend to some degree on the age and the level of formal education of the participants expressing them. Although not possible to prove sta-tistically, this notion of shift does have some coherence with the general theoretical ideas which have developed on the basis of the thesis work.

Four of the participants who were interviewed, were found to rep-resent sharp and coherent *reception, acquisition,* and *realisation* understanding. And their contributions were for this reason focused heavily in the analysis (Chapter 8). This revealed a number of things, but most particularly for the aims of the present study, that the later

forms of understanding presented an intellectual freedom as compared to the previous ones (reception and acquisition) and that it is really first in advanced realisation understanding that one has risen to a consciousness of understanding that makes the performance of a developmental learning activity possible.

The account of the significance of the different understandings of understanding was finally also forged into a developmental theory of the development of understanding of understanding toward the end of Chapter 8. According to this theory, the understanding of understanding is a function of one's development as a participant in different institutionalised discourses on the basis of one's possibilities to understand the character of understanding as a phenomenon as it tends to be sustained in these practices.

The design and the sampling procedures in the investigation is, to say the least, relatively limited. A longitudinal design, "random" sampling procedures, a larger sample and a more encompassing data from each of the participants would have been preferable for several reasons, if the intention had been to test a specific theory from the outset. This was not the intention however. Rather my aims were more exploratory and compensatory with regard to the omissions of previous descriptive research. And towards these ends some of the limitations of the design and sampling procedures, have to a certain extent been compensated for. This has been specifically through the gradual elaboration of the investigation method. Further, the scope of the study has also been broadened by the inclusion of data from other sources. This does not abate the fact that the prerequisites for the generalisability of the results of the study is limited. But it provides a foundation from which the plausibility of the findings can nevertheless be assessed.

Despite its limitations, the study has contributed with at least a somewhat better understanding of what understanding tends to be understood as among participants in various forms of educational practice. In comparison with the previous studies of understandings of learning and understanding, the present study has provided an account of what understanding as a phenomenon tends to be understood as, and this account is also felt to be more general and

specific than those that have been provided in, for instance, Burns et al. (1991) and Entwistle and Entwistle (1992).

A second advance made from the present study is in the light of the comparison between the results on understandings of understanding among the participants in the study as read out of their accounts of experiences of understanding, and the results on understandings of understanding in novels that is presented in Appendix 3. In this comparison, the understanding of understanding as an achievement of coherence, which has also been accounted for in Burns et al. (1991) and Entwistle and Entwistle (1992), has come more and more to appear as an understanding of understanding that is sustained in and springs forth from the experiences of understanding that one tends to make in one's participation in educational practice if and when such understanding is also really made to matter. Something which happens all too rarely in education, and particularly in many forms of higher education according to Beach (1995, 1997).

In addition to this, the present study has also provided an account of two other understandings of understanding than are accounted for in Burns et al. (1991). One is a more advanced form than the forms they give. One is a less advanced. They are *understanding as a reception* on the one hand and *advanced understanding of understanding as a realisation* on the other. The account of the earlier of these assumed forms of understanding is somewhat reminiscent of Pramling's (1993) account of *learning as becoming able to understand*. The later understanding of understanding reminds more of Säljö's (1979) account of *learning as the abstraction of meaning* and *learning as an interpretative process aimed at the understanding of reality*.

Support for the advanced form of understanding presented in the account is supported also, if indirectly, even by other researchers. This includes even those whose works have been reviewed in Chapter 2. Such support is given for instance by Marton et al. (1993) in their account of *learning as understanding, learning as seeing something in a different way,* and *learning as changing as a person,* in Marton, Watkins, et al. (1997) account of *learning as understanding meaning* and *learning as understanding phenomenon,* and in Entwistle and Entwistle's (1992) account of *creating own structures for topics,*

adjusting structures from strategic reading to meet exam requirements and *developing an individual conception of the discipline from wide reading*. What is significant here, is that all these categories are found amongst university students and are amongst the more advanced forms of understanding shown by them. This corroborates my thesis about the genesis (indirectly) and late development of advanced relational understanding.

The present study has provided a fairly penetrating account of what different understandings of understanding can mean for one's possibilities to engage in learning activity that involves a development of a more advanced understanding of the being of particular being as an objective in its own right. Through the hermeneutic and historical interpretation of this development, it has also however provided a first sketch for a theory of the development of understandings of understanding.

IMPLICATIONS FOR FURTHER RESEARCH

This enquiry has without a doubt a lot of things in common with the previous studies concerning study activity and conceptions of learning and understanding among studying persons. One thing is that, like those studies, it is based on the assumption that the most profound and innermost feature of learning is meaningfulness (Rogers, 1969) and that meaningful study activity involves making sense as a significant element (see also Beach, 1995, 1996; Alexandersson & Beach, 1997). Another common feature is that it is based on the assumption that one's ability to make sense of what one listens to, reads, wonders over and writes about as one studies, is not only dependent on the relation between one's own being and the object of study, but also on the being of one's own being also becoming an object for understanding. A third common feature with those studies, is that the present study has been based on the assumption that the ability to study develops as one grows more experienced with the meaning of understanding, of which it has also presented certain evidence. A fourth feature it shares with the previous studies, is that it has not only meant an interpretation of

different ways of understanding, but also an indication that some ways of understanding can be considered more advanced than others, and that the development of understanding appears to have a certain direction.

According to Chapter 8, the development of understanding of understanding proceeds from a form of consciousness of understanding as reception of knowledge about a given object and towards a form of consciousness as realisation via a form of consciousness as an acquisition of desired knowledge or skill through successful completion of deliberate learning activity. It has also been suggested it is in the third form that one begins to become truly aware of the relationality of understanding, i.e. that all understanding is relative.

In so far as the presented sketch for a theory of the development of understanding in general and understanding of understanding in particular can be accepted as sound, it can with reference to future research mean that there is a need to reconsider the so called "active view of learning". This is because against the background of the results of the study, it seems as if one has put too much emphasis on the activity of the experienced for understanding, experiencing and interpreting, at the expense of the activity of the existent, self-presenting, understood, interpreted, objectivity that reveals itself in the subjectivity's linguistic encounters. It seems also as if previous research has overseen the linguisticality and factuality of all understanding and has not succeeded in explaining the character of historically operative consciousness to the degree that it becomes possible to grasp that conceptions are not so much fix and firm meanings that persons and groups of persons are supposed *have,* as they are persons and groups of persons ways of making sense of things on the basis of their self-understanding of the things.

Conceptions are projections of meaning made on the basis previous experience and current understanding and one makes these projections almost as projections of the self and according to one's possibilities for being in the world in concrete activity. That is, one does so neither with a blank openness nor with a fixed frame of reference, but rather with a particular openness for a particular purpose towards a particular end. Thus one encounters, meets and

understands the world always according to one's possibilities for being in the world in purposeful activity towards a particular purpose. This is the essential core of activity theory, but it also essentially the character of a linguistic relation to the world as well.

This means that one can even see understanding as a hinder (in the relational conception) as well as a strength. Indeed perhaps we can even say that it is one's projection of oneself towards one's possibilities for being toward the being that one is encountering, that hinders oneself from understanding the being in accordance with its own possibilities for being in the world. For what an encountered being presents itself to consciousness, appears (at least according to the thesis) not so much as something entirely different from oneself as something that one has a relation to and as something that one assumes is possible to understand.

One can perhaps say that it is first and foremost previously un-foreseen aspects of being that one's previous experience had not taken under consideration, that makes new understanding possible at all. This is also a view which is expressed by Gadamer (1960/1993), and which places all previous experience as a limitation for, as well as a partial foundation of new understanding. This is because whilst an experiential event creates a meaning difference which makes new understanding possible (in that the experience of meaning differences calls for a reinterpretation of whatever is under consideration), in the event that previous experience might encourage one to stop searching for a language which belongs to the actual situation under immediate consideration, and which has the power to co-ordinate new and previous experience into more inclusive and precise understanding than before, past experience is counter productive to new understanding as well as supportive of it.

In this sense, it is the hitherto unforeseen being and the finitude of one's relationship to its existence, and more precisely the way that one projects oneself towards it and the manner wherein one en-counters it in concrete activity, that makes new experience possible. As experience of limitations of previous experience, new experience calls for new and more inclusive and precise understanding. Responding to this, one seeks to find way to a better understanding

and as one does this one projects oneself according to one's possibilities as they present themselves in light of the new experience. In this event, it may happen that one finds a way to relate to the being under consideration that corresponds to both new and previous experience, and that mediates between these experiences in such a way that it works out a merging of horizons between self-understanding and self-presentation. It is when this happens that one experiences that one understands.

In order to know more precisely, however, what it is that one has understood (which often seems to be more than one thing), it seems also as if one first has to make an explicit linguistic interpretation of what one has experienced before, before one can become consciously aware of the significance of the emerging new experience. Understanding precedes conceptualisation (Lonnergan, 1956). If this is the case, it means that it is really first in explicit linguistic interpretation that one becomes aware of what one actually has understood. This because making one's self-understanding explicit in such interpretation also means a new act of projecting oneself understandingly according to one's possibilities, which implies a formation of a new experiential horizon. In short, one's self-understanding seems in principle impossible to fully objectify.

If self-understanding and self-presentation not only make projections of oneself according to one's possibilities possible, they are also a part of what makes all changes of self-understanding and self-presentation possible. For it is only in projecting oneself according to one's possibilities that one can encounter a being other than oneself. And it is also only in encountering something other than oneself, that one gains experience and the need to understand differently. This is fruitful if an when one can search and eventually also find a language that belongs to the situation and that can co-ordinate new and previous experience of the being under consideration and one's possibilities for being in the world relative that being and in specific forms of concrete activity.

Understanding is, thus, proximally and for the most part neither a purely subjective nor a purely objective achievement, but always a concrete emergence of new truth that comes to stand over above old.

It is in other words a factual disclosure of being. It is something that typically appears to take place in, concern and in part modify a particular part or aspect of the world: namely the meaningful linguistic relation between oneself and one's counterpart in understanding.

One can perhaps also say that understanding essentially appears to be productive transformation of ones abilities to relate to a particular being in concrete activity. If interpreted in this sense however, it is both something that occurs in, concerns, and changes, particular possibilities to relate to things and activities. In the light of this interpretation, one can in turn make a distinction between understanding in three different and related senses. These are: 1) historically operative consciousness, 2) productive transformation of such consciousness, and 3) possibilities to understand and further relate to a particular object in a particular kind of activity that in part may be implied by a particular form of consciousness of a particular being under consideration.

However, If one makes this distinction and also tries to say something about the difference between previous research on conceptions, understandings, alternative frameworks , etc., and the research that is represented by this thesis, one can say that previously the character of historically operative consciousness and the character of understanding as an event were not taken into consideration, whereas in the present study there has been an attempt to take heed of these things. Further whilst this means that previous research has had to settle for only describing conceptions and relations between conceptions (Säljö, 1994, 1997), in the present research there has also been an attempt to understand them.

A main implication of the present study for future psychological and pedagogical research on conceptions, understandings, alternative frameworks, etc. then, is that it may be worthwhile when studying things like concepts, not only to try to articulate in what sense one tries to understand themselves, but also to study them in a sense that makes it possible to better understand and interpret their broader frame of reference as well. Another implication is that, as a rule, it is better to listen to what others have to say about a particular object

and then try to incorporate the positive aspects of their discussion in one's own, rather than merely trying to show wherein they are wrong. A third implication is that it is probably better to construe conceptions as projections of a particular view of something and an ability to take par in particular language games, rather than identifying conceptions with historical consciousness or frozen forms of thought. Because *understanding* is, as has been suggested here and elsewhere, not the same thing as explicit linguistic interpretation. It is rather both a prerequisite for and a result of existential awareness, a sense of self and explicit linguistic interpretations.

A forth implication of the investigation, is that it is better to study conceptions and understanding as attempts to make sense of something as it appears to be included as in particular language game. This is meant "instead of" merely viewing them as relatively independent meanings, not only of way that the objects under consideration are introduced by the researchers, but also of the ways wherein particular participants or various types of participants tend to understand these objects under consideration in different situations. This leads to a fifth implication. This is that it is probably better to view and study consciousness as historically operative consciousness rather than to merely view and study it as a relative static meaning structure (i.e. historical consciousness). And that it is probably better to view and study learning as the process whereby persons elaborate and guide inadequate or partially adequate meaningful presentations or actions in relation to Subject-Other-World relations, toward adequacy, by discovering, acquiring or sustaining the new dimensions offered by the Subject-Other-World network and its horizon (Giorgi, 1992). This in contrast to merely viewing and studying learning in terms of transitions between qualitatively different conceptions of the same object. The reason why the new suggestion is better than the old idea is that it is first in the concrete enquiry of being that one can hope to gain experience and find the necessary language to provide an explanation of why there is learning and why understanding develops as it develops does.

In order to develop understanding of understanding, it thus seems

important that one does not only settle for general structural descriptions of learning as the development of specific understandings of a particular object, but rather that we also stretch our knowledge frameworks to include also existential aspects. These include expressions about concepts in terms of what the categories of circumspective concern they express, represent in terms of lived experience, pre-understanding, negation of previous experience, understanding interpretation and explicit linguistic interpretation. This is also an implication of Säljö's (1994, 1997) critique of much of the "phenomenographic" research of the eighties. In order to develop a better understanding of learning in this sense, it is also probably necessary to better understand the general and specific character of the circumstances in which human beings learn, and the similarities and differences between learning various things in various situations, for various purposes and towards various ends. It is also important though, that one better understands the ways in which learners and more experienced and involved others are involved in various forms of learning activity, as well as the ways in which the character of particular types of self-understanding learners and teachers are influenced. It is important to know what combinations of such things can say for possibilities to learn particular things from particular associations.

However, even the above is not enough alone. Because in order to develop one's understanding of understanding in the indicated direction, it is also important that one better understands the importance that self-understanding of the significance of that which is the subject for studies may say, for possibilities to develop particular types of understanding of particular types of objects. Motivation covers part of this terrain. If one finds it worthwhile to develop understanding of understanding in the proposed direction, it seems, to put it short, important that one doesn't settle with what has been achieved so far, but rather pushes forward beyond toward a truly psychological and pedagogical understanding of learning as a human phenomenon.

IMPLICATIONS FOR PEDAGOGICAL PRAXIS

Reflecting on what consequences the results and the discussion of the results of the present study can have for pedagogical practice, it seems as if what has first and foremost been said here (and elsewhere) about understanding as best conceived of as historically operative consciousness and as self-understanding, practical ability and so on, has something to say to teachers and students. Beginning with the second, it seems important to once again point out that understanding as a rule not only means that one moves towards a meaning, but also that one thereby also becomes a person that understands or knows "that something" – if not better so at least – differently from how one tended to understand or know it before. This indicates that one changes as a person through the experience (Marton et al., 1993), and that one as a studying person, exactly as an educating person, is not so much an autonomous individual as a socio-cultural being (Ozmon & Craver, 1995, Chapter 10).

The study has in my view very strong implications for teaching. This is because it implies that if teaching is considered as a form of activity that involves development of understanding of particular phenomena in the sphere of experience and the sphere of activity in the world, there can also be a good reason to ask what counts as understanding in such spheres and who or what determines this. As a rule teachers seem to do so in the classroom, the activities of which generally involve directed acts of questions and answers, which are worked out especially for the purpose of providing opportunities for the studying person to demonstrate whether or not he or she has achieved the desired form of understanding. in this sense one could perhaps also say that it is what counts as understanding in language games "steered" by the teacher, that also determines what counts as understanding in the classroom. But of course, the teacher is also steered by other language games both outside and inside "the present".

If what counts as understanding in these language games is to be as fruitful as possible it seems important that one as a teacher asks the right questions and is familiar with the many different senses in which something, for instance, the equivalent sign, may be un-

derstood (Nickerson, 1985). Unless one does and succeeds in taking this into consideration in a fruitful way in the composition of the language games, the students could very well pass an exam for instance without having understood in the desired sense (Beach, 1997).

To have passed these examinations could then be read synonymous with having achieved the desired form of understanding, and that would be perfectly OK if there were such things as forms of understandings that were relatively fixed and firm and that could be described. And that we could use descriptions of such things to identify equivalents beyond the answers that particular students have given. But what would have become of understanding then? Would understanding thereby not have become like that which Gadamer (1960/1989) called "historical consciousness" as opposed to "consciousness in which history is ever at work"? Would understanding as a result of this movement then not have been ripped out of its living context, reformed according to the image of a dominant cognitive system? This is a dogmatic dependency relationship (Beach, 1997, 1999).

If one compares with what has been said earlier in this discussion about the ways in which the participants have understood under-standing, it seems as if what one is encountering here is something similar to what has been called *understanding as achievement of knowledge of or skill in something through successful completion of deliberate goal oriented learning activity.* But understanding that proceeds from the assumption that to understand something is to be able to carry out particular operations is to determine that understanding is no longer seen as historically operative consciousness, but rather as "a historical consciousness": i.e. a fixed and finished system of beliefs and possible actions that stands over against us like an object that has qualities that can be catalogued.

There is still some truth in this way of interpreting understanding, but understanding it lies in the practical side becoming recognised. This is also something that there has been an attempt to take into consideration in the thesis, by it pointing to and discussing Rosenberg (1981) on the one hand and to Gadamer (1960/1993) on

the other concerning what is contingent in a given situation. Taking one's point of departure in a notion of understanding like that of "historical consciousness", opposes or ruins our possibilities to understand and above all carry out education as the combination of teaching and learning for the purpose of developing more advanced systematic understanding. It "freezes" knowledge. This is also what normally happens in education perhaps.

What I'm setting out to assert here, is that models of understanding as factual acquisition are absolutely counter-productive with reference to the "high-modern", reflexive aims of education, and should be abandoned in favour of conceptions of understanding as a particular self-consciousness at a particular moment in time. Such may be objectified, but need not be. Moreover, if interpreted in this sense, what has been called conceptions in psychological and pedagogical research so far, is not to be identified with understanding as such, to be "developmental", because this should only be used to refer to how someone has grasped something in a particular situation, for a particular purpose and toward a particular end. When understanding is used to refer to frozen forms of thought it becomes counterproductive to the development of the most valued notions of understanding in high-modernity.

Understanding is a far more encompassing and elusive phenomenon than a conception. It is the totality of historically and experientially given and changing possible ways to discern and further relate to an object in concrete activity that are within a particular persons reach at a particular moment. It is the experience and the possible ways to discern and relate to the particular object in question that are implied by a living meaning relation. It is the historical personal ground whereupon one can project oneself according to ones possibilities relative to particular being in the world. It is an experience of being which can be voiced. And it is an orientation.

Understanding is then also the meaningfulness or the meaning relation of being in the world. It is also the medium wherein the being of the being that is available can present itself as something that appears to present this or that character, or as something that can be understood as something, or as something that one can

understand differently now from how one may previously have understood it. It is, thus, in short, the lived experience of being and the possibilities to discern and relate to this and similar or types of being. This "relativity" is what makes understanding generalisable. And without this "relativity" it is not.

Understanding is, thus, not the same as the being of the particular being that has become an object for understanding, but it is a living personal historical meaning-relation to it which is made according to one's possibilities relative to the being implied by one's understanding of the same. It is, in other words, a prerequisite for and a result of understanding in the sense of an experiential course of events that involves negations of experience, projections of oneself according to one's possibilities, understanding interpretation and explicit linguistic interpretation. These are the "semantics" of understanding and an expression of their semiotic relations. And these have been given relief with/in the present study.

This gives us the following as a new point of departure on/in "education for the advancement of understanding" and for teaching toward meaningful, relational learning. That is, that understanding is an ongoing functional relation with particular being in the world that may take on new meaning as it enters into new relations with the "one's self" which stands both with and against. It is a personal historical experiential linguistic factual relation with a proportional being of a particular object in the world. As such it is not only different from all other personal historically operative experiential linguistic factual possible relationships with that being, but also similar to all such relationships to the extent that the person's that are responsible for them have shared in the same world, have lived under similar conditions, have participated in similar activities, have had similar experiences, have learnt the same language, and have worked out the same relationship relative to being.

This gives us the, in my view, primary significance of the results of the study of the development of understanding of understanding as a phenomenon for relevant pedagogical practice. The findings not only throw light over what one in various ages and with varying lengths of formal education tends to understand with understanding

as a phenomenon and how one's understanding of that phenomenon tends to develop as one grows more experienced in what it means to understand. They also suggest that understanding as a phenomenon can be described as an experiential sequence of events in which historically operative consciousness of particular being as being that presents this or that but not the other character is transformed into another and often also more advanced, inclusive and exclusive form of consciousness of that something. This takes place through a particular type of event that essentially seems to consist in projecting oneself according to one's possibilities relative to the thing in question and involves firstly experiencing that "this thing" is not as one expected it to be, secondly looking for and finding another way of understanding it that corresponds to how it has presented itself, and then thirdly, integrating understanding interpretation with previous meaning into a more or less explicit linguistic meaning that comes to stand in a way that is felt to transcend a previous grasp in one sense or another.

This is an understanding of understanding as a phenomenon that suggests that understanding is not just a world event but also a word event, because the important thing with understanding is not only that it takes place in the world, but also that it can modify and be expressed in an essentially linguistic relationship to the world as a whole. This is the ability of a particular understander to relate to an object and its being, as a being that presents such and such a character, and also to be able to express this in discourse. This is an understanding of understanding that appears to present the possibility to understand teaching as a historical form of communication that involves the development of more advanced forms of consciousness of the things under consideration as a significant objective and is a consciousness of understanding, teaching and learning as historical forms of activity rather than as subjective or objective processes.

This is of vital importance. Because what it says is that what is important for understanding, is a consciousness that one as an understander transcends in understanding. This is perhaps first and foremost not so much previous understanding of particular being as

it is what one has been so far oneself in relation to the understood.
This links one to others in the web of the living, ever changing
functional meaning relations, that make up one's share in the world
with oneself, other persons, and things, and that is also where one
proximally and for the most part exists with the other persons,
beings and things that one encounters in the physical and socio-
cultural environment. Hence:

> The weight of the things we encounter in understanding plays itself out in a
> linguistic event, a play of words playing around and about what is meant.
> *Language games* exists where we, as learners – and when do we cease to be
> that? – rise to… understanding of the world.…

> Thus there is undoubtedly no understanding that is free of all prejudices,
> however much the will of our knowledge must be directed toward escaping
> their thrall. (Gadamer, 1960/1993, p. 490).

REFERENCES & APPENDICES

REFERENCES

Åberg-Bengtsson, L. (1998). *Entering a graphicate society: Young children learning graphs and charts* (Göteborg studies in educational sciences 127). Göteborg: Acta Universitatis Gothoburgensis.

Ahlberg, A. (1992). *Att möta matematiska problem: En belysning av barns lärande* [The meeting with mathematical problems: An illumination of children's learning] (Göteborg studies in educational sciences 87). Göteborg: Acta Universitatis Gothoburgensis.

Alexandersson, C. (1981). *Amedeo Giorgi's empirical phenomenology.* (Reports from the Department of Education, No. 3). Mölndal: Göteborgs University, Department of Education and Educational Research.

Alexandersson, C. (1985). *Stabilitet och förändring: En empirisk studie av förhållandet mellan skolkunskap och vardagsvetande* [Stability and change: An empirical study of the relation between knowledge acquired in school and in everyday life] (Göteborg studies in educational sciences 53). Göteborg: Acta Universitatis Gothoburgensis.

Alexandersson, C. & Beach, D. (1997). *Students' experiences of different pedagogical practices* (Reports from the Department of education and educational research, No. 1). Göteborg: Göteborg university, Department of education and educational research.

Alexandersson, M. (1994). *Metod och medvetande* [Method and awareness] (Göteborg studies in educational sciences 96). Göteborg: Acta Universitatis Gothoburgensis.

Allwood, J. (1984). Natur och naturresurser: Några exempel på semantisk analys av uppfattningar [Nature and natural resources: Some examples of semantic analysis of conceptions]. In F. Marton & C. G. Wenestam, *Att uppfatta sin omvärld: Varför vi förstår verkligheten på olika sätt* [To conceive one's surrounding world: Why we understand the reality in different ways] (pp. 169–181). Stockholm: Nordstedts.

Andersson, E. & Lawenius, M. (1983). *Lärares uppfattning av undervisning* [Teachers' conceptions of teaching] (Göteborg studies in educational sciences 44). Göteborg: Acta Universitatis Gothoburgensis.

Beach, D. (1995). *Making sense of the problems of change: An ethnographic study of a teacher education reform* (Göteborg Studies in Educational Sciences 100). Göteborg: Acta Universitatis Gothoburgensis.

Beach, D. (1996). *Mening och högre studier: Studerandereaktioner på fyra akademiska utbildningar för vårdande och medicinska yrken* [Meaning and

studies in higher education: Student reactions on four academic education for nursing and medical professions] (Rapporter från Institutionen för pedagogik, nr. 8). Göteborg: Göteborg universitet, Institutionen för Pedagogik.

Beach, D. (1997). *Symbolic control and power relay: Learning in higher professional education* (Göteborg studies in educational sciences 119). Göteborg: Acta Universitatis Gothoburgensis.

Beach, D. (1999). Alienation and fetish in science education. *Scandinavian Journal of Educational Research, 43*(2), 157–171.

Bernstein, R. J. (1983). *Beyond objectivism and relativism: Science, hermeneutics and praxis.* Oxford: Basil Blackwell.

Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (Eds.). (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain.* New York: David McKay Company.

Blum, H. P. (1979). The curative and creative aspects of insight. *Journal of American Psychoanalytic Association, 27,* 41–69.

Booth, S. (1992). *Learning to program: A phenomenographic perspective* (Göteborg studies in educational sciences 89). Göteborg: Acta Universitatis Gothoburgensis.

Bowden, J. & Marton, F. (1998). *The university of learning: Beyond quality and competence in higher education.* London: Cogan Page.

Bransford, J. D. & MacCarell, N. S. (1977). A sketch of a cognitive approach to comprehension: Some thoughts about what it means to comprehend. In P. N. Johnson-Laird & P. C. Wason (Eds.), *Thinking: Readings in cognitive science* (pp. 377–399). Cambridge, MA: Cambridge University Press.

Burns, J., Clift, J. & Duncan, J. (1991). Understanding of understanding: Implications for learning and teaching. *British Journal of Educational Psychology, 61,* 279–289.

Bush, M. (1978). Preliminary considerations for a psychoanalytic theory of insight. *International Review of Psychoanalysis, 5,* 1–13.

Collazzi, P. F. (1973). *Reflection and research in psychology: A phenomenological study of learning.* Dubuque, IA: Kendal Hunt Publishing company.

Corsini, R. J. (Ed.), & Ozaki, B. D. (Ass. ed.). (1984). *Encyclopaedia of psychology* (Vols. 1–4). New York: Wiley.

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Thousand Oakes, CA: Sage Publications.

Dahlgren, G. & Olsson, L. E. (1985). *Läsning i barnperspektiv* [The child's conception of reading] (Göteborg studies in educational sciences 51). Göteborg: Acta Universitatis Gothoburgensis.

Dahlgren, L. O. (1975). *Qualitative differences in learning as a function of content-oriented guidance* (Göteborg studies in educational sciences 15). Göteborg: Acta Universitatis Gothoburgensis.

Duncker, K. (1972). *On problem solving* (L. S. Lees, Trans.). Westport, CT: Greenwood Press. (Original work published 1935).

Edwards, P. (Ed.). (1967). *The encyclopaedia of philosophy* (Vol. 1–8). New York: Macmillan Free Press.

Ekeblad, E. (1996). *Children • learning • numbers: A phenomenographic excursion into first-grade children's arithmetic* (Göteborg studies in educational sciences 105). Göteborg: Acta Universitatis Gothoburgensis.

Enerstvedt, R. T. (1989). Verksamhetsbegreppet som grund för förståelse av barn [The concept of activity as a foundation for the understanding of children]. *Kritisk Psykologi, 1,* 5–14.

Engeström, Y. (1987). *Learning by expanding: An activity-theoretical approach to developmental research.* Helsinki: Orienta-Konsultit.

Entwistle, N. J. & Entwiste, A. (1991). Contrasting forms of understanding for degree examinations: The student experience and its implications. *Higher Education, 22,* 205–227.

Entwistle, N. J. & Entwistle, A. (1992). *Developing, revising, and examining conceptual understanding in degree courses: The student experience and its implications* (Research report). Edinburgh: University of Edinburgh, Centre for research on learning and instruction.

Forsberg, J. H. (1928). *Förstående och minne: En undersökning rörande vuxnas studiemetoder* [Understanding and memory: An enquiry concerning adult's study methods]. Uppsala: Arvid Svensson A/B Bokhandel.

Furberg, M. (1981). *Verstehen och förstå. Funderingar kring ett tema hos Dilthey, Heidegger och Gadamer* [Versthen and to understand. Reflections around a theme in Dilthey, Heidegger och Gadamer] Lund: Doxa.

Furberg, M. (1982). *Säga, förstå, tolka. Till yttrandets och textens problem* [To say, to understand, to interpret. Concerning the problems of expression and text]. Bodafors, Sweden: Doxa.

Gadamer, H-G. (1993). *Truth and method.* (W. Glen-Doepel,Trans., 2nd rev. ed., translation revised by Joel Weinsheimer and Donald G. Marshall). London: Shed & Ward. (Original work published 1960)

Giorgi, A. (1967). A phenomenological approach to the problem of meaning and serial learning. *Review of Existential psychology and psychiatry, 7,* 106–118.

Giorgi, A. (1970). *Psychology as a human science.* New York: Harper & Row.

Giorgi, A. (1975). An application of phenomenological method in psychology. In A. Giorgi, C. T. Fischer, & E. L. Murray, *Duquesne studies in phenomenological psychology* (Vol. II). Pittsburgh, PA: Duquesne University Press.

Giorgi, A. (Ed.). (1985). *Phenomenological and psychological research.* Pittsburgh, PA: Duquesne University Press.

Giorgi, A. (1992, August) *Learning summary.* Paper presented at a Nordic research course on research on learning, Aarhus, Denmark.

Hall, G. S. & Browne, C. E. (1903). Children's ideas of fire, heat, frost and cold. *The Pedagogical Seminar and Journal of Genetic Psychology, 10,* 27–85.

Hamlyn, D. W. (1967). Epistemology, History of. In P. Edwards (Ed.), *The encyclopaedia of philosophy* (Vol. 2, pp. 8–38). New York: Macmillan Free Press.

Hansson Scherman, M. (1994). *Att vägra vara sjuk: En longitudinell studie av förhållningssätt till astma/allergi* [Refusing to be ill: A longitudinal study of patient's relationships with their asthma/allergy] (Göteborg studies in educational sciences 87). Göteborg: Acta Universitatis Gothoburgensis.

Hasselgren, B. & Beach, D. (1997). Phenomenography: A good for nothing brother of phenomenology? Outline of an analysis. *Higher Education Research and Development, 16*(2), 191–201.

Hasselgren, B. (1981). *Ways of apprehending children at play: A study of pre-school student teachers' development* (Göteborg studies in educational sciences 38). Göteborg: Acta Universitatis Gothoburgensis.

Hasselgren, B. (1999). *The land of phenomenography.* Available at: *The land of phenomenography.* Available at: http://www.ped.gu.se/biorn/phgraph/welcome.html (April, 1999).

Heidegger, M. (1990) *Being and time* (J. Macquarrie & E. Robinson, Trans.). Oxford: Basil Blackwell. (Original work published 1927)

Helmstad, G. (1984). *Förståelser av förståelse* [Understandings of understanding]. Unpublished manuscript.

Helmstad, G. (1985a). *Vad förstår elever i åk 6 med förståelse? En analys av uppfattningar av förståelse på basis av uppsatser över ämnet: När jag förstod* [What does pupils in grade six understand with understanding? An

analysis of conceptions of understanding on the basis of compositions over the theme: When I understood]. Unpublished manuscript.

Helmstad, G. (1985b). *Vad förstås med förståelse? Mot en beskrivning av förståelse som fenomen* [What is understood with understanding? Towards a description of understanding as phenomenon]. Unpublished manuscript.

Helmstad, G., & Marton, F. (1992, April). *Conceptions of understanding.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Hermerén, G. (1983). Interpretation: Types and criteria. In J. Margolis, The worlds of art and the world (pp. 131–161). *Grazer Philosophische Studien, Internationale Zeitschrift für Analytische Philosophie, 19–1983.*

Hesslefors Arktoft, E. (1996). *I ord och handling: Innebörder av "att anknyta till elevers erfarenheter", uttryckta av lärare* [By word and action: The meaning of "using pupil experiences", expressed by teachers] (Göteborg studies in educational sciences 110). Göteborg: Acta Universitatis Gothoburgensis.

Hirst, P. (1973). What is teaching? In R. S. Peters (Ed.), *Philosophy of education* (Oxford readings in philosophy, pp. 163–177). Oxford: Oxford University Press.

Husén, T. & Postlewaite, N. (Eds.) (1985–1990). *The international encyclopaedia of education: Research and studies* (Vols. 1–10). Oxford: Pergamon.

Johansson, B., Marton, F., & Svensson, L. (1985). An approach to describing learning as change between qualitatively different conceptions. In A. L. Pines L. H. T. West (Eds.), *Cognitive structure and conceptual change* (pp. 233–257). New York: Academic press.

Johnson-Laird, P. N. (1983). *Mental models: Towards a cognitive science of language, inference, and consciousness.* Cambridge, MA: Cambridge University Press.

Karlsson, G. (1993). *Psychological qualitative research from a phenomenological perspective.* Stockholm: Almqvist & Wiksell International.

Kris, E. (1956). On some vicissitudes of insight in psychoanalysis. *International Journal of Psychoanalysis, 37,* 445–455.

Kroksmark, T. (1987). *Fenomenografisk didaktik* [Phenomenographic didactics] (Göteborg studies in educational sciences 63). Göteborg: Acta Universitatis Gothoburgensis.

Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing.* Thousand Oaks, CA: Sage.

Köhler, W. (1925). *The mentality of apes.* New York: Harcourt Brace.

Larsson, S. (1982). *Studier i lärares omvärldsuppfattning: Ett försök till integration* [Studies in teachers' conceptions of the world around them: an attempt at integration] (Rapporter från Institutionen för pedagogik). Mölndal: Göteborgs universitet, Institutionen för pedagogik.

Lave, J. (1990). The culture of acquisition and the practice of understanding. In D. Kirshner & J. A. Whitson (Eds.), (1997), *situated cognition: Social, semiotic and psychological perspectives.* Mahwah, NJ: Lawrence Earlbaum.

Lave, J. & Wenger, E. (1995). *Situated learning: Legitimate peripheral participation* (3rd printing). New York: Cambridge University Press.

Leont'ev, A. N. (1977). *Problemer i det psykiskes udvikling* [Problems in the development of the psyche] (Vol. III). København: Rhodos. (Original work published 1959)

Lévinas, É. (1987). *Time and the other and additional essays* (R. A. Cohen, trans.). Pittsburgh, PA: Duquesne University Press.

Lindahl, M. (1996). *Inlärning och erfarande: Ettåringars möte med förskolans värld* [Experience and learning: One-year old children's encounter with the world of pre-school] Göteborg studies in educational sciences 103). Göteborg: Acta Universitatis Gothoburgensis.

Longman Webster English College Dictionary. (1984). Harlow, Essex, England: Longman.

Lonnergan, B. J. F. (1956). *Insight: A study of human understanding.* New York: Philosophical Library.

Lurija, A. R. (1978). *The making of mind: A personal account of Soviet psychology* (A. R. Lurija, M. Cole and S. Cole, eds.). Cambridge, MA: Harvard University Press.

Lybeck, L. (1981). Arkimedes i klassen: En ämnespedagogisk berättelse [Archimedes in the classroom: A school-subject pedagogical account] (Göteborg studies in educational sciences 37). Göteborg: Acta Gothoburgensis.

Marton, F. (1978). *Describing conceptions of the world around us.* (Reports from the Institute of education, No. 66). Mölndal: Göteborgs University, Institute of education.

Marton, F. (1981). Phenomenography: Describing conceptions of the world around us. *Instructional science, 10,* 177–200.

Marton, F. (1988). Describing and improving learning. In R. R. Schmeck (Ed.), *Learning strategies and learning styles* (pp. 53–82). New York: Plenum.

Marton, F. (1992a). *Phenomenography.* Unpublished manuscript.

Marton, F. (1992b). *Notes on ontology.* Unpublished manuscript.

Marton, F. & Booth, S. (1997). *Learning and awareness.* Mahwah, NJ: Lawrence Earlbaum.

Marton, F., Dahlgren, L. O., Svensson, L., & Säljö, R. (Eds.). (1977). *Inlärning och omvärldsuppfattning: En bok om den studerande människan* [Learning and conception of the surrounding world: A book about university student's learning]. Stockholm: Almkvist & Wiksell.

Marton, F., Dall'Alba, G., & Beaty, E. (1993). Conceptions of learning. *International Journal of Educational Research, 19,* 277–300.

Marton, F., Hounsell, D. & Entwistle, N. (Eds.). (1984). *The experience of learning.* Edinburgh: Scottish Academic Press.

Marton, F., Hounsell, D., & Entwistle, N. (Eds.). (1997). *The experience of learning: Implications for teaching and studying in higher education* (2nd ed.). Edinburgh: Scottish Academic Press.

Marton, F. & Svensson, L. (1970). *Vad säger oss det som sägs?* [What does what is uttered tell us?] Bidrag till Nordiskt symposium om metodologiska problem inom pedagogisk forskning, Hurdal 26–28 oktober 1970 (Rapporter från Pedagogiska institutionen, nr. 54). Göteborg: Göteborgs universitet, Pedagogiska institutionen.

Marton, F. & Svensson, L. (1978). *Att studera omvärldsuppfattning: Två bidrag till metodologin* [To study conceptions of the world around us. Two contributions to the methodology](Rapporter från Pedagogiska institutionen vid Göteborgs universitet, nr. 158). Mölndal: Göteborgs universitet, Pedagogiska institutionen

Marton, F., Watkins, D., & Tang, C. (1997). Discontinuities and continuities in the experience of learning: An interview study of high-school students in Hong Kong. *Learning and Instruction, 7*(1), 21–48.

Marton, F., & Wenestam, C. G. (Eds.). (1984). *Att uppfatta sin omvärld: Varför vi förstår verkligheten på olika sätt* [To conceive one's surrounding world: Why we understand the reality in different ways]. Stockholm: Nordstedts.

Mitzel, H. E. (Ed. in chief), Best, J. H., & Rabinowitz, W. (Assoc. eds.). (1982). *Encyclopaedia of educational research* (Vols. 1–4). (5th ed.) (Sponsored by the American Educational Research Association). New York: Free Press.

Montgomery, H. (1988). Mental models and problem solving: Three challenges to a theory of restructuring and insight. *Scandinavian Journal of Psychology, 29,* 85-94.

Moravcsik, J. M. (1979). Understanding. *Dialectica, 33* (3–4), 201–216.

Myhre, R. (1992). *Hva er pedagogikk? En elementær innføring* [What is pedagogy? An elementary introduction] (Rev. ed.). Oslo: Gyldendal Norsk Forlag.

Neuman, D. (1987). *The origin of arithmetic skills: A phenomenographic approach* (Göteborg studies in educational sciences 62). Göteborg: Acta Universitatis Gothoburgensis.

Nickerson, R. S. (1985). Understanding understanding. *American Journal of Education, 93* (2), 201–39.

Oakes, M. E. (1947). *Children's explanations of natural phenomena.* New York: Columbia University, Teachers College.

Ohlsson, S. (1984a). Restructuring revisited: I. Summary and critique of the Gestalt theory of problem solving. *Scandinavian Journal of Psychology, 25,* 65–78.

Ohlsson, S. (1984b). Restructuring revisited: II. An information processing theory of restructuring and insight. *Scandinavian Journal of Psychology, 25,* 117–129.

Ottosson, T. (1987). *Map-reading and way finding* (Göteborg studies in educational sciences 127). Göteborg: Acta Universitatis Gothoburgensis.

Oxford English Dictionary. (1970). Volume XI, T-U. London: Oxford University Press.

Ozmon, H. & Craver, S. (1995). Philosophy, education, and the challenge of post modernism. In Ozmon, H. & Craver, S. (Eds.), *Philosophical foundations of education* (5th ed., pp. 361–392). Englewood Cliffs, NJ: Prentice Hall.

Palmer, R. E. (1969). *Hermeneutics: Interpretation theory in Schleiermacher, Dilthey, Heidegger, and Gadamer.* Evanston, IL: Northwestern University Press.

Parret, H. & Bouveresse, J. (Eds.). (1981). *Meaning and Understanding* Berlin: Walter de Gruyter.

Paul, the apostle (1979). The first epistle of Paul the apostle to the Corinthians, chapter 14, verse 20. In *The holy Bible containing the Old and the New Testaments: Authorized King James version with explanatory notes and cross references to the standard works of the Church of Jesus Christ of Latter-Day Saints* (p. 1455). Salt Lake City, UT: The church of Jesus Christ of Latter-Day Saints. (Original written about 55–56)

Perry, W. G., Jr. (1970). *Forms of intellectual and ethical development in the college years: A scheme.* New York: Holt, Rinehart and Winston.

Pfundt, H. & Duit, R. (1991). *Bibliography students' alternative frameworks and science education* (IPN reports in brief, 3rd ed.). Kiel: University of Kiel, Institute for science education.

Piaget, J. (1982). *The child's conception of the world* (J. & A. Tomlinson, Trans.). London: Granada. (Original published 1929)

Pramling, I. (1983) *The child's conception of learning.* (Göteborg studies in educational sciences 46). Göteborg: Acta Universitatis Gothoburgensis.

Pramling, I. (1994). *Kunnandets grunder: Prövning av en fenomenografisk ansats till att utveckla barns sätt att uppfatta sin omvärld* [The foundations of knowing: Testing a phenomenographic approach to developing children's ways of understanding their surrounding world] (Göteborg studies in educational sciences 94). Göteborg: Acta Gothoburgensis.

Pramling, I., Davidsson, B., Fors, B. & Johansson, E. (1995). *Förskolebarn och livsfrågor: Ett didaktiskt försök med blivande förskollärare* [Pre-school children and questions of life] (Rapporter från Institutionen för metodik i lärarutbildningen, nr. 10). Mölndal: Göteborgs universitet, Institutionen för metodik i lärarutbildningen.

Radnitzky, G. (1970). *Contemporary schools of metascience: Anglo-Saxon schools of metascience, continental schools of metascience* (2nd rev. ed.). Göteborg: Göteborg Akademiförlag.

Regler för målstyrning [Rules for goal-steering]. (1994). *Gymnasieskolan: Skollagen, Gymnasieförordningen, Läroplan, Programmål, Kursplaner* [The Gymnasium school: The school law, National curriculum, Program goal, Course plans] (2nd ed.). Stockholm: Svensk Facklitteratur.

Renström, L. (1988). *Conceptions of matter: A phenomenographic approach* (Göteborg studies in educational sciences 69). Göteborg: Acta Universitatis Gothoburgensis.

Rogers, C. R. (1969). Freedom to learn: A view of what education might become. Columbus, OH: Merrill.

Rosenberg, J. F. (1981) On understanding the difficulties in understanding understanding. In H. Parret & J. Bouveresse, *Meaning and understanding* (pp. 27–43). Berlin: Walter de Gruyter.

Rovio-Johansson, A. (1999). *On the educational constitution of differing meanings of the content of teaching in higher education.* Manuscript for a Ph. D. thesis in progress. Göteborg: Göteborg university, Department of education.

Runesson, U. (1999). *Variationens pedagogik: Skilda sätt att behandla ett matematiskt innehåll* [The pedagogy of variation: Different ways of handling a mathematical topic] (Göteborg studies in educational sciences 129). Göteborg: Acta Universitatis Gothoburgensis.

Säljö, R. (1975). *Qualitative differences in learning as a function of the learner's conception of the task* (Göteborg studies in educational sciences 14). Göteborg: Acta Universitatis Gothoburgensis.

Säljö, R. (1979). *Learning in the learner's perspective: Some common-sense conceptions* (Reports from the Institute of Education 76). Mölndal: Göteborg University, Department of Education and Educational Research.

Säljö, R. (1982) *Learning and understanding: A study of differences in constructing meaning from a text* (Göteborg studies in educational sciences 41). Göteborg: Acta Universitatis Gothoburgensis.

Säljö, R. (1994). Minding action: Conceiving of the world versus participating in cultural practices. *Nordisk Pedagogik, 14*(2), 71–80.

Säljö, R. (1997). Talk as data and practice: A critical look at phenomenographic inquiry and the appeal to experience. *Higher Educational Research & Development, 16*(2),173–190.

Sharp, R. (1986). Self-contained ethnography or a science of phenomenal forms and inner relations. In M. Hammersley (ed.), *Controversies in classroom research: A reader edited by Martin Hammersley at the Open university* (pp. 120–134). Milton Keynes, England: Open University Press.

Spiegelberg, H. (1965) *The phenomenological movement: A historical introduction* (Volume 1–2, 2nd ed.). The Hague: Martinus Nijhoff.

Spiro, R. J., Bruce, B. C., & Brewer, W. F. (Eds.). (1980). *Theoretical issues in reading comprehension: Perspectives and cognitive psychology, linguistics, artificial intelligence, and education.* Hillsdale, NJ: Lawrence Erlbaum.

Språkvetenskaplig databehandling. (1982/1983). *Romaner 80/81.* Göteborg: Göteborgs universitet, Institutionen för svenska språket, Språkbanken.

Strasser, S. (1985). *Understanding and explanation: Basic ideas concerning the humanity of the human sciences.* Pittsburgh, PA: Duquesne University Press.

Svenska akademins ordbok. (1928). Ordbok öfver svenska språket utgifven av Svenska akademin (Nionde bandet, Full - Föttling). Lund: C. W. K. Gleerups.

Svensson, L. (1983, August). *Three approaches to descriptive research.* Paper presented at the Symposium on Qualitative Research in Psychology, Perugia, Italy.

Svensson, L. (1976). *Study skill and learning* (Göteborg studies in educational sciences 19). Göteborg: Acta Universitatis Gothoburgensis.

Svensson, L. (1984a) *Människobilden i Inom-gruppens forskning: Den lärande människan* [The image of man in the research of the INOM-group:

The learning man] (Publikationer från pedagogiska institutionen No. 3). Mölndal: Göteborgs universitet, Pedagogiska institutionen.

Svensson, L. (1984b) Skill in learning. In F. Marton, D. Hounsell, & N. J. Entwistle (Eds.), *The Experience of learning.* Edinburgh: Scottish Academic Press.

Svensson, L. (1985, August) *Contextual analysis: The development of a research approach.* Paper presented at the Symposium on Qualitative Research in Psychology, Leusden, The Netherlands.

Tan, S. K. & Novac, J. D. (1992). *What does it take to understand physics: Interviews with high school students.* Unpublished manuscript, University Sains Malaysia, School of Educational Studies, Penag, Malaysia.

Theman, J. (1983). *Uppfattningar av politisk makt* [Conceptions of political power] (Göteborg studies in educational sciences 45). Göteborg: Acta Universitatis Gothoburgensis.

Thoma, H. & Kachele, H. (1986). *Lehrbuch der psychoanalytischen Therapie* [Textbook in psychoanalytic theory]. Berlin: Springer Verlag

Tunström, G. (1986). *Tjuven* (Roman) [The thief (Novel)]. Stockholm: Bonniers.

Van Kam, A. L. (1959). Phenomenal analysis: Exemplified by a study of the experience of "really feeling understood". *Journal of Individual Psychology, 15,* 66–72.

Vattimo, G. (1997). *Beyond interpretation: The meaning of hermeneutics for philosophy* (D. Webb, Trans.). Cambridge, MA: Polity Press

Vilks, L. (1994). *Nimis och Arx* [Nimis and Arx]. Nora, Sweden: Bokförlaget Nya Doxa.

Vygotskij, L. S. (1978). *Mind in society: The development of higher psychological processes* (Edited by M. Cole, V. John-Steiner, S. Scribner & E. Souberman). Cambridge, MA: Harvard University Press. (Original published in 1930)

Vygotskij, L. S. (1987). Thinking and speech (N. Minick, Trans.). In R. R. W. Rieber & A. S. Carton (Eds.), *The collected works of L. S. Vygotsky: Vol. 1. Problems of General Psychology* (pp 39–286). New York: Plenum Press (Original published in 1934).

Waern, Y. (1981). On the relation between comprehension and memory of a complete text. *Scandinavian Journal of Educational Research, 25,* 21-37.

Webster's Ninth New Collegiate Dictionary. (1991). Springfield, MA: Merriam-Webster.

Wertheimer, M. (1945) *Productive Thinking.* New York and London: Harper and Brothers Publishers.

Whorf, B. L. (1942). Language, mind, and reality. In B. L. Whorf (1956). *Language, thought, and reality: Selected writings of Benjamin Lee Whorf* (Edited and with and Introduction by John B. Carroll, pp. 246–270). Cambridge, MA: The Technology Press of Massachusetts Institute of Technology.

Wiggins, G. (1993). Assessment: Authenticity, Context, and Validity. *Phi Delta Kappan, 75*(3), 200–214.

Wittgenstein, L. (1968). *Philosophical investigations* (G. E. M. Anscombe, trans., 3. ed., repr.). Oxford: Blackwell.

Ziff, P. (1972). *Understanding understanding.* Ithaca, NY: Cornell University Press.

SENSES OF "FÖRSTÅ"

"1)… märka, erfara…; lära känna…; 2) … få veta, få reda på. få höra, erfara…få besked l. vetskap om ngt;… 3) komma underfund med; komma till insikt om, inse (ngt l. att ngt är l. vad som är… av ngt komma till insikt om ngt, draga den slutsatsen avngt (att osv)… 4) (med förståndet) genomtränga, fatta den värkliga innebörden l. det väsentliga l. det inre sammanhanget i (ngt), inse (hur ngt är möjligt l. varför ngt förhåller sig på ett visst sätt o.d.) äv. inse det naturliga l. berättigade i (ngt); begripa… 6) (med förståndet) uppfatta (ett gm tal l. skrift l. tecken l. på annat sätt gjort meddelande), så att man med orden l. tecken osv. förbinder en viss betydelse l. mening, begripa… fatta; 7) (i sht i skriftspr.) (upp)fatta l. tyda (ngt) på visst sätt, taga l. uppfatta (ngt) i en viss betydelse, (för sig själv) inlägga en viss mening l. betydelse i (ngt); tolka… 8) mena, avse, åsyfta; inlägga en viss mening l. betydelse i (ngt)…" (Svenska Akademin, 1928, F3256–3262).

ADDITIONAL TABLES

Table 1. The participant informants in terms of subgroup, status as participant, and gender

Subgroup	Status	M	F	Sum
		Sex		
A	written	5	8	13
	interviews	4	4	8
B	written	6	5	11
	interviews	4	4	8
C	written	4	14	18
	interviews	1	7	8
D	written	5	20	25
	interviews	5	5	10
	Total	34	67	101

Table 2. *Distribution of the twelve year old participants' accounts over categories*

	I. reception	II. acquisition	III. realisation		
			a. factual 1–2	b. relation. 1–3	c. systemic 1–3
Adam 1:	*3**	2, *4*		1:b3	
Ann 2:	2		1:a1, 2:a1, *3:a2*		
A 3:	1, 2, 3				
Agatha 4:	*2*		1:a1		
Abraham 5:	1, 2, 3, 4;				
A6:			1:a1, 2:a2		
A 7:		2		1:b3	
A 8:	1, 2	3			
Andy 9:	1	*4*	2:a1, *3:a2*		
A10:	1				
Anthony 11:	1, 4, 6	3	3:a1		
A12:	-	-	1:a1		
A13:			2a:1, 4a:1		
A14:	1				
A15:	1				
A16:	1				
A17:	-	-	-		
A18:	1				
A20:	-	-	1:a1		
Alexandra 22:	1, 2,*3*				
Amy 24:	1, 2, 3				

* Italicised letters and numbers indicate orally presented accounts.

Table 3. Distribution of the fifteen year old participants' accounts over categories

	1. recep-tion	2. acqui-sition	3. realisation		
Understanding as…					
			a. factual 1–2	b. relation. 1–3	c. systemic 1–3
B1:			1:a1		
B2:			1:a2		
Bill 3:		1			
B4:	1				
B5:		1			
Barbara 6:				1:b1,3; 2:b3	
Burt 7:					
Beatrice 8:		1		1:b1	
Bo 9:		1			
Betty 10:			1:a1	*2:b3*	
B11:	-	-	-	-	-
B12:		1			
B13:		1			
B14:			1a:1		
B15:	1				
B16:			1a:1		
Bobby 17:					1:c2?
Blanche 18:				1:b1	
B19	-	-	-	-	-

Table 4. Distribution of the eighteen year old participants' accounts over categories

	I. recep-tion	II. acqui-sition	III. realisation		
			a. factual 1–2	b. relation. 1–3	c. systemic 1–3
C1:					1:c2
Camilla 2:		1			1:c3
Charles 3:			1:a1		
C4:				1:b1	
C5:		1			
Caren 6:			3:a1	1:b1	*2:c1*
C7:		1			
C8:			1:a1		
C9:			1:a1	1:b1	
Christina 10:			*3:a1*		1:c2
C12:				1:b2	
C14:				1:b2?	
C16:					
C18:					
C20:				1:b1	
Caroline 22:			1a:1		
C24:			1:a2		
C26:					1:c1
Charlotte 28:		*3*	1:a2, *2:a1*	*4:b2;* 1:b3	
Constance 30:			1:a2	*1:b2*	
Christel 32:			2:a1	2:b1	1:c2
C34:			1a:1		
C36:			1:a2		
C38:					
C40:			1:a2		
C42:					1:c2

Understanding as…

Table 5. Distribution of the adult participants' accounts over categories

	1. recep-tion	2. acqui-sition	3. realisation		
			a. factual 1–2	b. relation. 1–3	c. systemic 1–3
Dan 1:			1:a1	1:b2;*2:b3*	
Daisy 2:			1:a1	1:b2; *2b3*	
Douglas 3:				*2:b2; 3b:3*	1:c3
Diana 4:				1:b2, *2:b2*	
Davis 5:			1:a1		
D6:				1:b2	
Dick 7:					1:c3, 2:c3
D8:				1:b1	
D9.				1:b2	
D10:			1:a2		
D11:			1:a1		
D12:			1:a1		
D13:					
D14:			1:a1		
Donald 15:			1:a1; 1:a2	*3:b3*	*2:c1*
D16:					
D17:					
D18:		1	1:a2		
D20	1		1:a2		
D22:			1:a2		
D24:					
D26:				1:b1;1:2	
D28:				1:b1	
Dora 30:		1, *2*	1:a1	*3;b3*	
D32:			1:a1, 1a:2		
D34:			1:a1		
D36:					
D38:					
D40	2		1:a1		
D42					
D44			1:a2		
Doris 46:			1:a1	1:b2	
Dorothy 48:				1:b1	1:c3
D50			1:a1		

Table 6. Distribution of interviewed participants' accounts over categories

	1. reception	2. acquisition	3. realisation		
			a. factual 1–2	b. relation. 1–3	c. systemic 1–3
Adam 1:	*3*	2, *4*		1:b3	
Ann 2:	2		1:a1, 2:a1, *3:a2*		
Agatha 4:	*2*		1:a1		
Abraham 5:	1, 2, 3, 4;				
Andy 9:	1	*4*	2:a1, *3:a2*		
Anthony 11:	1, 4, 6	3	3:a1		
Alexandra 22:	1, 2,*3*				
Amy 24:	1, 2, 3				
Bill 3:		1			
Barbara 6:				1:b1,3; 2:b3	
Burt 7:					
Beatrice 8:		1		1:b1	
Bo 9:		1			
Betty 10:			1:a1	*2:b3*	
Bobby 17:					1:c2?
Blanche 18:				1:b1	
Camilla 2:		1			1:c3
Charles 3:			1:a1		
Caren 6:			3:a1	1:b1	*2:c1*
Christina 10:			*3:a1*		1:c2
Caroline 22:			1:a1		
Charlotte 28:		*3*	1:a2, *2:a1*	*4:b2;* 1:b3	
Constance 30:			1:a2	*1:b2*	
Christel 32:			2:a1	2:b1	1:c2
Dan 1:			1:a1	1:b2; *2:b3*	
Daisy 2:			1:a1	1:b2; *2:b2*	
Douglas 3:				*2:b2; 3:b3*	1:c3
Diana 4:				1:b2, *2:b2*	
Davis 5:			1:a1		
Dick 7:					1:c3; 2:c3
Donald 15:			1:a1, 1:a2	*3:b3*	*2:c1*
Dora 30:		1, *2*	1:a1	*3:b3*	
Doris 46:			1:a1	1:b2	
Dorothy 48:				1:b1	1:c3

UNDERSTANDING IN NOVELS

The account of the various assumed forms of and conceptions of understanding will here form a background for a presentation of the forms of understanding and conceptions that have been conceived in the analysis of the concordance materials. This means that if the presentation of the discussed forms of consciousness and conceptions of understanding presented emanate from an attempt to work out what until further notice can be considered as a delineation of what have appeared as the ways in which the participants appear to have understood understanding, the present section can present the result in relation to an attempt to identify and exemplify these forms and conceptions of understanding from an analysis of the meaning of the usage of the verb *to understand* in its past tense.

The data consists of the previously mentioned extract from the concordance. This extract involved about 40 registrations of the key verb (*förstod*) in its immediate context, which as a rule means 4–10 words before and after the key word. The registrations were picked out on the basis of the same criteria as those that guided the preliminary analysis of the written account of experiences of having arrived at understanding of particular being.

The purpose of this analysis was simply to find instances of the previously discerned forms of understanding of understanding and to if possible also discern other ways of understanding understanding as a phenomenon.

The relevant parts of the concordance were read and categorised according to the previously established categories of description.

UNDERSTANDINGS OF UNDERSTANDING

Considering how the Swedish equivalent to the English verb *to understand* (förstå) is used in its past tense *(förstod)* in the mentioned database, it seems as if understanding as a phenomenon appears to be understood either as *a reception of knowledge of something through simple perception* or as *a realisation of something through experience and interpretation.* In the first case understanding is understood as an event that involves a knowledge recipient in an act of simple perception. In the second case, on the other hand, it seems to be understood as an event that involves a realisation about a particular being through an experience in relation to the character of something that can be understood and apprehended as something that presents the character of what one thereby experiences.

UNDERSTANDING AS A RECEPTION

The following extract has in relation to this been understood as usage of the verb that implies understanding in the first of the two senses:

> in… yellow and when she managed to take that which had been sewn in, she understood that it was a coin but of a sort that she nev…

The above has been understood as usage of the verb that implies an understanding of understanding as *a reception of knowledge of something through observation.* The same has also appeared to be valid for the following extract:

> … I began to discern details. It was the old. I understood that before I saw his face. It was pale…

Hereto too, understanding seems to be understood as *a reception of knowledge of something through simple perception* and as an event that involves oneself as a person that receives knowledge of something that is experienced to be the case through this something presenting itself through simple perception. It is a usage of the verb that suggests that understanding as a phenomenon means that one experiences a particular object or being as an object of a particular kind or as a particular individual through it presenting itself as that for oneself from a position and through a perspective that makes it possible for it

to present itself in this way. This implies an understanding of understanding as phenomenon that ascribes the understander a passive roll and the understander's counterpart an active role.

UNDERSTANDING AS A REALISATION

In the understanding of understanding as phenomenon that is assumed to be implied in the second type of usage of the verb, the relationship between the understander and the understood appears to be more dialectical. This could perhaps be exemplified by a consideration of the following extract:

> At first he did not understand what it meant. But then he understood. The tiger made an attack against the boards in front of the basement…

As may have followed from the reading of this quotation, the usage of understanding implies in this case an understanding of understanding that suggests that understanding implies a productive shift of awareness. It presents someone in a situation where he or she obviously hears a sound, finds that he or she doesn't understand what it is the sound of, tries to understand what it is a sound of and understands that it is the sound of "[t]he tiger making an attack against the boards in front of the basement". It implies that understanding involves both experience and interpretation, which has appeared as a defining characteristic of the form of consciousness of understanding as a phenomenon that has been called *Understanding as a realisation of something through experience and interpretation.* This understanding of understanding as a phenomenon could perhaps also be said to have been expressed through the following usage of the verb:

> … in her own despair she became all of a sudden conscious of his, and understood to a certain extent how humiliating it must have felt…

Beside these two there were about thirty-five other extracts that also were found to express understanding in the discussed sense.

CONCEPTIONS OF REALISATION

The usage of the verb understand in the discussed senses have in turn been found to express the following conceptions of understanding:

Understanding as a realisation of:

> 1) that something is the case
> 2) the existential meaning;
> 3) how something appears for someone else;
> 4) what is meant with something.

The various conceptions of *Understanding as a realisation of something through experience and interpretation,* which were recognised in the concordance material, will be exemplified below in the mentioned order.

1. That something is the case

The conception of *Understanding as a realisation of something through experience and thinking* means that the understander understands that something is the case. It can be exemplified with the following extract from the concordance materials:

> When they began to miss him at his workplace everyone understood that he had drowned.

In this particular usage of the verb, it is "that he had drowned" that is said to have become the object for understanding, and which was realised through some sort of additional experience and thinking to that which somehow had led to that one had learnt that he seemed to have or could have drown.

2. What really is the case

The conception means that the understander is conceived and explained to understand what really is the case as opposed to what appeared to be the case. This is only represented by two cases.

The first of these runs as follows:

> … ed and laughed from the harbour side but shut up when they understood that they by mistake had entered into a house of mourning.

This suggests an event where a group of people realise that what appeared to be a place where they could merry themselves was not what it appeared to be, but rather the opposite, namely a house of mourning. The extract does not tell us how this understanding was arrived at, but it suggests at least that it was something that could have been reached through something in style with: looking for a place where one could enjoy oneself, finding a place that looked as if it could be such a place, entering it as if it was, but once in the building, finding that it was the opposite, namely a place where people had gathered to mourn.

The second extract sounds as follows:

> … To begin with I believed that the film was in favour of drugs but understood later that it delivered critique in part against society…

This extract suggests also a course of event s where what is really the case is understood, but only after what appeared to be the case was proven to be different to how it had been expected to be.

3. The existential meaning

The conception of *understanding as a realisation of the existential meaning through experience and thinking* means that the understander is felt to understand the existential as opposed to, for instance, the linguistic meaning. This could be exemplified with the following extract from the concordance:

> … to drive the whole distance without stopping over night. That night I understood what the notion "fall asleep when driving" means…

This extract suggests a situation where a person who has heard and understood but not experienced the expression "fall asleep when driving" comes to understand what it means to have the assumed experience. This expresses a conception of understanding as a realisation of the existential meaning of "falling asleep when driving" through first hand experience and recognition of the phenomenon in question.

4. How something appears for someone

The conception of *understanding as a realisation of something through experience and thinking* means that the understander is felt to understand how something, for instance a particular object, situation, sense, etc., is lived by another person. This could be exemplified with the following extracts from the concordance:

> … that tenderness came over me and I felt I understood how she experienced it, how she mourned over that she could not…

> … in her own despair she became all of a sudden aware of his, understood to some extent how humiliating it must have felt.

Each of these two extracts imply a situation where a person is said to have experienced that he or she realised how another person lived or lives a particular situation. They suggest also that this realisation takes place through the understander somehow finding him/herself in a mode in which through an imaginative transposition, another person's position can be divined in order to experience how the other lived, lives or has lived his or her situation. These extracts imply that the emotional dimensions of one's belongingness to the world have something to say in understanding. However, there are also some extracts that have been found to express this conception that do not imply any emotionality in understanding how the particular object, situation, sense, etc. appears for others.

5. What is meant with something

The conception means that the understander is felt to understand what is meant or said by, for instance, a particular word, utterance, gesture, etc. This could be exemplified with the following extract from the concordance:

> Uglik made a jerk with his head and she understood immediately what he meant. She took the frying pan with…

In this particular case, the usage of the key word has been taken to express understanding as an apprehension of what a counterpart obviously meant to communicate with a particular gesture. It is a usage that presupposes a dialogical relationship between a person that says something with a gesture and another person who by experience

and interpretation of what is meant with the gesture apprehends what is intended. This assumed conception suggests that understanding means an apprehension of what is meant with something and could be exemplified with the following extract:

> I know that. A long gaze. I understood what it meant. I looked down.

The use of the key verb suggests a dialogical relationship between two persons. One that obviously thinks something about a particular object and expresses this thought in a gesture for another person, who by experience and interpretation apprehends what the first obviously thinks about the particular object and communicates in return about it.

In addition to these two examples, which have both been taken here to presuppose understanding as a realisation of something through experience and interpretation by comprehending understanding as a realisation of what is meant with something through apprehending, there are also examples that suggest a slightly different situation. One such example is the following:

> … man friends of my wife…" They spoke German, but I understood most of what was said. They had obviously not seen…

In this particular use, understanding is also understood as a realisation what is meant with a particular (series of) expression(s), but with the difference that it suggests a much more complicated relation than a dialogical one. It differs also with respect to what is said to have been understood. This appears not as much in terms of what was meant with what was said with what was uttered as it does what the understander could make out of what was said with respect to the interpretations of the speakers' experience(s) of the object(s) for their speech.

A more sophisticated analysis might perhaps say that the example is an example of another sense of understanding that the first two. However, in this case they have all been taken as expressions for the same conception of understanding as what is meant with a particular expression and that one arrives at this through experience and interpretation of what it appears a counterpart means with what they gesticulate, utter, etc.

SUMMARY OF THE RESULTS CONCERNING UNDERSTANDING IN NOVELS

In sum, the analysis of forms of consciousness and conceptions of understanding as a phenomenon in the concordance have revealed that understanding for the most part appears as a realisation of something through experience and interpretation or as a reception of knowledge of something through observation. It has also shown hat there are no indications that understanding has been understood as an achievement of desired knowledge or skill through the successful completion of goal-oriented learning activity.

The analysis has also revealed that understanding of understanding as a realisation of something through experience and understanding has been found to manifest itself in terms of a realisation:

1. that something is the case;
2. of what really is the case;
3. of the existential meaning ;
4. of how something appears for someone else; and:
5. of what is meant with something; through some sort of experience and interpretation.

It has thereby, however, also revealed that the actual part of the concordance only represents four of the altogether eight different manifestations of understanding as a realisation of new truth about a particular way of being in the world through experience and interpretation which emerged from the interpretation of the written accounts of instances of understanding and the additional examples that were added in the interviews. The conceptions: f) how something works; g) inherent regularity or structure; and: h) why something is; seems, in other words, not to be represented in the concordance, whereby it seems reasonable ask if this is not due to the concordance being based on a particular kind of written material where such conceptions are seldom expressed.

DIFFERENCE BETWEEN THE LATER AND THE EARLIER INTERPRETATION

The reflection over the variation between the different episodes that the participants recounted gave at one stage of the analysis the thought that the events described were about:

Acquiring a desired skill

Getting to know something

Realising something (Helmstad & Marton, 1992, p. 4)

This preliminary result was considered similar to that arrived at by Pramling (1983). In her study of children's conceptions of learning, she found that the participant stories about things that they meant the had learnt were about:

Learning to do

Learning to know

Learning to understand (Pramling, 1983, p. 92)

Moreover, whilst the first category was by far the most frequent and the third extremely rare in Pramling's study, things appeared to be the other way around with the material that forms the basis for the present study. It also seemed as if some of the accounts which makes up the data fail to carry the meaning that eventually became associated with "understanding", namely those which were of the first two categories and which were about *Acquiring a desired skill* and *Getting to know something*. This made for a hypothesis in which it appeared as if the observation presupposed an implicit notion of understanding, where the line of reasoning was that the intuitively felt meaning that can be assumed common to all episodes, can be intuitively accepted as being

examples of accounts of understanding proper. If the common ground against which the different meanings of understanding appear could be made explicit we would have a possibility to answer this charge. This is meant, to answer the question "What is the invariant meaning or essence of understanding?" as an empirical approach to a fundamentally philosophical problem.

In accordance with previously established praxis, the attempt to work out an answer to this question meant searching for a way of discriminating between all instances that belong to the third category (i.e. understanding "proper") and those which do not, it was assumed that all understanding is learning, but that not all learning involves understanding. This was something that was also felt follow from Pramling's (1983) and to support a hypothesis concerning the results of her study.

In the discussion of Marton et al., (1993), it was noticed that this article represented an attempt to spell out what could be considered to be "the essence of learning" as "becoming more capable through experience". In the stage of the analysis where the accounts were found to be about *Acquiring a skill; Getting to know something;* and *Realising something;* it emerged that the assumed essence of learning obviously applied well to both *Acquiring a skill* and *Getting to know something.* This is because in the analysis of the accounts that had been found to represent this, it occurred that these accounts implied that "understanding" meant that one felt one became more capable in one sense or another and that one typically meant one did so through accidental action, observation, information, practice and/or questions and answers. These "accounts" rest in contrast with, for instance, those of biological maturation, or productive thinking.

An attempt to apply what was said to be characteristic about "the essence of learning" to "the essence of understanding" was also made, but it seemed as if the later was more specific. Assuming that this was a valid interpretation, it appeared to follow that the essence of understanding had to be qualified further to differentiate it from the meaning of learning. In connection hereto, it seemed obvious that understanding implies a particular meaning of "becoming capable" and/or a particular meaning of "through experience" in the

description of learning as "becoming more capable through experience".

Trying to spell out what then appeared to be common for all the accounts of instances that had been classified as belonging to the third type, i.e. *Understanding as realising something* rather than as *acquiring a skill or getting to know,* it was said that in each case some change of the understander's conscious awareness of something is described or implied. Furthermore, it was also said that it seemed also as if this change was experienced to be of a particular kind, with a subjective as well as an objective aspect which was conceived and explained as a course of events in which appearance and reality, subject and object become visible, and first separated and then united again.

More precisely, the accounts that had appeared to set loose *Understanding as realising something* seemed to indicate that one as a person usually lives in a taken-for-granted attitude where one assumes that one's knowledge or one's consciousness of things simply reflects what these things are like, and that others are aware of the same things in the same senses as oneself. One is in what the phenomenologists call *the natural attitude* unaware that *what is,* is in part relative to ones experience and that a certain thing that one is aware of as something that presents this or that character may appear differently to others in the circumstances given and also to oneself in other circumstances.

In some cases, however, an experience that one is unable to perceive how something really is, breaks down the normal unity between perception and reality. One experiences that one does not understand until one once again – if possible – experiences that one does. Understanding means, then, a lived experience of realising how something is. The natural attitude is restored. Struggling with a problem and all of a sudden realising how it can be solved is an example of understanding in this sense. In other cases, it appeared that understanding means that what is the case and perceived reality are split in retrospect as one becomes aware of the obvious fact that what one took for granted to be the case about something was in fact ones' interpretation of it; one was wrong or one had not experienced what one is aware of now. This relationship was in connection hereto explained as one that essentially appears to consist of becoming aware

of this due to an insight into what the actual aspects of reality *really* look like. Moreover, it was suggested that it is exactly this "insight" which makes what one experienced as reality. At the same time, the insight means that one experiences that one becomes aware of how things are.

This type of account of understanding as realising something was, in other words, found to suggest that understanding sometimes means that one leaves the natural attitude in retrospect so to speak. These accounts were also interpreted to suggest that in the same moment as one moves out of the natural attitude one also moves into it again, albeit not exactly the same natural attitude as before, but one that represents a partly different outlook over that which it concerns. This means that they were found to suggest, that one from now on either tends to understand that which one had not understood before with that which has become object for understanding or that one tends to understand that which one has understood before in another and in some sense more advanced meaning.

In relation to the discussed interpretation of the general structure of the meaning of the accounts that at that stage of the analysis had been interpreted to understand understanding as a realisation of something, was also to advance a preliminary conclusion that understanding could be interpreted as something in style with a simultaneous suspension and confirmation of the natural attitude. That is, that it was an experiential course of events that among other things involved partial negation of previous experiences and the emergence of a new experiential truth as something which came to stand over and above the older version. One example of a narrative that was found to imply this assumed form of understanding was one that was related to learning to ride a bike. This was described as follows:

> After the child has had some practice on the bicycle with someone – who usually has already developed the skill – running after holding it, all of a sudden the child feels a change in his or her relation to the bike and shortly thereafter discovers that the more experienced or capable other is not holding the bike. It is at this instant that the child realises "I can ride the bike!"; the meaning of what has been experienced. This realisation implies of course that the state of being able to ride the bike was there before the child became aware of it. There had thus been a perception which differed from reality. Understanding means experientially seen, thus, that one realises what the case

really is. Perception and reality are no longer separated. (Helmstad & Marton, 1992, p. 6)

Another narrative that also was taken as an example of this form of understanding relates to what happened on a Christmas Eve when Santa Claus visited the family. This was described as follows:

> The child gets suspicious about the identity of Santa and by pulling his beard he comes to understand that Santa Claus is actually father or grandfather or some family friend. At the very instant of understanding, Santa Claus is in retrospect split into an appearance (Santa) and a reality (father). At the same time, what is perceived (father) and what is real (father) collapse again; what appeared as Santa was in fact father. (ibid.)

Understanding was then, thus, understood as a collapse of reality and perception of reality into reality after that they have either been separated prior to the understanding taking place or have been separated in retrospect in the very act of understanding. A kind of event that results in that what previously was not understood becomes understood, or that what previously was understood in one sense now comes to be understood in an even more profound one. A new truth which stands over above the old has emerged for the understander.

In order to further demonstrate the obvious difference between this sense of understanding, which was worked out through the interpretation of the discussed accounts, and the meaning for understanding that the other accounts appeared to suggest, one deviant case of each was considered. These two examples are presented below:

Acquiring a skill

> It began at my grandmother's. I was sitting eating when my mum and dad came in. They shouted for me to come. I went over to them and saw that they had bought a bicycle! It was a red girl's model, the old type. Dad ran and pushed while I tried to cycle. After a while it went really well (at least I thought so then). I rode it all evening. There was a really long hill and I whizzed down it. I was really sad when we had to go home (A 7:2)

Getting to know something

> When I understood…

> I was in the fifth grade (the second year of junior school) and we had just started to study English. The last chapter in the book had the heading "Safety first". I translated it into "saftfest" [Swedish equivalent of "lemonade party"]. I

> was at the age when that was a reasonable thing for a chapter to be called, and I didn't really think about it. I didn't think of checking in the dictionary to see if I was right. The day came when we got that chapter for homework. When I looked at the book's vocabulary list I was a bit disappointed. My translation of "Safety first" was completely wrong. But I thought my translation was much nicer, at least for a fifth grader. (D 20:1)

The first of the two examples was obviously not an account of an instance of understanding as it has been characterised above. One reason for this that was pointed out, was that it obviously does not involve a description of a subjective aspect. Another was that it obviously does not involve any explicit distinction between reality and perception of reality either. In consequence, it was not found to imply any collapse of the two either. Because, the account suggests just that the boy simply learns to ride the bike, without suddenly understanding that he actually can ride it (as in the case mentioned earlier).

The second example was somewhat more difficult to distinguish. The narrative yields that the girl at the first encounter with the expression "Safety first" thought that it meant "saftfest" (Swedish for "lemonade party"), but that she at the second encounter with the expression learnt what was the correct Swedish equivalent from the dictionary. The reason why this account was found more difficult to differentiate from the accounts that were found to lend themselves to be understood as expressions of understanding as realising something, was explained to be that it may appear to suggest that understanding involves a retrospective split of reality into perception and reality and the collapse of the two into a new reality. However, whereas other accounts suggest that understanding involves a transformation of one way of understanding something into another in terms of a power of an experiential logic of relations or an evident logic of a system or structure; the narrative about gaining knowledge of the correct translation of "Safety first" does not involve any explicit outlining of this element.

The main difference between the accounts about understanding as realising something and those about receiving knowledge of something was, thus, found to be that while the former appeared to involve more or less explicit indications that understanding involves

experience of evident truth, the later appeared to lack this element, as the girl is simply informed about the correct Swedish equivalent of the expression and it is accepted due to the authority of the dictionary, not because it is experienced as being the true meaning of the expression. Finding out the correct meaning of a word or an expression may imply genuine understanding. For instance by finding a missing piece, the lines may make sense and all of a sudden form a coherent and transparent whole in which the different parts are logically related to each other. Nothing of this sort is, however, expressed in the second kind of account. Consequently, it was not considered as an account of understanding as realising something, but rather as an account of learning something in a particular sense, namely as getting to know something.

At this stage of the analysis, there were three types of accounts in the material, two that were about *learning* and one that was about *understanding* in the discussed sense. In a subsequent phase of the analysis, it became obvious, however, that also the first two types of accounts could be considered as accounts about understanding too, where the meaning for understanding could be said to lack the essential element of the meaning for understanding that had been read out of the accounts of the third kind.

It was also found that the accounts about *Getting to know something,* on a closer inspection appeared to consist of two different kinds with respect to how the object for understanding is meant to have become so. In the first type, something that one all of a sudden just noticed by accident or as something that someone else all of a sudden just said. In the second type, understanding is something one arrived at through feeling a need to know it, taking an action to know it and eventually also obtaining knowledge of it.

The first type of the accounts of *Getting to know something* can be illustrated with the following example:

When I understood

When I understood that Buster, my hermit crab, was dead. Buster had been ill for a week or so. He had crawled out of the shell several times. We, my mother and me, went away for the weekend to Varberg. We came back on the Sunday. Buster was dead, because he had not moved one bit and… it smelled

bad. I cried for several hours, it felt at least like I did. Then we buried him…
Now we don't live there any longer. It happened in Kungsbacka. (Andy 9:1w)

The second type can be illustrated with the following example:

When I understood the word precipitation

It all started January 15 when we came to the geography lesson.

Gunnar Petrell came and presented himself.

Then he began to talk about what we would work with and among other things
he said that we would talk much about "precipitation" in Sweden and in the
Nordic countries.

I could not follow, I did not understand the word "precipitation" but I didn't
dare to ask what was meant with it.

All the time, he talked about it and I could not grasp the word, at the middle of
the term we did some group work and I was together with two others, they also
talked about "precipitation" and it was then that I decided to ask what was
meant by it.

They explained the word very well, but the term was almost over.

When I understood the word, I understood also the fear that I've had for the
teacher. (Dora 30:1w)

In the first case the object for understanding is something that the
person just observes, finds, etc., in the second it is something that the
person feels a need to know, takes actions to learn to know and
thereby also manages to achieve knowledge of. The first account
suggests that the person is a rather passive recipient, the second
suggests that the person is a rather active agent. This is an observation
that also has support in Pramling's (1983) investigation, which
presents a similar variation with respect to how the participants
appear to have understood and explained how learning comes about
(ibid., p. 105 ff.).

Against the background of these observations, one could perhaps also
expect to find a similar variation with the accounts that were found to
be about *acquiring a skill*, but the analysis has not given any support for
this. If it had done so, there would be accounts about *acquiring a skill*
that would suggest that the skill was acquired by accidental action and
accounts that would suggest that the skill was acquired by successful
completion of deliberate goal-oriented action. The analysis has,
however, resulted in discernment of accounts suggesting that the
object for understanding is reached through successful completion of

meaningful learning activity. The following account may serve as an example of this:

> When I understood the technique…
>
> To begin with I should perhaps explain what I mean with "the technique". I play the electric organ and I have done that for about 7 years. When I moved to town 2 years ago, I began to compete in playing the electric-organ. I have competed in the town championship for two years and it is about one of my tunes for competition that I'm about to write. I had laid hands on a Japanese tune. It was a very difficult tune and I liked it although I did not always know the technique. The competition was to take place the first of April.
>
> By the end of February, I had still not found the way through the tune. On the top of everything, I became ill and could not take my organ lessons. My teachers even thought that I should play another tune. But I was determined to manage the tune on my own!
>
> Said and done. Since I was ill, I had whole days for practice. And one day I managed the technique. There was no limit to how proud I was over having managed the tune and the technique by myself. My teacher was very pleased and I myself grew in confidence. When I later also won the town championship I was overwhelmed. I had won with a tune that I was not supposed to have played. (Beatrice 8: 1w)

This example suggest that understanding is an achievement of knowledge. In comparison with the accounts that had been taken as examples of *Getting to know something,* but that at this stage of the analysis had begun to emerge as accounts that express another meaning, it appeared reasonable to assume that the examples could be explained to present just about the same meaning for understanding. Moreover, in a subsequent attempt to spell out the general meaning for understanding not only of those accounts that could be said to be about understanding, but also for those that had been taken as examples of *Acquiring a skill* and those that had been taken as examples of *Getting to know something* it occurred that this could be accounted for in terms of three different forms of consciousness of understanding as phenomenon.

A form of consciousness was then defined as a personal experiential ground on the basis of which a person or a group of persons can relate to a particular kind of being as something that presents this or that character rather than another character. It is a theoretical construct invented to better understand why a person during a particular passage of time tends to and can relate to a particular being in some

sense or senses, but not in another sense or other senses or why that being at that moment in that person's experiential history can present itself in some sense or senses for that person, but not in others. It is a result of an attempt at a hermeneutic phenomenological reinterpretation of a conception as "a certain delimitation of a phenomenon from the context or background, and of its component parts and the relations between them" (Marton et al., 1993, p. 278; Svensson, 1984a), towards interpreting it as relating to a particular being as a being that presents this or that character, that presupposes more fundamental and more encompassing experience of that being than what is contained in that particular way of relating and that can also be understood as the personal ground for relating to it in this way.

A form of consciousness of something as a phenomenon can, thus, be understood as the experiential background against which a person can relate to a particular being as something that present this or that character rather than as something that presents another character. It is a construct whose meaning can be explained further in comparison with what Dilthey [1958] called *Erlebnis:* "a lived experience encompassing unity of parts of life bound together through a common meaning for the course of life" (Palmer, 1969, p. 107).[1]

Erlebnis can be illustrated with the experience of loneliness. Which is, for instance, not so much what one encounters when one finds oneself lonely as it is what loneliness has come to mean for oneself as a result one's encounters with instances of various types of loneliness, at different times, situations, and places. This may even include other narratives about loneliness (and of course most importantly) one's dominant meta-narratives of loneliness as carved in one's major/main official discourses. Experience presents, in other words, the character of a contraction of meaning; an operative consciousness that reaches out and encompasses both recollections of the past and anticipation of the future in the total context of meaning that could be said to make up the life world (Palmer, 1969). This is a conception of experience that steers away from the otherwise so tempting tendency to make visual

---

[1] Gesammelte Schriften, VII, p. 194.

perception into a paradigm for understanding of consciousness. It is a conception that has been developed further in Heidegger (1927/1990) and in Gadamer (1960/1993). The meaning of the conception is that consciousness is not so much a question of having grasped a particular object in a particular sense as it is a question of orienting oneself towards "being in the present".