"You can learn to make a fair job of sharpening knives in a couple of years, but getting a pair of scissors into perfect working order is the real test of the master."[1]

Chapter 1: Knowledge and Learning: Some Examples

Introduction

Knowledge comes in many forms: the insight which an experienced mother practises in her contact with her child, the skill which an artisan exhibits in the exercise of her craft and the knowledge expressed in scientific theories, to give just a few examples. Here I use "knowledge" as a comprehensive umbrella term to cover what might more commonly be referred to as insight, skill, understanding and so on.

Several years ago Ulf Linde, the Swedish art critic and connoisseur, referred in a radio interview to "knowledge as a form of attentiveness."[2] He was talking mainly about painting and he mentioned that Picasso was someone who was always paying attention. Linde went on to say that one cannot be trained to produce masterpieces but that attentiveness can be learnt as a routine.

Whenever my thoughts have turned to the subject of living knowledge, Ulf Linde's words have come back to haunt me—they have developed into a sort of key. It is the idea of *knowledge as a form of attentiveness* that forms my main theme here. This phrase will take on life, grow and change together with the text of this book.

Words cannot fully capture the meaning of living knowledge. Ulf Linde's words may, however, point our attention in a productive direction and, in so doing, our thinking about knowledge.

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1 Bruno Seyfert, a knife-grinder in Stockholm, interviewed in Dan Jörgenson "Sätter skärpa på slöa eggar," Dagens Nyheter: *På stan,* April 21, 1990.

2 July 28, 1987. Based on my own notes taken at the time.

The remainder of this introductory chapter is devoted to several examples of knowledge and learning. They help to provide a picture of an area of study—*knowledge and learning in action*. I shall be referring back to them throughout this book.

The Cello Master Class

This example is taken from Schön (1987), who refers in turn to a book about the Beaux Arts Trio.[3] Here the master, and the teacher, is Pablo Casals. In what follows Bernard Greenhouse, the cellist of the Beaux Arts Trio, describes his early lessons with Casals:

> We spent at least three hours a lesson. The first hour was performance; the next hour entailed discussion of musical techniques; and the third hour he reminisced about his own career. During the first hour, he sat about a yard away. He would play a phrase and have me repeat it. And if the bowing and the fingering weren't exactly the same as his, and the emphasis on the top of the phrase was not the same, he would stop me and say, "No, no. Do it this way." And this went on for quite a few lessons. I was studying the Bach D Minor Suite and he demanded that I become an absolute copy. At one point I did very gingerly suggest that I would only turn out to be a poor copy of Pablo Casals, and he said to me, "Don't worry about that. Because I'm seventy years old, and I will be gone soon, and people won't remember my playing but they will hear yours." It turned out of course that he lived to the ripe old age of ninety-seven. But that was his way of teaching. … He was extremely meticulous about my following all the details of his performance. And after several weeks of working on that one suite of Bach's, finally, the two of us could sit down and perform and play all the same fingerings and bowings and all the phrasings alike. And I really had become a copy of the Master. It was as if that room had stereophonic sound—two cellos producing at once.[4]

But as soon as this degree of mimicry had been achieved, says Schön, Casals did something surprising:

> And at that point, when I had been able to accomplish this, he said to me, "Fine. Now just sit. Put your cello down and listen to the D Minor Suite." And he played through the piece and changed *every* bowing and *every* fingering and *every* phrasing and all the emphasis within the phrase. I sat there, absolutely with my mouth

3 Nicholas Delbanco, *The Beaux Arts Trio* (London: Victor Gollancz, 1985). My comments are based in part on those of Schön.

4 Ibid., 50–51; quoted in Donald Schön, *Educating the Reflective Practitioner* (San Fransisco: Jossey-Bass Publishers, 1987), 176–177.

> open, listening to a performance which was heavenly, absolutely beautiful. And when he finished he turned to me with a broad grin on his face, and he said, "Now you've learned how to improvise in Bach. From now on you study Bach this way."[5]

In a conversation about music and Casals and the necessity of copying, Olle Sjöström, a statistician and amateur musician, said to me: "The cardinal sin of the amateur is to listen only to his own playing." Perhaps it is not imitation that is most important but learning to listen—attentively.

In this account there is a great deal one has to try and fill in for oneself. Greenhouse does not, for example, say anything about the extent to which Casal's reminiscences during the lessons were connected to the piece that was played during the first hour nor to what extent the discussions of technique were either.[6] The details are not, however, particularly important here.[7]

Greenhouse distinguishes three key elements:

- *Practice* or *training*, in this case playing the cello—*playing* and listening.
- *Discussions* of technique, *reflection* about the way something was done, what other possibilities existed and which ones could be created—in order to acquire a language that is an integral part of the activity.
- The initiation of the *individual* into a tradition, through a master; anecdotes and reminiscences have an important role to play in the creation of a professional identity.

Knowledge is to be found at the conjunction of these three elements—and there may well be others; in other words: when they come together to form a unity.

It is also worth paying attention to the relationship between necessity and freedom, between discipline and creativity—a dialectic of learning. Once Greenhouse has achieved, been forced to achieve in fact, an exact imitation, Casals reveals that no particular aspect of what he has learnt to imitate (bowing, fingering, phrasing) is the key if he is to continue to study Bach,

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5 Ibid., p. 51; quoted in Schön, *Educating*, 177.

6 According to Schön, *Educating*, 178.

7 The point is *not* that the process of learning in music referred to is in any way typical or necessary, nor that it should be. All that matters is that it is possible. The three key elements are also to be found in other forms of education.

so much as Casals. Casals' own improvisation is part of the teaching-and-learning process—Greenhouse is forced to go on learning in freedom. The somewhat paradoxical nature of the lesson would seem not to have been lost on Casals, to judge by his broad grin.

Casals teaches Greenhouse to imitate him to the point where "imitation" means that Greenhouse has to create a wholly new performance of his own, different from that of Casals. Schön notes this and goes on to mention the story of the rabbi whose pupils reproach him for not having followed the example of his illustrious father. "I am *exactly* like my father," he replied: "He did not imitate, and I do not imitate."[8]

In all "practical art" there exists a dialectic that resembles that of learning: a dialectic between "trusting blindly" in one's own knowledge and being forced to "go beyond" it and steer one's own course, with all the insecurity that may entail.[9]

The Honour of Work and the Practical Intellect

> How does an individual (an artisan) set about solving a task which will be assessed and made use of by others? How would you do it yourself? How aware are you of what you are doing? If you have been able to acquire a fully developed and living form of knowledge about how to relate to your own body, about the care of tools, the right clothing for different purposes, the assessment of materials, you can devote all your energies to the task in hand. This being so, you know that everything takes its own time and there is no need to hurry. At best you have been given the opportunity to practice the art of your craft and just as a painting, a film or a piece of music is an artistic expression achieved with the help of knowledge—a boat, a house, a machine are the expression of the vision and ambition of an artisan.[10]

So writes the cabinetmaker Thomas Tempte in his book *Arbetets ära* (The Honour of Work). His emphasis is on the transmission of generations of experience—for good and ill—within a craft or profession. A key concept is that of professional ethics. This quotation is taken from the chapter

8 Schön, *Educating*, 179.

9 An extended discussion can be found in my "Attentiveness in Musical Practice and Research," *Music + Practice* 1, no. 1 (2013). http://musicandpractice.org/musicandpractice.

10 Thomas Tempte, *Arbetets ära. Om hantverk, arbete, några rekonstruerade verktyg och maskiner* (Stockholm: Arbetslivscentrum, 1982), 76.

"Professional Ethics," under the sub-heading "An Attempt to Clarify the Meaning of Professional Honour."

In the same chapter Tempte also reflects on "practical" and "theoretical" knowledge.

> A common misconception on the part of non-artisans is that the work of the artisan is manual labour. Another is that the intellectual labour it involves is less complicated.
>
> These everyday mental somersaults are actually based on ignorance. The need for abstract thinking is really very high. You have to develop in advance an idea of what an object will look like, how it will be put together, how it will work.
>
> This is based on experience of the qualities and potential of the material, on access to tools, on the skills that have been acquired and on self-awareness. It is a long and tortuous process. Made more difficult by legitimate interests in making a profit, by millennia of disparagement of work that is seen to be done. As well as by judgements about the intellectual capacity of the worker. The intellectuality of practical work is of another order. It has more to do with the creative imagination. Someone who works theoretically can always produce an outline which can be subjected to criticism and corrected (developed). Practical work is more comprehensive: it requires production resources, materials and labour. Finally there is the finished object which contains all that has been enumerated. The materials that have been used have been used forever. And mistakes cannot be rectified with words but by actions. This series of actions is not manual labour but involves instead the making of a multiplicity of decisions which requires considerable mental energy.
>
> One difference between theoretical and practical knowledge is very clear: theoretical knowledge is always changeable and uncertain, it is not definitive and can never be conclusively wrong or right. Practical knowledge is definitive and tangible. Everyone who has struggled with a problem of how to make something knows how all hesitation is brushed aside when the skilled artisan demonstrates how to think and act to solve problems and complete a piece of work. Getting good informed advice is as important as the right materials and tools.
>
> One may also have to break with the experience of previous generations. The skilled and experienced artisan is familiar with the processes underlying previous experience. Breaking accepted rules does not primarily mean opposing established authority but growing beyond it. What this requires is not defiance but reflection. "The old" were never less good they simply had more limited resources.[11]

Tempte says it is a misconception to regard craftsmanship as a form of manual labour. The artisan's practice consists of a series of actions involving the

11 Tempte, *Arbetets ära*, 76–77.

making of "a multiplicity of *decisions* which requires considerable mental energy" (my italics). This would mean rejecting the idea that practical knowledge is acquired with the training of the body, while the mind thinks, develops theories and makes decisions. This dualism which Tempte rejects—but is also to some extent a prisoner of—is still one of the fundamentals of the generally accepted theory of knowledge and the way scientific activity is perceived. This is shown not so much in that it is directly defended but rather by what is not discussed.

The decision-making procedures of craftsmanship can be very exhausting. Later on in *Arbetets ära* Tempte refers to the work of Gösta the boatbuilder.

> It takes an experienced boat-builder two to three weeks to complete the planking. It is a long and demanding process of concentration which is a great drain on the mind. Once one has acquired Gösta's level of experience, routine becomes a help. Gösta has the whole boat in his head which might be compared with the way an architect thinks. Although with the difference that Gösta also produces what has been conceived with his own hands.[12]

In similar fashion Tempte describes his reconstruction of Tut's chair, where he talks of a huge "emotional drain."[13]

"Tut's chair" was fashioned by an Egyptian carpenter for the Pharaoh Tutankhamen more than 3,000 years ago.[14] This was the chair Thomas Tempte reconstructed.[15] He worked to a great extent with reproductions, mainly of tools. This is the context in which he says: "Tools which work well and effectively generate a sense of fulfilment and pleasure in the work and promote the desire to do the job. But they also bear witness to the wisdom and awareness of the craftsman."[16] In the act of reconstructing Tut's chair, he became acquainted with the *thinking* of the Egyptian carpenter—"thinking" in the sense of the practical intellect.

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12 Tempte, *Arbetets ära*, 87–88.

13 Thomas Tempte "Tuts stol," in *Den inre bilden. Aspekter på kunskap och handling*, edited by Bo Göranzon (Stockholm: Carlsson, 1988), 73.

14 There are many variant spellings of the proper name.

15 Tempte, *Arbetets ära*, 44–48; Tempte, "Tuts stol," and Thomas Tempte, "The Chair of Tutankhamun," in *Dialogue and Technology. Art and Knowledge*, edited by Bo Göranzon and Magnus Florin (London: Springer-Verlag, 1991).

16 Tempte, "Chair of Tutankhamun," 160.

Tempte contrasts the intellectuality of practical work with "purely abstract intellectualism" which he repudiates but says little about. He does, however, mention that the (then) new Swedish secondary school curriculum, for example, results in "trainees whose skills are acquired at the schooldesk rather than the workbench."[17] This could perhaps be described as an intellectuality characterised by a firm belief in the power of the *word*.

Tempte refers not only to the intellectuality of practical work, but also to "the practical intellect,"[18] which is a *creative* and *imaginative* intellect—at work creatively and imaginatively throughout the whole process from an (internal) image of the desired result, through production right up until the finished product.

Tempte says that theoretical knowledge is always changeable and uncertain. Practical knowledge is said, on the other hand, to be definitive and tangible. Here we find a key area of tension and one which is difficult to gain access to. If we can get a grasp of this tension, or polarity, we will have made considerable progress along the road to a theory of practical knowledge.

What is "definitive," final in action, has to be compatible with a *fallibilistic* position, i.e. the point of view that in every case we may always be mistaken in believing that we possess knowledge. We can be mistaken, or make a mistake, even when we are convinced that what we believe or do is correct. And as Tempte says, we have to go beyond the experience of previous generations, go beyond accepted rules.

What we *believed* to be right can therefore be wrong. But *action*, to the extent that it is an expression of skill, does not allow for uncertainty. This is a fundamental dilemma. Part of the conflict, I think, has to do with the way a "theoretical intellect" can be satisfied with pure opportunities for thought, while a practical one is always bound by, and responsible for,

17 Tempte, *Arbetets ära*, 76.

18 "The Practical Intellect" is first used (in Swedish) as a heading for the final section in Tempte, Arbetets ära. Subsequently it was used—with direct reference to Tempte—as a book title (in Swedish), Bo Göranzon, *Det praktiska intellektet. Datoranvändning och yrkeskunnande* (Stockholm: Carlsson, 1990). One needs to be cautious in referring to a special form of "intellect" since it may sound closed and reified. It would be better to consider the "practical intellect" as a form of intellectual *activity*.

execution in action—in which case, *language* can never be separated from a context of creative and imaginative action and become purely speculative.

Another aspect of this tension is captured in a few words by the Swedish poet Göran Sonnevi:[19]

> There are many theories, a single practice

Doing is unitary, irrevocable and definitive. One can speculate about various possibilities and interpretations. And yet action is the point where we leave the realm of possibility and act in a *particular* way—the world is changed, there is no way back.

Here again we see a dialectic between necessity and freedom, necessity and knowledge: a thing *has* to be done this way. Perhaps the same dialectic is also to be found in "theoretical knowledge": a thing has to *be* this way. We will leave the question in suspension and return to Thomas Tempte.

His reflections on knowledge are contained in a passage about professional ethics. It is these ethics which determine what a good finished product is, by determining the nature of good work and of good judgement. The ethics are to be found in each action, in every act of decision-making—they steer the attention. Having emphasised that "there are no great discoveries to be made in craftwork," Tempte writes:

> Ethics are not changed by the discovery of iron, advanced techniques of sawing, mechanical development: all these do is provide the process of production with greater freedom of choice, with greater resources. The ethics of craftsmanship are changed (impoverished) by demands for maximum profit, unplanned growth, lack of social responsibility, political immaturity.
>
> An artisan never allows himself to hurry or take shortcuts. A piece of work has to take the time it needs and the materials that are most suitable. Similarly, there is often only one method which is suitable in relation to the skills, tools and materials available and the specifications placed on the finished product.[20]

One cannot simply generalise about various occupations:

> A farmer, a child-minder, a smith, a boat-builder enjoy such different conditions of work that it would be difficult to formulate any universal rules to cover them all, and perhaps even more importantly, difficult to apply them.

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19 Forms part of the poem "Burge, Öja; 1989," in Göran Sonnevi, *Trädet. Dikter* (Stockholm: Bonniers, 1991).

20 Tempte, *Arbetets ära*, 77.

> To my mind an ethics of craftsmanship has more to do with the conditions for the honour and practice of work, speaking metaphorically.[21]

I think he means this literally, and not metaphorically.

This is the way he talks about the ethics of his own trade, the ethics of the cabinetmaker.

> The cabinetmaker's job is to produce affordable, light furniture which requires the minimal consumption of timber. The wood has to be straight and smooth. The furniture should be beautiful and harmonious in its proportions. Easy to keep clean, the constructions should not gather dirt and dust. They should feel light and yet be stable. They should respond to changes in fashion and yet still be able to accompany the owner and the user throughout their lives. The wood should be chosen with care, placed attentively in the piece of furniture and the carpenter should give of himself during this work. The piece of furniture must be imbued with every care, with a sense of responsibility and a sense of honour, in such a way that others can experience it. All joints should be carried out with precision but not in an exaggerated fashion. Moderation, discretion, good sense and care should be imprinted on the things which serve people in their living.
>
> These principles served to shape the ethics of the artisan. Professional honour means fulfilling these requirements. A number of precise rules were developed for the choice and evaluation of timber, the proportioning and shaping of the parts of the furniture. And for the care of many different tools.
>
> What the carpenter knows is that love for the wood requires sharp tools.[22]

This could also be called the *aesthetics* of the cabinetmaker which hardly amount to a full-blooded ethics. Ethical considerations would also require an analysis of *whom* one was working for, not simply of *how* one works.[23]

Let us return to Tempte's description of Gösta the boat-builder, he continues to refer to the planking process.

> Gösta's advice to us apprentices did not come in the form of tables or systems but as judgement, using your senses, training the eye to make measurements, taking what you see as your starting point and always to think ahead. "All lines should be clean and harmonious, there should be no bulges to offend the eye."
>
> The extraction of each plank from the timber, shaping it and setting it into the hull is an act of birth. Gösta appears to be ambling aimlessly round his workshop, looking at irrelevant objects, standing still for long periods, making remarks about where a

21 Ibid., 78.
22 Ibid., 79.
23 As Jerker Lundquist pointed out to me.

> particular tool has been placed, looking at the sky. His hand-rolled cigarettes are lit and then stubbed out. He goes out and rummages among the timber or just looks at it. Judging, assessing and weighing. Finally he makes up his mind. We are asked to help lift in the timber for the planking. He hums and measures, making marks with his carpenter's pencil. He takes a break for a proper smoke. This is an act of concentration. Bouts of concerted action are interspersed with moments of total relaxation. But never any haste. The haste and the effort all take place inside Gösta.[24]

We also need a portrayal of knowledge in action in order to understand knowledge; the quotation above provides a good example. The photographer Peter Gullers has said: "This understanding requires a portrayal rather than a description. That is the power of the visual arts and poetic language."[25]

The School of Architecture, Quist and Petra

We will now consider a further example of creative and imaginative intellectuality—creative and imaginative knowledge. This is taken from a teaching project at a school of architecture. Once again the source is Schön (1987).[26] My presentation of this material is very selective, the aim being to point out a number of factors in a structural dynamic. First, however, a few words of explanation about the teaching situation.

"Studio-based teaching" is a characteristic feature of architectural training throughout the world.[27] A design project consists of one or more design exercises, in the course of which the students are supposed to sketch out a preliminary version of the design based on a fairly loosely defined specification for a building giving the surface areas and the functions. A project usually lasts for a whole term. A typical feature of studio-based teaching is that the teacher in charge of the program does no teaching in a formal sense, her primary task instead is to create a teaching environment that resembles

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24 Tempte, *Arbetets ära*, 85/87.

25 As quoted in Bo Göranzon, *The Practical Intellect. Computers and Skills*, translated by Struan Robertson (London: UNESCO and Springer-Verlag, 1993), 74.

26 This example is to be found in Donald A. Schön, *The Reflective Practitioner. How Professionals Think in Action* (New York: Basic Books, 1983), chapter 3, and almost unaltered in Schön, *Educating*, chapter 3. I provide references to Schön, *Educating*, where what I write is based mainly on p. 44–52.

27 This passage and what follows is based on information provided by Jerker Lundquist in a letter.

a "real-life" work situation as much as possible. Any deviations from the real-life situation are to be made clear to the students.

As part of the responsibilities of the teacher in charge of the design project, she should now and then intervene in the work of the student to provide guidance which, in this case, amounts to the teacher giving tips and hints on how they might—perhaps—be able to solve the problems of the exercise. It is a cardinal error for the architecture teacher to say "this is what you should do—to get it right"; instead she is supposed to coax out of the students their own solutions.

Gösta's advice to his pupils was: judgement, using your senses, training the eye to make measurements, start from what you can see and always think ahead. "All lines should be pure and harmonious, there should be no bulges to offend the eye." These words could also apply to architectural work. Quist, the teacher responsible for the project in Schön's example, has, however, another guiding rule, which he tells the student, Petra, when she has got stuck in her work:

> You should begin with a discipline, even if it is arbitrary. The principle is that you work simultaneously from the unit and from the total and then go in cycles.[28]

The discipline is necessary in order to set limits to the task and so make it manageable.[29] As part of the learning process, Petra is to understand the meaning of expressions such as "discipline," "unit" and "total" in the *context of architecture*.

As we enter the narrative, Petra has got "stuck." Let us, however, first see how far she has come.

Her project is to design a school. She has been provided with a set of design specifications, including the dimensions and functions, and a graphic description of the site (with levels, roads, etc.). The school should contain six classrooms, one for every year-group from one to six. The site also contains some other buildings (see the left part of fig. 1 below). The students are to work on the project throughout the term and several weeks have passed by the time we enter the picture. Petra is still at an early stage of the design. She

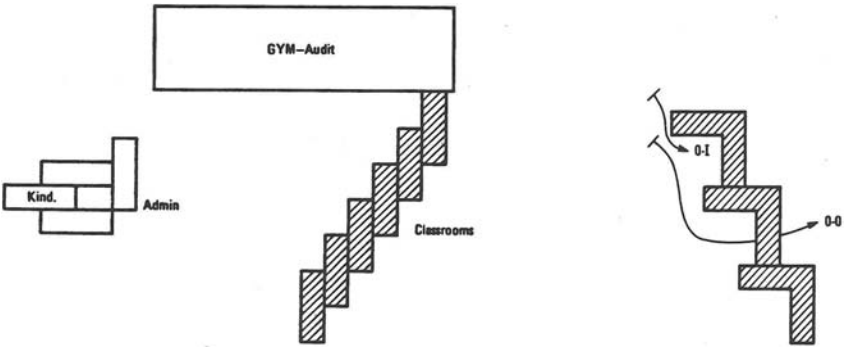
28 Schön, *Educating*, 45.

29 This forms part of "problem setting"—the active determination of a problem, cf. chapter 6 below.

is making preliminary sketches in order to discover a basic design, a "design hypothesis"—that she will be able to build on.

What she has realised is that the six classrooms cannot constitute the basic units of the architectural design by themselves, they are "too small in scale to do much with." The classrooms have to be put together in such a way as to provide a sense of proportion for the other parts of the construction. After her preliminary sketch (fig. 1 on left) she switched to arranging the classrooms in a structure of L-shaped pairs to make the basic units (the altered classroom-components are shown on the right in fig. 1). She describes her aims in terms of space, orientations and their effect on education. The first and the second year-groups will be grouped together, for example, which is "more what I wanted to do educationally, anyway," Petra says.[30] She has discovered a basic design hypothesis.

Figure 1: Petra's first sketch together with the other buildings (on the left) and her changes to the classroom section (on the right)[31]



It was after this that Petra got stuck. She had tried to find a good way of getting the building to fit into the site, a slope, but had failed.

The first part of the design review, which lasts roughly twenty minutes, consists of Petra explaining what she has done and where she has got stuck. Then Quist takes the initiative, he starts sketching—more as an architect than as an instructor. But he also describes what he is doing in words.

30 Schön, *Educating,* 47.
31 Ibid., 47.

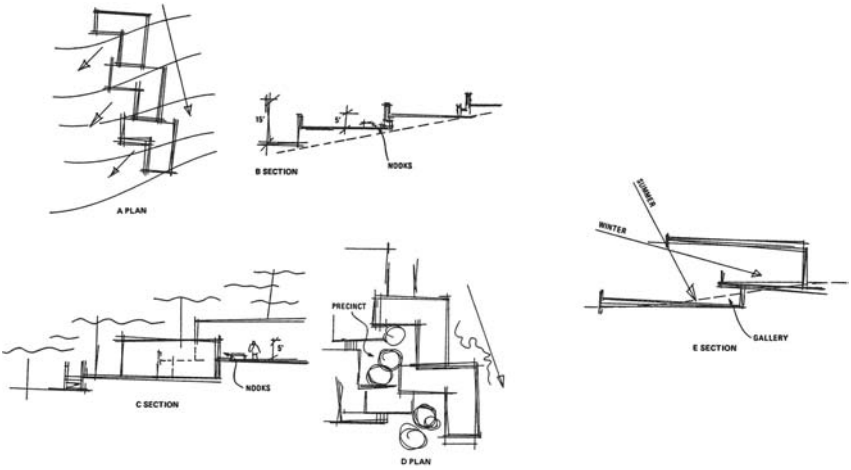
He does not try to solve Petra's problem directly, he reshapes it—or rather he re-states the problem from its starting point. He discovers that the fundamental principle of *adapting* the buildings to the site is an impossible one to apply.

> You should begin with a discipline even if it is arbitrary, because the site is so screwy—you can always break it open later.[32]

Petra is learning to acquire a creative and imaginative intellectuality. What is being created here are representations. In contrast with Gösta the boat-builder, Quist and Petra are not working directly with reality. This gives them a greater freedom.

Quist wants to introduce a discipline, a geometry, to get round Petra's problems. He starts by putting in a North-South line. He continues to make sketches. He arranges the buildings in terraces. Some of his sketches look like this:

Figure 2: A few of Quist's sketches[33]



The sketches are not fully comprehensible to anyone not familiar with "design language." For this very reason, it is important to include this figure here.

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32 Ibid., 49.
33 Ibid., 51.

Petra accompanies Quist on his journey of discovery through the sketches. At the end of the review they go through what has occurred, they describe and reflect upon the path that has taken them to where they are now. Petra will afterwards continue with *her* work—on that subject the story is silent.

Let us return to the question of communication and the language of architecture. Although Quist does not explicitly teach the right way to do things, *he describes what he is doing* while he is sketching. This way of putting it may be misleading, as Schön also points out. It is not the case that he does something, sketching, which he then also describes in words. His words and the sketching constitute a unity of meaning, which Schön calls design language. This has to be acquired by learning to see—including seeing alternatives—and to understand; that is, learning to pay attention in the course of observation and action.

The above description of the design review fails to capture entirely the "dialogical" structure that permeates the encounter between Quist and Petra. This is not a dialogue only in the sense that two people are speaking to one another, frequently in design language. What we have here is the construction of dialogically structured knowledge. Both Petra and Quist make sketches, they work together on a problem—in order for Petra to learn.

This is an excellent example of "learning by doing." This dialogical structure is unlike the cello master class in several ways. It is, for example, a cardinal sin for a teacher of architecture to say "you should do this—to get it right." And yet, ultimately, this is what Casals also warns against.

The dynamic at work in the co-operation between Petra and Quist can be summarised under several headings:

- They *experiment*; testing their way forward in an interchange between the whole and the part; at certain stages one of them provides guidance, at others they experiment together.
- This is a process which takes a *long time*, made up of repeated attempts to find new approaches both to the parts and the whole.
- Petra learns to pay attention both to what Quist does and to what *she does herself*.
- Both teacher and student alternate between *commitment* and *detachment*. The first proposed solution is Petra's own. She then has to "detach herself" from it and find a way of imagining herself into—and participating

in—Quist's proposal. And vice versa, Quist has to open himself up to Petra's proposals. But at a later stage, he has to detach himself from what she puts forward in order to become absorbed in his own thought process; the same applies to Petra.

– This pattern of alternation also applies in relation to each person's own proposals, in *directing* the sketching and *allowing the sketching to speak*, so that the unintended and the uncontrolled can also make themselves known.

Being, Doing and Experiencing—Embodiment

We shall now turn our attention to the body, to embodied being and to bodily experience. The following examples derive for the most part from the field of physiotherapy.

The aim of physiotherapy, says Susan Rosenberg, a physiotherapy teacher and researcher, is integration, "getting patients to live within their bodies and learn to work with themselves despite any functional barriers."[34] It is on the basis of her own experience that she writes:

> One's being has to be the starting point for any physiotherapeutic process which aims to teach patients to find their bodies and find their way around inside them. Being is also the basis for being able to manage the feelings that the patient projects on to the physiotherapist, as well as the feelings and relations evoked in the physiotherapist as part of the interaction. This is a prerequisite for a developed empathetic ability.[35]

Being, which is of crucial importance both for the physiotherapist and the patient, is contrasted with activity, or doing, which has been dominant in traditional physiotherapy where the patient is seen primarily as someone (or something) to be trained.

What is it, in fact, that is being treated in physiotherapy? Simply the patient's body, or both the body and the soul? This is a key problem, although this formulation of the question should be avoided as it presupposes a dualism between the body and the mind, between the body and the person. This

34 Susanne Rosberg, *Hur handskas den psykosomatiskt orienterade sjukgymnasten med patientens regression i den sjukgymnastiska behandlingsprocessen*? (Stockholm: Karolinska institutet, 1990), 24.

35 Rosberg, *Hur handskas*, 34.

dualism dominates Western thought—it is particularly noticeable in the way knowledge is conceptualised—and can easily lead to seeing the body as an *object* in the world, an object that can be affected by illness, be treated and so on.

Instead we might say: We are our bodies. Human existence is a bodily being-in-the-world. Or expressed slightly differently: *the body is our openness to the world*. Dualism, however, is always there as an undercurrent, it pervades our language and our ways of thinking—not least in the fields of science and medicine. It can perpetuate itself without becoming apparent or being openly discussed. It frequently functions as an unstated ideological presupposition.

In order to achieve the integration which Susanne Rosberg sees as the goal of physiotherapy, it is necessary to go beyond this dualism in understanding knowledge and action. Gunn Engelsrud, a Norwegian physiotherapist and researcher, also opposes this dualism. She defends what she calls a living phenomenological understanding of the body, based on a phenomenological-existentialist tradition.[36]

According to Gunn Engelsrud, the way the body is received and understood is of crucial significance for therapeutic work.[37] If the body is seen as the centre of experience and knowledge, this makes possible a better understanding of the bodily and verbal dialogue so central to physiotherapy, and not only to physiotherapy. The body is a "home of our own" and we "receive" other people through the body, says Engelsrud.

At its best physiotherapy can create—and at its worst obstruct—this kind of understanding on the part of the patient, and this in turn can create or obstruct a positive outcome to treatment. Let us just linger for a moment with the "philosophy" before we consider some of Engelsrud's examples:

> The human being exists, acts and reflects as a living body. In other words: It is through the body that the human being "has" the world.[38]

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36 Gunn Engelsrud. "Kroppen – glemt eller anerkjent?" in *Moderne omsorgsbilder*, edited by K. Jensen (Oslo: Gyldendal, 1990), 160–181.

37 Even where I fail to provide page references this is based entirely on Engelsrud, "Kroppen," up until the concluding part of the section, where I make use once more of Rosberg, *Hur handskas*.

38 Engelsrud, "Kroppen," 164.

It is as living bodies that we are in contact with other people—we are interconnected in this way. This can be contrasted with the way human beings and knowledge are seen in dualistic terms, where people *influence* one another and are the *cause* of the reactions of others, and so on.[39] "Influence" and "cause" connote an external or objective relation between people and their actions—to the extent at least that these terms have been developed in the dominant strains of Western science and philosophy. Here our bodies are seen as something separate, not as interconnected in a living way.

A therapist, or care worker, who wishes to function reflectively as a practitioner, ought, Engelsrud says, to have insight into who she allows the patient to *be*, and who she herself *becomes* in relation to the patient. This involves giving the body due importance by working with one's own embodiedness: with the boundaries of the body, its feelings, ways of moving, etc. A professional therapist has therefore to renounce what she may feel to be the proper professional detachment and knowledge "in order to be able to participate attentively in an embodied encounter."[40] This does not, however, involve a refusal to reflect but a being open to reflection through the body.

The significance of bodily awareness, reflection through the body and similar concepts have to be understood and consolidated in a context of embodiment. What is at issue here is "tacit knowing," where words can only serve as signposts. Engelsrud provides two examples to show bodily encounters between the physiotherapist and the patient. They are taken from therapeutic encounters between physiotherapists and children in a local health centre. The treatments were recorded on video.[41] In both cases the therapist is a woman and remains anonymous.

The first example is a treatment situation involving a physiotherapist and a nine-year old boy with "problems of perception and co-ordination."[42]

When the boy has changed his clothes and they have stepped on to the floor, the physiotherapist says "Do you know what you should do now? You should move around to the music.… Do you like the music I've found for you?" When the physiotherapist says "music" the boy starts to move.

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39 Ibid., 165.
40 Ibid., 166.
41 See ibid., 160–161 and 168, for the background.
42 See ibid., 168–173.

He starts to dance and shows with his body that this is something he likes, he makes rhythmic sounds and moves his arms as though he were beating drums. He allows his body to become more relaxed than previously in the session. His associations to the music are given direct bodily expression.

The physiotherapist does not, however, receive the boy's bodily expressions. Instead she talks about what the boy is supposed to do when the music stops. She is focused on giving instructions and is always one step ahead of the boy. The boy is an object to be instructed and treated. The physiotherapist cannot "see" what the boy's body is saying, Engelsrud says. She fails to attend to the body in two ways: she is unaware of her own embodied being and pays no attention to the bodily being of the boy.

A common feature of the kind of "closed interaction processes" demonstrated in the first example is that the physiotherapist "avoids being, meaning that the body presenting itself is ignored." In such cases, the therapeutic treatment is frequently dominated by exercises and actions that exclude embodied being.[43] The mutual embodiedness that links the participants together at a pre-reflected level cannot be expressed and made use of.

In the second example, only the outlines of which will be alluded to, the patient is an eight years old girl, whose problems include overweight and inadequate bodily control. Any attempt to summarise the typical features of this therapeutic situation turns it into the exact opposite of the first example. The physiotherapist immediately receives the girl's embodiedness and makes use of the encounter to create a common reference point. Then the mutual *bodily dialogue* continues. On both sides, there is a sense of embodied presence which means that the (whole) girl can participate and so make progress.[44]

The points of contact for the mediating power of the body are many and include movement, touch, breathing and body language. A division of this kind may, however, be misleading. It is in an encounter in which specific, pre-defined "signs" are not identified, in which a specific "diagnosis" is not made—that an opening is created for bodily understanding and dialogue.

> … it is through the open acceptance of our own embodied existence that we become able to permit the embodiedness of the other.

43 Ibid., 171.

44 For a more detailed description of the treatment situation see ibid., 173–178.

> The body should therefore be re-established as the source of experience and the centre of being.[45]

Let us now return to Susanne Rosberg and the research she carried out on—and together with—experienced physiotherapists. She, too, used a video-recorder. The focus is on the body as the source of experience. She talks about the physiotherapists' *use of themselves*. One example of this relates to breathing:

> In order to be able to give patients the opportunity for deeper contact with themselves, physiotherapists work with their own concentration and bodily presence. Physiotherapists describe the use they make of what they can sense in their own breathing, when they attempt to accompany the breathing of the patient in order to gain an understanding of what is occurring within the patient and in this way make appropriate adjustments to what they are doing.[46]

Perhaps we could talk here about a conversation in an embodied sense, *being together* and *being present*. And we could mention once again bodily/embodied attentiveness. Attentive listening is the key, as in other kinds of conversation.

One of the physiotherapists, whose treatment methods Rosberg has studied, says in relation to her patients that she "goes into their breathing" in order to *stay with* them. She uses the whole of the body as a sounding board, although breathing serves as the shared heartbeat of the encounter.[47]

> It could be said that /physiotherapists /make use of their perceptual ability to receive the whole patient into their own bodies and "taste" what is going on in the patient in order to decide what to do. This form of sensory eavesdropping may be considered a particularly crucial professional treatment tool since aspects of communication at the non-verbal level are so prominent in the work of the physiotherapist.[48]

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45 Ibid., 179.

46 Rosberg, *Hur handskas*, 59.

47 See ibid., 60–61. It is not clear in this paper whether it is always the same physiotherapist who is talking. Susanne Rosberg has also spoken of the same phenomenon in the work of her own practice.

48 Ibid., 70; she also points out that this degree of receptivity creates problems for the physiotherapist, in the form, for example, of various kinds of undesirable "regression."

Embodiedness has to be taken seriously if any understanding of knowledge in action—physiotherapeutic knowledge, for example—is to be gained. And this means taking seriously being in the body—the bodily being-in-the-world. "Action" should not be so restricted in meaning that it excludes "*being*," in which case all that remains would only be goal-directed, object-oriented action.

"Experience" and "perception" are frequently given too restrictive a meaning, particularly in epistemological contexts. Sometimes it may, in fact, be necessary to "receive the whole patient into one's own body." The whole of the body is a "sensory organ."[49]

Human Roles—the Order of Things

We often imagine actions as being the result of a totality of feelings and convictions—the "driving forces" behind action. Actions are at the end, so to speak, of a chain reaction. This image is a one-sided one. Erland Josephson, the Swedish actor and man of many talents, serves to illustrate this point.

Ingela Lind interviewed him before the publication of his book *Rollen* (The Role):

> We talked about acting and about the actor often being driven by a peculiar mixture of shyness and exhibitionism. But shyness is the dominant factor, Erland Josephson thinks. The actor needs someone to give him the right to express himself. Is that true, I wonder? Actors don't usually find talking difficult. The problem isn't silence but the lack of a centre, the fact that they drift around playing roles off-stage as well.
>
> – Real discussions among actors are rare. Our views are seldom thought through or important even. An actor looks for his anger, his feeling. You find a place for your need to express yourself in various ways, in different roles or in real life. You think a particular thing because you need to be angry, instead of the other way round. Our feelings are so practised. We learn to skate across the magnificent experiences we touch on through the texts we perform.[50]

And in *Rollen*, Josephson writes:

> It is often difficult to discuss things with actors. We are not only testing our arguments, we are also testing our own involvement in the argument. That's why we

49 Susanne Rosberg points out that this is only one aspect, one can also "lose oneself in the sensuous" and then no knowledge formation can take place.

50 Ingela Lind, "Det storslagna frestar," *Dagens Nyheter*, August 27, 1989.

> find it so difficult to give in. A discussion is not only a demonstration of intellectual skills. It is an exercise in empathy. Next time we may be able to practice our empathy for the very opposite viewpoint. Intellectual faithlessness may be a form of fidelity to our profession.[51]

The distinction between what comes from the inside and what from the outside is by no means obvious.

Let us leave Josephson and the final example in this chapter based on examples. Appropriately, we conclude with a further example of a tension, for tensions characterise the area of knowledge in action.

The examples I have produced—or rather reproduced, are of course not intended as "data" or "empirical evidence" for me to investigate and build a theory on. The examples are part of the theory; they are already structured.

The examples also provide material for comparison, both for myself and for readers from different backgrounds. There are many points at which to find the way in.

The rest of this book continues to build on these different examples. The examples, however, are not my own constructions, not fundamentally at least. They are based on experiences of reality, in reality. This means they have a relative degree of autonomy. The sources can be investigated still further. My structuring of the examples may be questioned. In this way my text can be seen in another light. Critical questions can be put.[52]

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51 Erland Josephson, *Rollen* (Stockholm: Brombergs, 1989), 138.

52 The "relative autonomy" of examples has been underlined by Gunnar Skirbekk. Cf. Gunnar Skirbekk, "Praxeological Reflections," in *Praxeology*, edited by Gunnar Skirbekk (Bergen-Oslo-Stavanger-Tromsø: Universitetsforlaget, 1983), the section "The Power of the Example," 127–131, and Gunnar Skirbekk, "Pragmatischer Naturbegriff? Anmerkungen zu Habermas," in *Die Pragmatische Wende*, edited by D. Böhler et al. (Frankfurt am Main: Suhrkamp, 1987), 221–222. Cf. also Bengt Molander, "Praxeology," in *Routledge Encyclopedia of Philosophy*, Vol. 7, edited by Edward Craig (London: Routledge, 1998), 647–49. I will be returning to the subject of examples in chapter 8.