2 THE ACT OF CREATING KNOWLEDGE

In Chapter 2 you will take part in a number of issues, questions and actions, which you may face, when you are involved in knowledge-creating work. In such real situations, it is necessary that your positions are based on deepened thinking as well as a creative attitude, this in order to build a serious foundation to the "adventure" that is offered by investigative work in general and by research in particular. It is about testing that awareness and self-reflection which we brought up at the end of Chapter 1. In order to illustrate this, we have chosen a practical theme for this chapter, entrepreneurship, which is *indeed* a relevant area for methodology in the subject of Business.

A METHODOLOGICAL START

In order to provide a basis for the methodological *modes of thinking* which were developed in Chapter 1, we will here relate these modes to knowledge-creating reflections and actions in relation to a specific study area. It is our hope that this will provide even more substance to the reader's thinking and understanding of what this book on methodology will be all about at this early stage. We have chosen entrepreneurship, which is about the ability to think in new directions and realize them in action. If we, as creators of knowledge, intend to study this phenomenon we have to prepare ourselves for a number of issues to decide on, issues which have a direct connection to those brought up in Chapter 1.

Our purpose is to highlight a number of *aspects of deliberations* which a creator of knowledge should reflect upon during the very process of designing an *operative paradigm*, a process which, according to what has been said before, takes place starting from the *methodological view* chosen by the creator of knowledge, based on his/her convictions, and the study area which is at hand, in this case entrepreneurship. We will, with a number of deliberations, illustrate this complexity following as far as possible the process from beginning to end, but we also intend to make it as easy as possible for the reader, keeping in mind that this is an introduction and thereby renouncing details and excesses. The chapter then becomes a kind of methodological start to that intensification which will gradually take place through the whole book.

TO THINK AND TO REFLECT CRITICALLY

To think and to reflect critically means philosophically to develop alternative ways to think about and to look at things. And this, in turn, requires imagination. Critical thinking is consequently intimately related to a person's creative ability and his/her ability to think unconditionally. And to think unconditionally is not easy. It often calls for more than most people think. We often hear others, or ourselves, saying: "Let's start from scratch", designing a new effort to create knowledge. We then may remind ourselves that it takes longer to be scratch-thinkers than it takes to be scratch-players in golf, that is, to reach a handicap of zero.

Let us, with a very simple example, illustrate this idea about *imagination* as a requirement for critical thinking. In an interview you ask an entrepreneur to present the *unique* characteristics and content of entrepreneurship. As an answer to your question the entrepreneur blinks seven times and says that this is the root of entrepreneurship. You do not get any other answer. Your first thought may be to dismiss the whole thing as a strange quirk. It does not fit with the answers you expected. Seven blinks is also no part of any theory for describing entrepreneurship. So what to do? Well, you may start to generate a number of imaginative deliberations in order to try to get a perspective on the answer. Let us "play" some such answers to illustrate what we mean:

1. The entrepreneur may want with his answer of *seven* blinks to indicate the importance of *uniqueness* and the *childlike mind* of entrepreneurship. In the world of *fairy tales*, it is possible, for instance, to find Snow White and the *seven* dwarfs. It was the first film by the super entrepreneur Walt Disney, and it was his stroke of genius to give individual and *unique* traits to the dwarfs. That entrepreneurship is about daring to be unique, to believe in oneself and always be first, just like Walt Disney was with most of what he did.
2. Maybe he wanted symbolically to point at the wonders of the world, which are *seven* in numbers – to show that entrepreneurship is about creating small or big *wonders*.
3. Maybe he wanted to compare entrepreneurship with what is referred to as the free arts during the Middle Ages – *artes liberalis* – which were *seven* in numbers – demonstrating that entrepreneurship can be seen as *venturesome art*!
4. Maybe he wanted to illustrate the story in the Bible about how the walls of Jericho tumbled down when the trumpets were heard for the *seventh* time – indicating that entrepreneurship is like going through walls of resistance. Sir Richard Branson (*Virgin*) has likened entrepreneurship to going through a wall.
5. Or maybe he just wanted to say that the soul of entrepreneurship is located in the *seventh* heaven. It is to be in a state of intense, delight or ecstasy.

The pedagogical point is now *not* what the truth is about what the entrepreneur meant with his *seven blinks*. Those far-fetched explanations selected here have been deliberately chosen to inspire the imagination. It is about exercising your own mind in order to come up with new perspectives on what you intend to study. And with new and more perspectives you

reach farther, deeper and are able to generate more insightful results. In imagination you may also become emancipated from, and get a new perspective on, your own clichés. Not least, it is then possible to expose clichés that consist of pre-scientific concepts or jargon within the different methodological views, within the subject and in the study area. *So, creativity is a prerequisite for critical thinking and reflection*.

Seeing and thinking

Words can force our thinking and our acting in tracks that we do not consciously choose ourselves. If somebody comes up with a good entrepreneurial idea and some narrow-minded person glues *clichés* on it, like unrealistic, fuzzy, idealistic or naive, then a direct hindrance for getting the idea assessed on its true merits exists. It may be the same in a research process. *Scientific concepts* like reliability, objectivity, dialogue, interview, sample, system, component, structure of meaning, methodics and analysis can directly focus the interest in a way that makes the creator of knowledge think along some predetermined tracks. In the same way *pre-scientific concepts* in our own subject, such as cluster, risk, network, Business concept, brand, market, best practice and benchmarking, may make the creator of knowledge follow a certain pattern. Language may consequently be an encyclopedia of what we do not see *as well* as what we do. And the different *methodological views* are in many aspects different linguistic encyclopedias of how research should be done (we know that Kuhn originally picked up his *paradigm* concept from linguistics).

In MIT an experiment was done with a group of students who were about to get a new teacher. They were divided into two groups and they were given the same detailed description of the competence and characteristics of the new teacher, except for *one word*. In the papers of one of the groups could read that the teacher was a "rather warm person", while the other group could read that he was a "rather aloof person". The teacher met the two groups at the same time and gave his lecture. When the students afterwards were asked about their opinion of the teacher, it appears they differed widely. The group we can call "warm" experienced him as very sympathetic, while the group we can call "aloof" experienced him as much more unsympathetic. And what conclusions can we draw from this?

What the students believed to be their own independent thinking was in fact generated by a cliché. The same phenomenon – same teacher and same lecture – was experienced very differently. This type of thinking in clichés triggered by small words also has a tendency to reinforce itself.

There are probably many who ask themselves whether we should throw away our clichés. Of course not! They are in fact a prerequisite for us to be able to handle our environment and ourselves, and to conduct studies creating knowledge. *Our different methodological views could, after all, be seen to represent different forms of thinking in clichés.* On the other hand, it is possible for a person with a critical and imaginative mind to be able, in short intervals, to emancipate him/herself from this kind of mind control. And by doing so, be able, as a creator of knowledge, to experience investigated areas in new ways. This is one of the ambitions of our book on methodology.

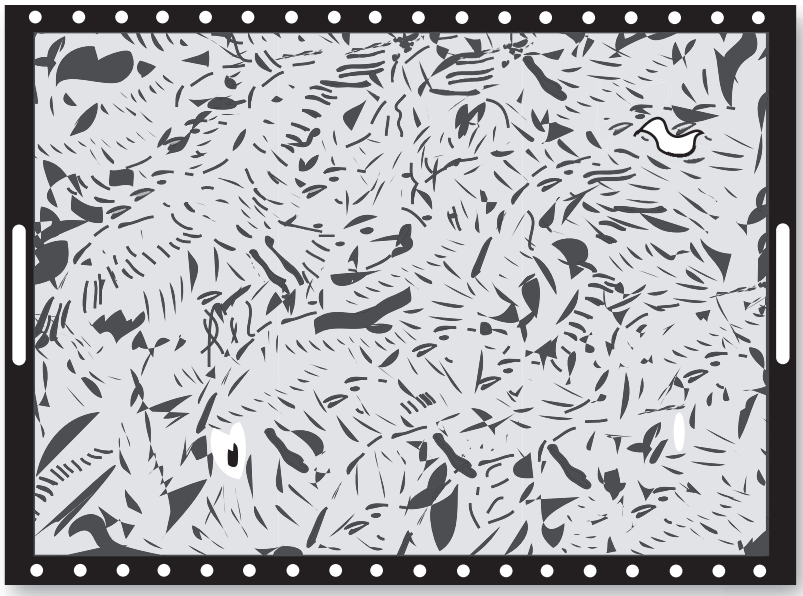

Figure 2.1 Study Area

Among other things, entrepreneurship is about being able to discover that Business quality which clichés prevent us from seeing. To see beyond seeing, so to speak and to develop oneself, new ideas and new ventures. Let us look at Figure 2.1. When facing something as chaotic as this picture seems to be it is easy not to perceive *immediately* what actually exists as the *inner quality* of it. Let us play with the thought that this is the picture of entrepreneurship you meet as a creator of knowledge, when for the second time you experience, your study area, keeping your first step, the seven blinks mentioned earlier, in mind.

The feeling of cognitive chaos, meeting what is different, is often related to the fact that our inner map cannot immediately make a clear pattern of what we see. We may perhaps lack relevant *ultimate presumptions* or *clichés* in order to be able to quickly structure what we see. We described this in Chapter 1 as "the way a problem appears to a creator of knowledge is intimately related to *the* view he/she is using for his/her reflection". In real life many people leave this type of situation and call it fuzzy. And they lose the golden nuggets, which are associated with discovering. Research as well as entrepreneurship is basically about *self-reflection* and *awareness* – trying to discover how clichés, or the lack of them, make us blind. To see beyond seeing, so to speak!

Small things may sometimes lead to quite large changes of awareness. Consider what happened to the students at MIT when the word "warm" was changed for "aloof" in the description of the teacher. Here it is easy to see what the choice of different words can do. This is not an irrelevant experience for all those who want to design an *operative paradigm*

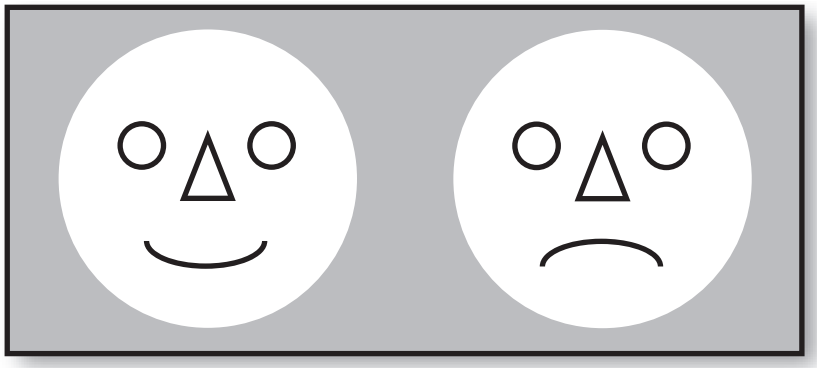

Figure 2.2 With the Naked Eye

and create knowledge by using questionnaires or interviews, for instance. Look at the next picture (Figure 2.2), which is closely related to this phenomenon of words.

The picture in Figure 2.2 is a typical *Gestalt phenomenon*, which means that the whole is something more than the parts in it (systems thinking). Here we have only changed the mouth, but suddenly the eyes appear happy or sad. This can give some indication what body language can mean when interviews are conducted. Or what *single details* can mean for the designer of the impression of the whole. Or how a system, something whole (a company), in fact can change through a minor change in some of the internal components.

Let us now see what the "chaotic" picture in Figure 2.1. was hiding for all who did not see what inner quality was in it – see Figure 2.3. That is, entrepreneurship with a unique ability to have an overview and to move fast, combined with the ability to be able to glide in the seventh heaven.

As soon as you see the gull in the figure, something strange is happening. It establishes itself in the brain and occupies seeing. After this, looking at the study area ("the chaotic picture" in Figure 2.1.), the gull appears at once – that gull which was originally so difficult to make out. This is experienced by everybody in daily life after having bought a product of a new brand. What before has been seen very little of, now seems to exist everywhere. This selective perception is a strength as well as a weakness. Think about when it can be one or the other. Also think about how this thing with selective perception can also influence the choice of different methods and techniques when an *operative paradigm* is about to be developed. And do not forget to keep in mind that a *methodological view,* to a large extent, is controlling how this development process is conducted; that is, what will be seen and what will not be seen!

What *cannot* be seen using *one* methodological view *can consequently*, after having changed to another, be as clear and evident as the gull becomes in Figure 2.1, once it is set out as in Figure 2.3. Then it also becomes difficult to recreate the original, somewhat chaotic picture, where the gull did not appear immediately. You have converted to another seeing, so to speak, which also happens when you change methodological view. We want to stress, however, that our

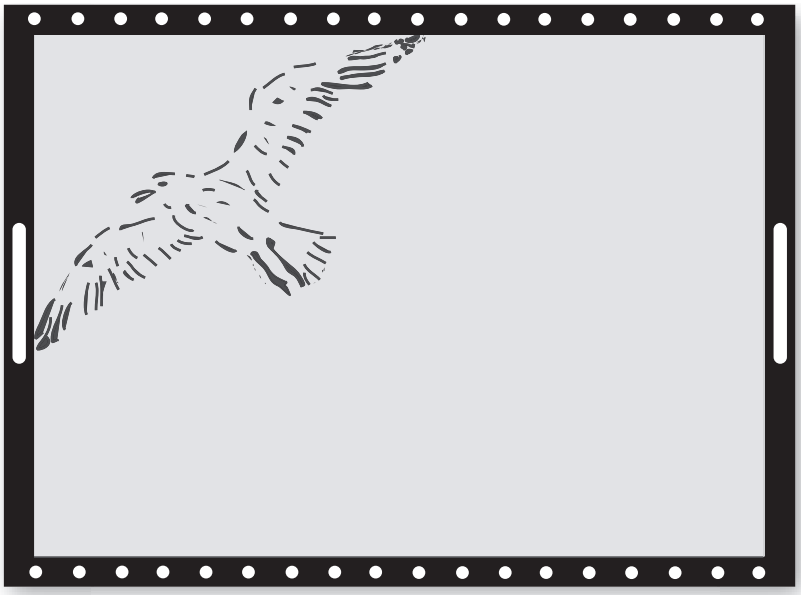

Figure 2.3 "Entrepreneur" in the Seventh Heaven

simile is very simplified and that change of methodological view is associated with personal ransacking and controversies, which are related to *ultimate presumptions* and therefore your whole set of personal convictions.

So, now we have seen a picture which was about *not immediately seeing what was there,* and also about what happens with seeing once you have seen it. But there are also pictures where we *immediately see what is not there*. We add something, so to say, and create an optical illusion. Something to think of as well, when facing a study area. Can my methodological view, my methods, my pre-scientific concepts, create optical illusions? And if so, which ones?

In Figure 2.4 most people see the NATO-type star in the picture, which is *not* there. It exists only as a mental cliché in our heads, not in the picture! And by this we have come to an interesting point in this exposition! Try at this stage to emancipate yourself from the visual impression of the star in this picture, or of the gull in the previous chaotic picture (Figure 2.1). This gives a small taste of how difficult it is to think from scratch, to think unconditionally.

We can go on like this and illustrate things and make small changes, which will completely modify our experiences of them. *This can also give an indication that nothing needs to be too small in a study in order to be able to grow and point at something bigger.*

In the next picture (Figure 2.5), we can see how pairs of *similar* figures assume a *totally* new form with *minor* changes in the broadness of the lines in the figures. Here we can play with the thought that this has been preceded by the ink flow to the different symbols in the figures suddenly having taken new directions, that is, by something insignificant that has been operating for a longer time. Or that the flow of involvement and joy in a company has

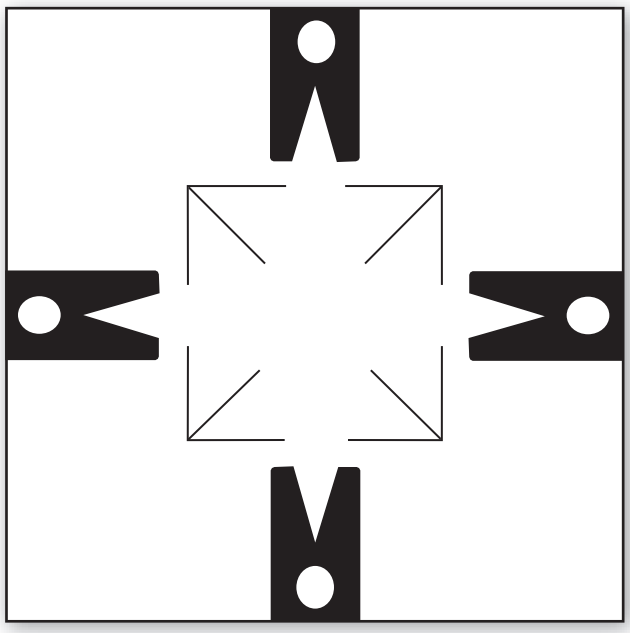

Figure 2.4 Seeing is Believing?

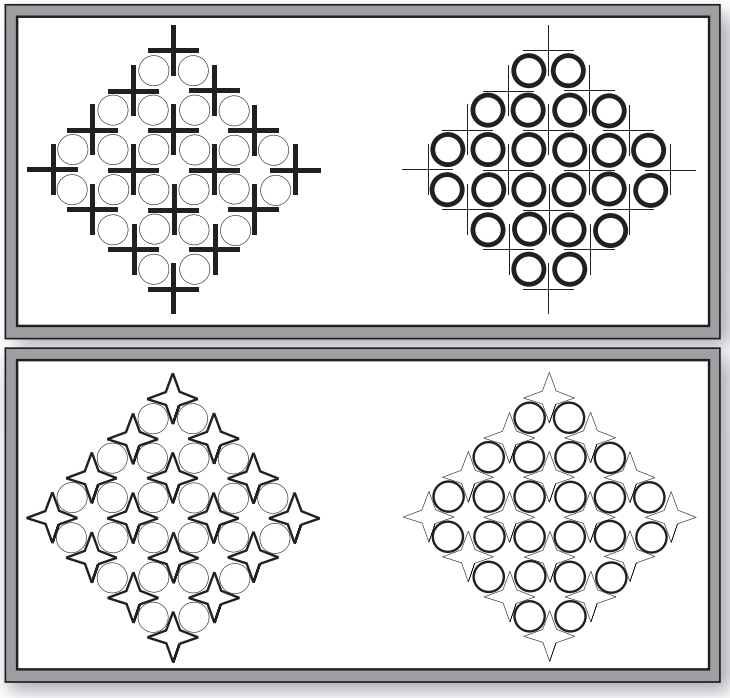

Figure 2.5 On the Whole

declined for a longer time, so that suddenly, the day the company is facing a technological shift in the market, there are no new ideas to be had.

Many small, apparently *insignificant*, changes have consequently "in secret" led to *significant* and bigger changes. In this way we can also look and try to describe what is happening in a research project, in order to better understand *the importance of insignificancies* to the whole. The world as a knowledge-creating *possibility* therefore, also consists of *the exceptions*, *the paradoxes* and *the deviations*. The ability to discover possible changes in the small, which can lead to something bigger, requires imaginative mental skills in both the creator of knowledge and the entrepreneur.

The importance of the perspective

What does the perspective mean for our seeing? Take, for instance, a map of some well-known area and turn it upside down and it is clearly seen how our ingrained *perspective* has created a *mental cliché*. Maps are a kind of investigative pictures which will give us more detailed information than words can do, just like economic models. *Forms, lines, symbols and colors* are working here as clichés which are supposed to simplify. A well-known map turned upside down will change the prerequisites for these clichés and the map then becomes more difficult to use as an orientation.

Our ingrained perspective in the case of the map, with its clichés of forms, lines, symbols and colors, makes it possible for us to rather unconsciously orient ourselves on the map or in the real world. This is the strength of mental clichés. Their weaknesses include the task for the creator of knowledge to reveal through *problematization*. The *knowledge-creating point* with problematization – to make what is common uncommon – is that we then will think out new points of departure to use for an orientation, and in this way discover new aspects of life.

One perspective brings order and delimits what we look at and reflect upon. It also directs our attention to some specific aspects of reality while others are made invisible. Look at Figure 2.6 and ask yourself what it is and what shape the object has.

The perspective here becomes completely decisive for how one will perceive the shape of the object. The clock is round someone says. The clock is slightly elliptic, almost rectangular, says someone else. Who is right? The perspective becomes the decisive factor, at the same time as we can realize that an object can always be looked at from several different angles.

The French author Jarry (a predecessor to the theatre of the absurd) has commented on this phenomenon:

> Why does everyone claim that the shape of a watch is round – a manifestly false proposition – since it appears in profile as narrow rectangular construction, elliptic on three sides; and why the devil should one only have noticed its shape at the moment of looking at the time? (Shattuck & Watson Taylor, 1965: 23)

This way the perspective also points out a direction from which the onlooker is handling his/her reality. This can also imply what is acceptable knowledge and *normality* in a paradigm. The perspective can therefore be seen as a creator of safety by reducing ambivalence

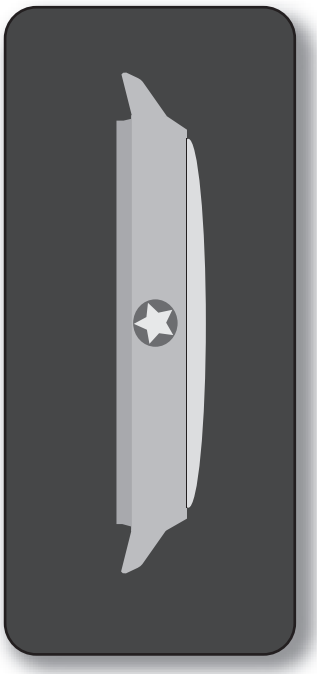

Figure 2.6 The Outlook

and uncertainty. But precisely because of this the perspective can be the major obstacle to discovering new ways to create knowledge and to develop new Business ventures.

To be *able* to look at something from several different perspectives, or to *dare*, which often go together, always gives the creative mind suggestions for new ideas. You should never, therefore, be afraid to put yourself in different perspectivistic positions when looking at something – both mentally and purely physically. To sit down on one's heels, for instance, makes it possible to look at something from a child's perspective. Look at the next picture (Figure 2.7) and speculate over what it can be.

Is it the egg of an ostrich in a jaw? Four hedgehogs eating from the egg of an ostrich? Or is it no ostrich egg? No jaw? No hedgehogs? Then what is it? A four-leaf clover that has been stuck to a black egg? Or is it possibly four elephants, which are drinking from an oval pool? Maybe it is a beginning of what is entrepreneurially possible?

To play with thoughts and perspectives in this way can allow completely new conditions and mind tracks to emerge with the creator of knowledge.

Understanding and explaining factors

In science we often use different *understanding or explaining factors* (variables) when we develop knowledge of situations, problems or phenomena. Transferred to a study of *successful entrepreneurship*, the concepts of *risk taking* and *proactivity* could, for instance, be used as

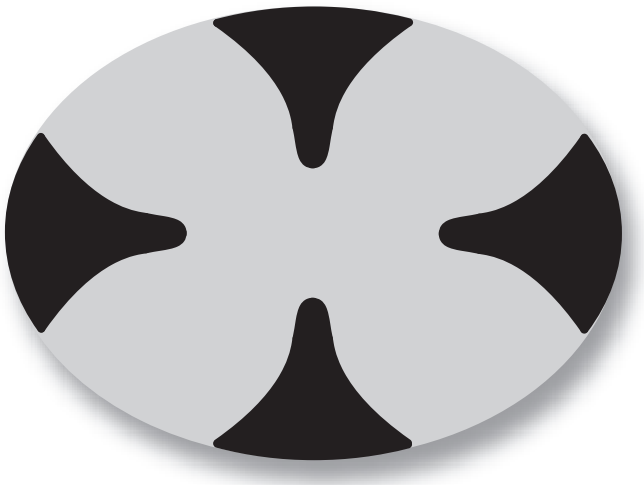

Figure 2.7 What is the Problem/the Opportunity?

such common *factors* (variables). If we say, then, that successful entrepreneurship is characterized by risk taking and proactivity, then these two concepts for creating understanding or explanation may be defined in many different ways by various entrepreneurs. It is also far from certain that the definitions used by the creator of knowledge will coincide with those in the field being studied. This is the problem of creating knowledge which has to be considered in every study which tries to reflect reality: *that what we study really is what we intend to study*. Sometimes this relation between what we do and what we intend to do, is simple to check. Sometimes it is extremely subtle. And sometimes it becomes totally incorrect and we may not even discover it. One creates fictive explanations or misleading understanding, so to say. In other words, no creation of knowledge!

So, here it is about being very stringent, but also imaginative, with problematizing, defining and determining meaning in order to gain knowledge-creating results of value using *methodical procedures* and one's *methodics*. Let us illustrate this in a simple way by using Figure 2.8.

We see here how four completely different objects, lit from above, give the same *shadow picture*. Have we then found a connection which may possibly constitute an understanding or explaining factor to why all subjects can lead to *successful amusement* (compare successful entrepreneurship)? The question becomes whether that similarity we can now find in *all* objects could explain why these objects in *different* contexts can lead to something linguistically so *similar* as successful amusement.

We can consequently find that successful amusement in the different cases here is related to *one* explaining variable which exists in *all* the objects in question. We may also find that *all* have other variables *in common* such as: (1) that they contain dark sections; (2) that they can roll; (3) that it is impossible to see through them; and (4) that they can be carried one way or another at amusement. All these explaining variables can consequently be seen as

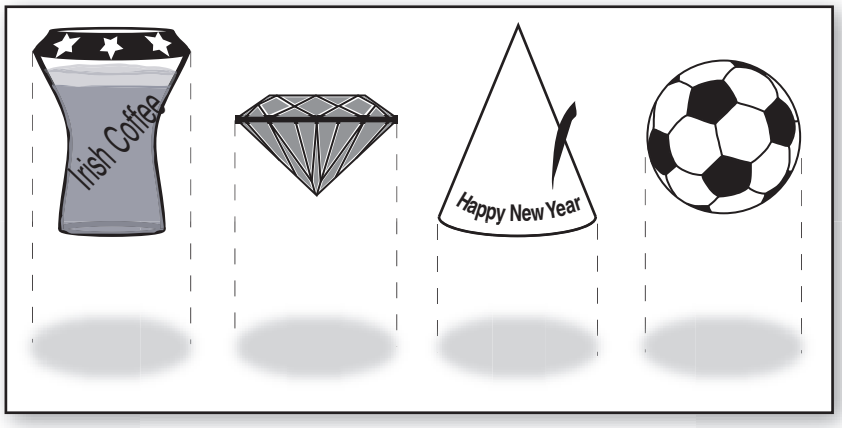

Figure 2.8 Cast a Shadow over the Results!

valid for successful amusement, together with the shadow picture. But the question still remains whether the variables explain what they are meant to explain: successful amusement (compare successful entrepreneurship, explained by risk taking and proactivity as variables).

So always ask yourself if it is shadow or surface variables you are studying, or if it is real objects in their right context.

THREE METHODOLOGICAL VIEWS

We have previously, on a number of occasions, said that we can see different *methodological views* in our subject and we have done so without providing their names. Not giving their names too early has been a deliberate choice on our side, because we first wanted to build up an understanding that there are different ways of looking at the world in which we act as Business economists. And these separate ways also give separate conditions for what we are creating knowledge of. We have also developed a mode of thinking (Chapter 1) in order to be able to describe the look of relations in *methodology* between stages and processes which are in there. Furthermore, in this chapter we have gone deeper into methodology by bringing up a number of aspects and considerations, which a creator of knowledge must keep in mind when designing an *operative paradigm*. We have come to the point, however, when it is convenient to introduce the three methodological views in brief. We do it in the same simplified way as in the rest of this chapter and do not ask for either totality or details at this stage.

We will present the three methodological views – *Analytical view, Systems view* and *Actors view* – in relation to the study area of entrepreneurship. First a few general points about this study area, however.

The study area of entrepreneurship

An entrepreneur's *Business concept* is both in small and large part about the *art* of *merging* the passion – the personal inner feeling and the dream of wanting to create something – with an idea rich in points for a market that may not even exist yet. And then in concrete *action* the entrepreneur goes on to develop an exciting and imaginative strategy, where the personal passion/dream and the point in the business concept constantly trigger and inspire each other toward new exciting combinations, in a development complex that will create in order to make businesses in a market.

This is normally understood *not* as a linear process from a starting point going straight toward a goal, but rather as a *wandering and searching* development, where one thing gives way to another, and inessentials turn into essentials and vice versa, which may very quickly totally change the prerequisites. Entrepreneurship is also more about creating anew and changing markets than about entering already known and established ground. This opinion we also often find with those we may call Business venturers with a capital V, that is, with Business managers who are creating the radical innovations or the really big reconfigurations of the market. Thomas Watson, the "true" optimist who created IBM, explained over and over again for his colleagues that every company in the world needs their machines, but the companies just do not know it yet. Watson is often referred to as having said "We know better than the customer what the customer needs!"

This is an entrepreneurial way to think which can also be illustrated by the following quotation by Apple's founder, Steve Jobs, who supposedly stated: "You can't just ask customers what they want and then try to give that to them. By the time you get it built, they'll want something new".

Another aspect, which also exists within the study area, is the importance of *feeling* for entrepreneurship. We may here quote another super entrepreneur, Sir Richard Branson, who created Virgin has claimed: "I never get the accountants in before I start up a BUSINESS. It's done on gut feeling".

With this so-called gut feeling, the entrepreneurs are "seeing through" our taken-for-granted mental clichés and establishing new perspectives, which give new meaning to realism. The entrepreneurially legend Larry Ellison, who started Oracle, puts it this way: "The secret with entrepreneurship is to identify what is wrong with conventional and traditional knowledge, and in ways of thinking".

The fact that new thinking and innovation also can be more difficult for the environment also belongs to the study area of entrepreneurship. That is, to study those social and Business-oriented contexts in which the entrepreneurs are placing their efforts and how they are received. Let us by using a few historical examples describe what in this respect may constitute the context of resistance and inertia of entrepreneurship in that socio-economic world in which they are acting.

In **1878**, the chairman of Western Union turns down the exclusive rights to the telephone with the words: "What use could the company make of an electric toy". He was possibly influenced by the American president at the time, Rutherford B. Hayes, who said in 1877: "An astonishing invention – but who would ever want to use one?"

In **1959**, shortly after Ingvar Kamprad had started IKEA, most Swedish furniture dealers said something similar to this: "I would not even like to call this Kamprad with IKEA a furniture dealer. A real furniture shop should have readymade furniture and home delivery. And it should be placed in the centre of the city".

In **1962** the Decca Recording Co brushes aside the Beatles with the words: "We do not like their sound and their guitar music is on its way out".

In **1997** the administrative manager T. Ruud in the Norwegian K-Bank claims: "Internet is something for young people 14–22 years old. This will not become any important area for K-Bank in the future!" In **2000** the same manager says: "Internet will become the most important distribution channel for K-Bank in the future!"

If people who are deeply involved in BUSINESS activities have problems in understanding the transforming power of entrepreneurship, we may be able to predict that it is also a delicate task from a research point of departure to create knowledge in this subject and area. We will present some "unconditional" questions in the next section in relation to reflections that may start such a creation of knowledge. Still in the same simplified spirit as before.

Some "unconditional" reflections over the area of entrepreneurship

What we refer to here, as "unconditional" reflections are unconditional in the sense that they are not connected to any explicit methodological view or paradigm. This does not deny the fact that different methodological views, through their different *ultimate presumptions* will look different as well as act differently, and also use different language for problematization and come up with different results in the design of the *operative paradigms*. However, as mentioned, we want the reader to consider his/her own answers to the questions below, before we provide our answers later in this chapter.

- *When we start our research process in the area of entrepreneurship should we then first:*
    - orient ourselves about the *ultimate presumptions* which different views of creating knowledge are based on, or just believe that we could go on unconditionally in the study area?
    - decide which *methods and techniques* we will use, or first make clear to ourselves how they are related to ultimate presumptions?
- *When we then attack the study area, which questions should we put? Which perspective should we choose? Should we:*
    - look for similarities in what is different? The regular in the irregular? Or vice versa?
    - look for what the entrepreneurs have *in common* as explanations and understanding? Or vice versa?

- try to understand the individual entrepreneurs and their context? Or look for more general aspects independent of the different contexts?
- look for the different contexts which the entrepreneurs are part of and describe those relationships which exist and what they mean for the entrepreneurship in question?
- put up hypotheses and test them? Generally en masse or through a few cases where the different opinions of the entrepreneurs are related to their own contexts?
- look for answers by studying overall social structures of rewards, laws and taxes?
- look for answers by acting together with the entrepreneurs concerned to implement a project?
- look in the literature and research reports and then through empirical studies to confirm and/or reject previous theories in the area? Or vice versa, first empirics and then theory?

Your intentions *when looking* will give an *answer* to! In the best of cases. But it is not necessary that *those questions* you come up with and look for an answer to are the best to explain and/or understand a study area.

- *After these questions should we then:*
  - try to clarify the different scientific and pre-scientific *concepts* in the study area to be able to see the mental clichés, or are they embedded beforehand in the questions above? So in this way before we ask our questions we try to clarify them?
  - create a set of concepts and definitions by which we can accomplish our knowledge-creating work? Or should we let them develop as we go on with investigating the study area?
- *Are we now clear to design our operative paradigm and:*
  - set about which *methods* and *techniques* we should choose beforehand and/or develop? Or is this to be done as we go on in a wandering and searching process similar to entrepreneurship, that is, the study area?
  - concretely design a *methodics* for our process of creating knowledge? Or is the methodics also developed by what we meet, so that one thing gives way to another, in a process close to wandering and searching?
- *How are we then to present our results? What type of answers should we provide? Are we to:*
  - look for *general explanations* which are seen as valid in most cases? Or are we looking for *understanding-oriented* descriptions, which are connected to the specific cases?
  - develop descriptive languages which mean that action is placed in focus, that is, the very act of achieving change and understanding in specific cases? Or are the descriptions to be connected with reports, which are spreading our knowledge further? Or both?
  - write and/or act mainly for the scientific community or for the society at large, or only for those involved? Or both?

Starting with this type of question we imagine that the creator of knowledge *in spe* (Coming, Future, to become) is preparing his/her next investigative and research-oriented study. Once a creator of knowledge has then clarified to him/herself such matters as *ultimate presumptions* and choice of *methodological view*, based on his/her own personal conviction, the process will not be so extensive in the future. A person has then adopted a way of creating knowledge, which is based on *methodological awareness and self-reflection*. That is what this book is trying to teach.

Let us now talk about our *three methodological views* briefly with respect to the questions just presented. Our ambition is to illustrate how the methodological views most likely will present different perspectives when creating knowledge in the study area of entrepreneurship (as well as in other study areas, of course). The intentions of the questions above were to focus the following *five* points of departure:

- Ultimate presumptions (see "Paradigm" Box 1.6 and Figure 1.9)
- Interesting issues and perspectives
- Conceptualization
- Methods and methodics
- Results

The analytical view

Ultimate presumptions

The analytical creator of knowledge is in general not very interested in philosophical matters. Nevertheless, he/she, perhaps unconsciously, makes certain assumptions about the reality in which he/she is operating, or functions as if these assumptions have been made.

The analytical view presupposes that *reality* is *filled with facts* and independent of individual perceivers. Being fact-filled means that it both contains objective elements, that is, external conditions for entrepreneurship, and that it also contains a number of opinions and ideas which people have about entrepreneurship, even though the creator of knowledge, for instance, the entrepreneurship one, may possibly think that several of these opinions and ideas are wrong. *Reality* has also a *summative* character so that new scientific findings about entrepreneurship make the picture of this phenomenon more and more complete.

In the *conception of science* of the analytical view is included a number of entrepreneurship concepts. However, it is a common opinion, that, due to the fact that the subject, in the modern sense of it, is so young, there is a great degree of confusion and many unclear points in entrepreneurship as an academic subject and that there are many, often diverging, opinions of the meaning of its central concepts.

One *scientific ideal* is that entrepreneurship scholars will be able to come up with a common agreement about what the subject stands for, what its most central questions are, and how these questions are to be tackled scientifically. Many voices have been aired that this would give the best basis for attacking and conquering the entrepreneurship study area. The

majority of (above all transatlantic) entrepreneurship scholars assert that what is needed is *clearer theories, more distinctly formulated hypotheses and, most importantly, statistically secured results*.

One *ethical* aspect of analytical entrepreneurship research is that its creators of knowledge can give advice to different decision makers (which they often do), butthey should make a distinction between the role of decision-making and creating-knowledge.

One *aesthetical* aspect of the same is that its creators of knowledge are very fond of "beautiful" graphs and "nicely" presented statistical arrangements.

Interesting issues and perspectives

The scientific ambition of the analytical view is to come up with *explanations* from a general point of departure. This means to come up with patterns, with regularities, with representative models. In other words, the analytical view looks at *regularities* and *similarities*, for what is *common* among entrepreneurs and entrepreneurship. Analytical entrepreneurship creators of knowledge are confident, by doing so, of being able to contribute to the development of the modern society, which in their opinion *stands or falls by its ability to be entrepreneurial*. They are also convinced that that the number of entrepreneurs and entrepreneurial ventures in the world never has been higher than today. For such a creator of knowledge the issue is to discover those *"laws"* that govern society from an entrepreneurial point of view. They are also interested in finding the conformity to a law of entrepreneurship at the level of a firm and at the level of the individual entrepreneur. *Typical questions* for the entrepreneurship creator of knowledge include:

- What are the relations between entrepreneurship and economic growth?
- Which political measures will encourage entrepreneurship in a country?
- What does the entrepreneurial personality look like?
- Which are the most important success factors in an entrepreneurial environment?
- Which are the most important steps to take at different stages of the growth of an entrepreneurial BUSINESS venture?
- How critical are different obstacles in an entrepreneurial process?

Conceptualization

The function of concepts, according to the analytical creator of knowledge, is to *catch the truth*. The truth is in the reality. The creator of knowledge is to depict this reality in the closest possible way, as objectively as he/she can. In the entrepreneurship case the mission for the analytical creator of knowledge is to find *the equivalence in reality* of concepts like "entrepreneur", "opportunity recognition", "BUSINESS idea", "risk taking", "profit orientation" and others. There is also a general belief here that some concepts are more important than others to *explain* entrepreneurship. The analytical entrepreneurship creator of knowledge is looking for them all the time.

Methods and methodics

Methods in the analytical view rest, of course, on the premise that they, as closely as possible, shall "hit" those forces which are governing the fact-filled reality, reality then seen as built up by laws of causes and effects. It is under such circumstances quite natural to look for two sources of data: (1) public statistics, above all such information, which has been collected by impartial agencies and institutions; and (2) answers to those who know and who have been there. It is important in the second case for an interviewer to influence the answers as little as possible. Another important source of information for the analytical creator of knowledge in entrepreneurship is to acquaint him/herself with results from research done already.

Based as much as possible on what the creator of knowledge judges as of interest in this previous research, when trying to *explain* and not only to describe the study area in question, he/she feels that he/she is best guided by formulating *hypotheses*, that is, preliminary explanations which are formulated in the beginning of the study and which are to be tested (be confirmed or rejected) as the study goes on. One problem, sometimes expressed by analytical creators of knowledge in entrepreneurship is that there are so many *contradictory results*, which are caused by, they say, the fact that the subject is so young. However, they are convinced that as knowledge of entrepreneurship will gradually improve, existing conflicts and paradoxes will be eliminated or at least explained.

The methodics in the analytical view consists of well-defined steps to take. Following these steps is seen as a guarantee that valid results will be coming up as a result.

Results

The analytical creator of knowledge in entrepreneurship looks at his/her results as one more contribution to the truth of the subject in question, at best as *generalizable* explanations. As he/she feels as one part of a larger collective of researchers aiming in the same direction and guided by common *methodical procedures* and *methodics* (the analytical view is seen as very homogeneous), he/she asserts that it is of minor importance whether the results are conforming to what has been found out elsewhere, brings some clarity to some scientific entrepreneurship issue, or comes up with some new findings. In the last case it is not appreciated, however, if the results are based on definitions and conceptualizations, which differ radically from what is seen as the *dominant opinions* of the meaning of key terms.

Those concepts and definitions, which the analytical creator of knowledge in entrepreneurship is using when presenting his/her results are important in order for them to be accepted by other creators of knowledge in the same field and with the same orientation. This is clearly in line with the importance which the analytical view points out for language as a depicting and clarifying tool.

The result of a study based on the analytical view, it may be a consulting report, a general investigation or a research effort, is often based on clearly designed rules as far as general design and sections to be included are concerned.

The systems view

Ultimate presumptions

Philosophical assumptions made by a systems creator of knowledge are, consciously or unconsciously, as well as in the two other views, a kind of their own. The systems view looks at *reality* as consisting of fact-filled systems structures in the objective reality and of subjective opinions of such structures, which are treated as facts as well. Unlike the analytical view, however, a creator of knowledge in, say, entrepreneurship cannot see how different parts of reality can be simply added to each other and combined without those parts influencing each other. In other words, reality is *not summative* here.

The *conception of science* of the systems view implies studying the entrepreneurship reality as different wholes and patterns, where the entrepreneur is not looked at as an isolated individual.

The *scientific ideal* is to find these wholes and patterns as objective structures and to try to make every new systems picture better than the last, partly as more valid systems structures, partly as pragmatically more favorable concepts. There are a number of such systems pictures within entrepreneurship at present.

The *ethical* dimension has become more powerful in the systems view. This means in entrepreneurship, for instance, that because different *components* in a BUSINESS system, like employees, the founder of the Business, financiers, environmentalists, feminists, etc., depend on each other and because none of them favors negative results of entrepreneurship, different kinds of systems consequences of the phenomenon have more and more come out into the open.

Aesthetical aspects of the use of results from a systems-based study play a minor role according to the systems view. However, aesthetical aspects on the content of the report, its language, its graphs and its figures are often of great importance.

Interesting issues and perspectives

The systems creator of knowledge is convinced, of course, that entrepreneurship can only be explained or understood in its *context*. This context is therefore the place for the creator of knowledge to start from and interesting issues, according to him/her, are raised there.

The creator of knowledge sees the context as a system, where he/she is looking for *regular patterns, interactions and relations*. However, he/she also allows him/herself to bring *irregular aspects* of the context into the picture as well. All of this is to be part of a *systems model* or a *metaphor*, which is to *describe* and *explain* or provide an *understanding* of the entrepreneurial reality.

To be inspired and to relate to other research done, the creator of knowledge usually (but not always) starts in existing *literature* to look for research/consulting/investigations being done in the same field. These other efforts may also provide inspirations for interesting *analogies* to use, guiding the creator of knowledge in his/her design of the operative paradigm.

The perspective of the creator of knowledge has, as a consequence, that his/her interest is directed more toward different *situations* of structures and relations than toward general factors en masse, taken out of context.

The systems oriented creator of knowledge more often works as a discussion partner to, and as an interviewer of, entrepreneurs in the study area, than as an actor taking part in co-creating the future.

The basic perspective is that the right combination of circumstances at national, regional, industry and individual company levels will provide the solutions – and the systems creator of knowledge has a rather pragmatic attitude to which they should be.

Conceptualization

The systems oriented entrepreneurship creator of knowledge claims that a systems oriented view is the most successful way to go to bring the subject forward. The systems view has also entered the entrepreneurship area *with gusto*. There are few texts on entrepreneurship, which do not contain terms like clusters, industrial parks and regional development, to give a few examples of terms normally studied with a systems view. Concepts like network, interaction, organizational learning, innovation and design are also very common in system view studies with all the specific questions these concepts will raise.

Methods and methodics

Researching systems has several consequences. One is that a system can be extensive as well as complicated with many people involved. It might therefore be *a huge job* for a systems creator of knowledge to study, say, an entrepreneurial issue with a systems view, to participate in discussions and conduct interviews in a number large enough for a comprehensive and clear systems picture to develop in his/her mind. This requires also, normally, that the creator of knowledge should try to lay his/her hands on as much relevant secondary information as possible in order to supplement the picture.

Another methodological consequence of the systems view is based on the fact that a system does not appear overnight and that it has often existed for a long time. It is therefore often important for a systems creator of knowledge of, say, an innovation system, to clarify *the system's history*, including critical events that have taken place and important decisions that have been made along the way.

What has been said above naturally leads to a situation where an individual systems research effort rarely covers more than a few cases in the study area at the same time.

An interesting (or rather natural) aspect of methodics in the systems view is that its design is done to generate *pictures* of those systems which are believed to be there out in the fact-filled reality, that is, to *gradually* move forward to get better and better pictures of those real systems.

Results

It is quite natural that a more comprehensive report from a systems study contains empirical results that to some extent are *unique* to the study. What it might have in common with other systems studies are two things.

It may be based on the same *systems theory* as some other study or studies. This could, in entrepreneurship studies, be theories like necessary components in an entrepreneurial system, common mistakes made in an entrepreneurial start-up, or roles played by different participants in an entrepreneurial network.

Another aspect that a systems study report quite often has in common with other reports is that he/she often will come up with some (what he/she considers to be) *representative metaphor* (which the systems creator of knowledge can see as providing a kind of understanding, that is, it clarifies to him/her the system being researched in a deeper sense than just explaining it). In the old days, it could be a metaphor like a machine or an organism. In modern times, metaphors like power structures or value hierarchies are more common.

The actors view

Ultimate presumptions

When the creator of knowledge confronts his/her study area and starts to reflect on the ultimate presumptions of the actors view, it may in a simplified description look like this.

The actors view assumes that *reality*, as it exists for us, is a social construction, filled by chaos and uniqueness in the case of entrepreneurship, but also relatively stable structures, mentally anchored with those actors, who maintain the structures. It is a world, which to the largest extent is dependent on us human beings, where the creator of knowledge also participates as one of its constructors.

In the *conception of science* of the actors view, it is included that all pre-scientific concepts must be objects of reflection in all kinds of work of creating knowledge. The view claims that taken-for-granted concepts may become obstacles to real understanding and renewal.

As the actors view starts from the idea that research – the work of creating knowledge – always has self-reference to the society at large, that is, participates as one of the constructors of the social reality, it becomes natural that the *scientific ideal* of the actors view advocates a knowledge creating and consciously active interaction. This may mean everything from the language style of reports to an active changing and developing work in the study area at the same time as the area is researched.

Ethically this is about taking responsibility for his/her part of the construction of reality, which the creator of knowledge cannot disclaim responsibility for, whether he/she wants it or not.

Aesthetically it may be so that the actors view, perhaps more than any other view, wants to come up with descriptions and interpretations which are close to being artistic. The actors view also has an expressed concern in an innovative knowledge interest, that is, not only to describe but also to drive change.

Interesting issues and perspectives

When the creator of knowledge has reflected on the paradigm and view he/she has chosen, he/she may, but not necessarily, continue by taking account of what other creators of knowledge have done in the study area (*the actors oriented creator of knowledge may choose to first*

go to the study area and then study what others have done). To study what has already been done in the area is about getting an understanding of where the research front is and what questions might be of interest. Included here, of course, are studies which are not done by the actors view alone. When these results are problematized, in relation to the presumptions of the different views, the creator of knowledge may have sorted out the following as a *starting actors orientation* for his/her own *perspective* in relation to his/her own *issues*.

Economic growth in a country depends on the *individual* entrepreneurial act. An entrepreneur is a person who thinks what is impossible and approaches reality without taking cover against it with the use of established and "correct" thinking. He/she does not drive any linear process or start from what exists, but creates his/her own story and lives his/her dream. It is a person who with ideas is happy to surprise his/her own rationalistic sides. He/she is also happy to place him/herself in situations, which are difficult to master in order to consciously loosen their grip, thereby being forced to look for new and untested roads out of the difficulties. The entrepreneur is the person, who with a glint in his/her eyes walks right through the wall of resistance which everybody claims that he/she will face. The entrepreneur is like a court jester of the present who dares to do what others do not. It is easy to laugh at him/her, but the risk is always that the laughter will stick in the throat. And the only medicine being offered is total devotion to what is not possible to understand immediately.

Then one is offered a possibility to reflect on one's own taking-for-granted explanation models.

The possibility of being heckled for one's ideas can only function as a trigger for the true entrepreneur. The entrepreneur has an ability to marvel at *everyday matters* as others do when faced with incomprehensible tricks by a magician. Entrepreneurs often talk about their ideas as magical, almost like spiritual experiences. And these intuitive visions and breakthroughs in their personal development must be caught, understood and constituted in works of creating knowledge.

It is generally possible to say that entrepreneurship is a *non-linear process*. It is *unique, chaotic* and *specific*, and it is related to *single individuals*. Then the overall perspective and issue is raised with the actors oriented creator of knowledge: *is it possible to study entrepreneurship with linear and general methods which are searching for what is similar in what is dissimilar – which are searching for general explanation factors?* Is it possible to *explain* entrepreneurship? Is this not a phenomenon, which must be made intelligible by deepened *understanding*? That is what the actors creator of knowledge is thinking.

An actors oriented creation of knowledge also tries to entice the master talent, which is in every individual! In consequence, this creator of knowledge asks him/herself whether it is possible, as in statistical studies, to "bring together" what is *qualitatively different* with individuals into something *quantitatively similar* (measurable), and by doing so exclude what is *unique*. The actors view does not, however, try to isolate what is rationally sensible and exclude what is emotionally creative. What is unique and what is emotional for the individual are both what is essential, because it is the *personality*! And feelings and imagination are the very detonating composition which actives reason. The actors creator of knowledge therefore asks him/herself whether it is possible in a study to separate the entrepreneur from

his/her situation of feelings and practical reality. Does not every entrepreneurial answer have to be interpreted relative to the uniqueness and context (lifeworld) of the individual entrepreneur?

Conceptualization

The actors view, just like the other views, has an established set of concepts, which we will come back to in later chapters. One of the most prominent characteristics of this set is, however, the concept of *language development*, which means, among other things, that the creator of knowledge attempts to develop a language that will bring *understanding* and *action* when facing the study area. It is a *conceptual development*, which in the study is linking the actors' *own* mental language with the developing descriptive language of the creator of knowledge. This is to be seen as a mirror of feedback as well as of providing understanding for the actors involved, and a description for bringing insight and action for those who also may take part in the results.

The actors view is encouraging its creator of knowledge, when facing the study area, to be open, devoted and start by throwing away all previously given categorizations and clichés. Entrepreneurship is to be understood on its *own conditions*. *Improvization* and *creativity* in the process of creating knowledge then become important concepts in the actors view! *The feeling* for the aspects of entrepreneurship, which are more difficult to catch and which are truly different, like lust, force, dream, imagination, chaos, perseverance, artistry and free thinking, must be given their place in the developing conceptualization. The individual/entrepreneurial "language of adventure" is not to be transformed into some kind of phraseology of scarcity.

Concepts of shaping, connected with the established conceptualization of the view in question, are to be specifically developed for the study area with a capacity to catch the entrepreneur's creation of him/herself as well as the essence and socioeconomic context of entrepreneurship. These concepts become decisive in the process of making the innovative power of language come alive to describe and clarify the "discoveries" and ideas of the creator of knowledge, and to create action.

Methods and methodics

That *choice of methods* that are to come forward, using the articulated issues, perspectives and conceptualization above, is first of all the *dialogue*. According to the actors view the important thing here to be able to approach a reality – the reality of entrepreneurship – on its own terms. And then it is also important to understand what the dialogue can do in this context.

The actors oriented creator of knowledge searches in every possible way for the *inner quality* of those entrepreneurial masterpieces he/she is facing. And at the same time, he/she takes pains to recreate this *quality* within him/herself in order to able to *understand* the *masterpieces* and bring the experience forward. He/she is listening to the "harmony" of the entrepreneurs, follows their rhythms and tries to distil the essence of the quality of the whole thing.

For the creator of knowledge it is necessary here to enter a dialogue with a reality that he/she *identifies* with at the same time, in order to emotionally, imaginatively and *qualitatively* look for what is *different*, and to make this reality intelligible using the *first hand expressions* of the entrepreneur and the concepts of shaping by the creator of knowledge, where participating actors are made into *subjects* for an *innovative* knowledge interest. *Methodics* becomes *processual*, that is, it is worked out gradually by what is happening in the dialogues and the choice of leading actors. Historical, economic and other sociostructural studies may be added in order to supplement the contextual aspects of the statements of the entrepreneurs themselves. This becomes a constant work of interpretation which in several aspects is similar to the entrepreneurs' own processes of trial and error and creativity, where one thing gives way to another. If in the process questions and answers arise which can be seen as more or less depending on the context, the actors oriented creator of knowledge may also use questionnaires, but in a fashion which usually differs from the way they are used in other methodological views (exemplified in Chapter 14).

Results

The actors oriented creator of knowledge does not try to *explain* that entrepreneurship which he/she is facing in the study area, as *general* explanations of what is *unique,* according to its conception of reality, only become shallow clichés, and also become outdated the moment they are stated. Every free human being (so also an entrepreneur) may, of course, at the same time as he/she hears the explanation do exactly the opposite of what the explanation says. This is, according to the actors view, part of the peculiarities of social reality, a reality in constant interactive change, if, for no other reason, because of the *self-reference*, which is built into the work of creation of knowledge.

The creator of knowledge talks instead of creating *understanding* and *insightful action*. This is about *making* the rich possibilities of entrepreneurial reality *come alive* (the irregular in the regular). The answers are to reinforce what is unique for the subject. Be deep and penetrating. Clarify the vital interaction, which exists in the study area. Point out what is different in what is similar. No quantitative, statistical study can liberate this thematics according to the actors view. *Ponderanda sunt testimonia, non numeranda* (The testimonies are counted through their weight, not through their numbers). This is how the creator of knowledge is thinking here.

Metaphors (language pictures) as *concepts of shaping* become for the creator of knowledge one of the most important elements in that *descriptive language*, which he/she develops to present his/her "discoveries" in the study area. It also becomes one of the most important forms of shaping for linguistic/semantic innovation in the social science area according to the actors view. The *second forms of shaping* for the creator of knowledge are the *symbols*. They can be seen as taking over where metaphors are no longer enough. Symbols (e.g., road signs, pyramids, pentagrams) are instrument of knowledge which can be used to disclose sides of reality, which get away from all other languages. Like the metaphors, the symbolic language may awaken our imagination and offer us a trip into the "magic" kingdom of the "wordless" entrepreneurial thought.

The actors oriented creator of knowledge will in his/her report present *results* as *reflections on shaping* related to the theories of the area. This way he/she attempts to summarize the

experiences in a metaphoric and critical language into order to go deeper down into human life in the entrepreneurial portraits. For the reader it then becomes possible, in the borderland between the descriptive language of the creator of knowledge and the actors' own linguistic descriptions of either experience that "Yes, it is probably so", or to argue against and reject. The creator of knowledge wants with this to create an intellectual as well as exciting reading, in which the reader can participate actively. *The essence of the acting of the actors oriented creator of knowledge is more of a wish to excite the dialogue about entrepreneurship at all levels, no matter how it develops* – a dialogue that the creator of knowledge wishes to see as a kind of *meta-production* of new entrepreneurial thoughts in the social construction of reality.

What can be more important than immediately reflecting when approaching a study area with ambitions to create knowledge? In this chapter, a number of such aspects have been raised. The fact that critical thinking is associated with imagination is perhaps not the first thing on the mind of a knowledge creator in spe. Here we have given it a prominent place as part of the mental activities that are presented as part of the development of an operative paradigm. We have also raised some small examples of warning: clichés and thinking in clichés have been illustrated, and the importance of perspective has been focused. The chapter also points at the importance of being observant so that those explanations and that understanding used in the study really illustrate what they are supposed to illustrate. As a theme throughout the chapter, we have used the study area of entrepreneurship. At the end of the chapter, the three methodological views, the analytical view, the systems view and the actors view are briefly presented in relation to entrepreneurship as a study area. Here we illustrated for the first time in our book how the various methodological views may reflect and act facing the tangible task of creating knowledge.

POINTS OF REFLECTION

1. To *think critically* is not as simple as is sometimes presented. What a person may not think at first as an important characteristic of critical thinking is .....!
2. Give some examples of what could be called *clichéd thinking* and *optical illusions*. Why is it important to be observant of these in one's methodical procedures?
3. A thing, a phenomenon, a set of events can be seen from different *perspectives* and through them specific aspects will also appear more often than others. Take one example where you describe one thing, a phenomenon or a set of events out of different perspectives and illustrate how these may influence the general opinion of the matter in question.

(Continued)

(Continued)

4. At one place in the chapter we can read: *that what we study is what we intend to study*. What does this mean?
5. In the chapter three *methodological views* are introduced. Which ones? Why are they called methodological views?
6. When you read the description of how the three methodological views look on the specific study area of entrepreneurship, what did you think then? Which important *differences* do you see between the three methodological views?
7. Those *differences* that exist between the methodological views can also describe/explain their different names. Something where you think this is clearly seen.

RECOMMENDED FURTHER READING

See the end of the Appendix and visit the website below.

Become a worldwide partner as a ***knowledge creator*** in the development for *Methodology for Creating Business Knowledge* by visiting the website: knowledge-creator.com. Here you can contribute by asking your own questions and you will also find answers to the most frequently asked questions. The website has been developed alongside this third edition of the book and the questions posted there will be used to provide input for future editions.