CHAPTER 4
THE EXEMPLARY THEORY

4.1 DISCLOSING THE PROBLEM FIELD

From what was said about educating and teaching in the previous chapters it must have become clear that renewal of and change in the event of forming only can acquire validity to the extent that harmony is maintained between external and internal as well as objective and subjective moments. Thus, e.g., the one-sided instilling of encyclopedic knowledge cannot be taken as an aim of teaching but much rather the insightful command of fundamental concepts must be striven for in order to make possible the unlocking of the categorical structure of reality.

At the same time, in order to penetration deeply into our didactic interventions that ultimately can push through to self-forming, the fundamental demands of nearness to reality and concerned involvement must be broached to insure a life dynamic and radiating power that enliven a learning person's activities and change his attunement.

The **exemplary principle for teaching and learning** contains possibilities for us to fulfill, within certain limits, the actual demands of our quickly growing society and its increasing complexity. The solution in the exemplary must be sought in complaints that have to do with the overload of learning material and the close connection between neglecting teaching as well as "scientizing" it, on the one hand, and the fact that pupils increasingly show less interest in certain basic subject areas, on the other hand. The learning contents leave some pupils cold and uninspired. As a general didactic theory, the exemplary is not bound to any particular methodology, psychology or subject didactic pronouncement. As such, it is possible to work deductively and to differentiate, but also there can be a uniting. Induction or deduction and at the same time the ordering of learning content can be realized on the basis of divergent insights arising from means-end, case-type, particular-general or cause-effect relations.

Thus, e.g., proposing the ideas of reducing and "elemental-izing" [content] are not new reformative demands on teaching. The directedness to quality at the expense of quantity by accountably delimiting learning content also, however, contribute to working against superficiality. In doing so, the exemplary grapples with an opposite pole of any didactic intervening that advocates completeness and "fullness". Therefore, it is the task of a didactician to search for contents that, as elementals and fundamentals, illuminate the "essence" of a theme (slice of reality) or concept.

Scheuerl [49, 7] also indicates that by illustrating and clarifying a communication with the help of images (symbols) or working on paradigms there is no need to be concerned with a logical sequence and a straightforward, progressive "growth", but there must be a much greater focus on mastering fixed points as centers of gravity. The mastery of such learning materials offers a learner "islands" that provide him with security to venture into new situations as well as for orienting by which the whole structure becomes understandable. This clearly points to the one-sidedness of didactic objectivism that elevates material forming to an aim.

However, the exemplary principle is no "magic potion" that guarantees changing learning and teaching into easy tasks or awakening interests in the pupils. On the contrary, it requires better preparation, dedication, initiative and directed activities of both teacher and child than do most of the usual forms of teaching.

Where today complete pedagogical proficiency is expected of each teacher in order to keep up with and meet the high demands of a teaching event, the mastery of the exemplary principle has the advantage that it creates a broad field of possibilities, but at the same time, allows for realizing a more certain approach that opens a methodological way not only for a teacher but also for a child. The greater certainty of the aim (experiencing the near to reality elemental) and it more easily becoming visible allows a child to acquire greater self-confidence because he feels that he no longer is swinging back and forth in a field of tension of extreme contradiction so typical of the forms of teaching grounded in the

principle of “trial and error”. So much so because today a child early on finds himself confronted with the snowballing abundance of learning material, subject splintering and early specializing in an “insecure” place in which he finds it difficult to venture. This immediately decreases the possibility for productive thinking and creativity to arise. In exemplary teaching, a simple example would easily serve as a particular case for better understanding a general concept, but also to make it transferrable.

4.1.1 An historical approach to the exemplary

With his lecture at the Congress of Tubingen in the autumn of 1951, Martin Wagenschein set the wheel in motion. This natural scientist had seen the possibilities of the exemplary, implemented them in teaching Physics and in doing so arrived at a number of fundamental conclusions. Thus, it also is to be expected that other didacticians such as Ballauf, Derbolav, Ebeling, Flitner, Heimpel, Klafki, Meyer, Newe, Scheuerl, Siewerth, Spranger, Wegmann, Weniger, and others carry out subsequent work.

In the 1960’s a true menu of exemplary courses appeared in which the principle was approached from different perspectives, and its essential characteristics, philosophical grounding and possibilities of application were worked out for theory and practice. The earliest literature shows an increasing trend to meaningfully use the exemplary principle in various subject matter areas in accordance with genetic findings [i.e., findings related to origins, beginnings, essentials].

Thus, we must accept the exemplary as a long known principle that yet again is transformed, bent and regenerated as a result of the didactic releasing itself from its post-war rigidity.

Wagenschein[65, 129] compares the exemplary “experience” to building a ship that has much promise and about which the building plan that can only be brought to form and brought into existence on the sea of pedagogical practice.

By studying the exemplary theory, a didactician immediately becomes aware of the potential on hand and that he has to do with a

comprehensive and supple concept whose feasibility and fruitfulness have already been convincingly confirmed in various terrains and dimensions and even with slight modifications. Although at first the exemplary principle was applied as a counter action to the danger of the abundance of learning material, today it is highly esteemed for the inherent characteristics of its radiating and reflecting power. For Scheuerl[49, 9] this has to do with the penetration into the essences of an area of reality. Also, Wagenschein[65, 8] says of this: "Das Einzeine, in das man sich hier versenkt, ist nicht stufe, ist die Gegenteil das Spezialistentums. Es will nicht vereinzeln; es sucht im Einzelnen, das Ganze." Derbolav"s[26, 82] contributions are in the fact that he especially speaks out against "falsely" making teaching scientific. Thus, he looks for a philosophical beginning for the exemplary, for what didactic principles will be proposed with thematic and genetic possibilities for experiencing. He expresses himself as follows: "Nimmt man dies alles zusammen den Einzug der Geistes der modernen Fachwissenschaft mit allen seinen strukturmerkmalen (vor allem den das Schulergedachtnis fur sich in Beschlag nehmenden Totalitatsanspruch) in den Bildung skanen des Gymnasiums, die vorwiegend fachwissenschaftlische Ausbildung der hoheren Lehrerschaft, den Zustrom nicht immer geeigneter (und daher um se mehr auf ihre Begabungswunsche pochender) Schulermassen, die Erwartungen und Forderungen einder ungeduldigen Beruftswelt, die Ausspruche der Hochschulen selber, dann het man in etwa ein Situationsbild der Hoheren Schule von heute."[15]

Also Gustav Siewerth[54, 69] tried, with a philosophical grounding of the exemplary, to give depth to teaching and he also states straight forwardly that for him it involves disclosing principles. Thus, he tries to search for primordial phenomena that will awaken a questioning attitude in a child and that will lead him on the way from searching and finding to a mastery of the essence of a causality. For him, this involves the idea of an independent experimental investigation and directed inquiry about reality, the presentational help of a model, the changing over of each response to a "weighted" ordering, the increasing generalizing from the data

[15] Derbolav, J.: Das Exemplarische im Bildungsraum des Gymnasiums, Bonn, 1957.

obtained and mastering exact explanations. To be able to design criteria for the most succinct and clearest aims, Siewerth goes further and also investigates a number of known modes of the exemplary as a theory of the activities of teaching and learning.

For Ballauff[26, 106] the exemplary has to do with acquiring "insights" and, therefore, rather than maximum curricula he wants to see "Funktionsplane" with the aim of acquiring fundamental experiences. Such an aim can best be achieved in "epoch-teaching" where room is allowed for the insightful mastery of fundamental structures and synoptic schemas.

Also, concerning the choice and presentation of contents there already were many contributions that later came up again for discussion. However, we will suffice with the judgment by Wagenschein[65, 6] where he indicates that teaching must remain directed to "den Mut zur Grundlichkeit und bei begenzten Ausschitten intensive zu verweilen." Thus it appears that the exemplary support of what is simple and always valid of a thematic fundamental axiom overcomes imageless, linear approaches.

In addition, Derbolav[26, 81] cuts through this problem when he broadens his concept of exemplary to a more comprehensive field as he says: "Das unuberschauberer Stoffmassen auf durchsichtige Zusammenhange undreprasentative Modellgedanken, sondern sucht diese daruber hinaus auch in ihrer kategorialen Bedeutsamkeit fur die Erkenntnis uberhaupt, in ihrem hermeneutischen Sinn fur das sich in ihnen spielgelnde Menschentum zu erschliessen."

These related and indeed distinguishable pronouncements of a number of didacticians about the possibilities of exemplary learning and teaching once again emphasize the fact that here we are dealing with an "open" didactic principle that, at the same time, excludes everything in teaching that might show itself as apparent forming, rigid, dogmatic and recipe-like. The exemplary principle is many-sided and can be applied fruitfully in most subjects and will increase in value and utility in the higher classes of secondary schools as well as in Universities.

Unfortunately, it also is the case that the theoretical triumphal progress of the exemplary principle includes so many possibilities and has created so much sensation that some less "schooled" didacticians have felt themselves called to venture into this terrain. In doing so there are all kinds of false claims made and the validity of the original concept is violated.

Consequently, at this stage it certainly is necessary to offer a more complete description of this concept.

4.2 THE ROOT WORD "*EXEMPLUM*"

To make the meaning of the concept easier to understand, first one can go from the Latin root word "*exemplum*" to the verb "*eximere*" that means "to take out".

The "*Exemplum*" or result (unveiling) of exemplary learning thus refers to what is "taken out" during the event. In addition to the meaning "taken out" (*eximere*), it also can mean to release, to detach or to excavate out. Thus, something only can serve as an "Exemplum" if it first can be freed from any covering and the essence or truth can be re-isolated from a complex.[19, 92] Thus, the exemplary experience now acquires a substantive-passive (form) character that has important implications for the didactic. The event of exemplary learning and teaching always must be called into appearing by something or someone. Even in an auto-didactic (e.g., programmed instructional) situation there always is an appeal from the leaning content.

Along with Gerner[19, 77] there must be a warning that disregarding the fundamental characteristics of the exemplary can lead to invalid findings that will not be acceptable for practice.

However, the "exemplary" is not a new "finding" regarding teaching. Although today it has surfaced anew in Western thought about forming, it remains an age-old principle of acquiring experience that for centuries was adopted in various curriculum compilations and forms of ordering learning material.

As is the case with other didactic principles, such as that of activity teaching, exemplary teaching and learning do not offer fixed guidelines and methodological ways. The design of each learning situation must be handled each time completely "on its merits", and in union with methodological, psychological and other insights. Each result of an exemplary form of teaching will progress "differently" or can be recognized with little inflection as one of the variants (modes) of the exemplary. We find a good example of the exemplary principle in a situation that still exists today, i.e., certain contents, because they are viewed as "classic", can be transferred from one particular example to another. Here one thinks of a number of experiments in the natural sciences, certain theorems in geometry and particular historical episodes that remain preserved out of mere tradition. Where already in the writings of, e.g., Wolff and Kant there is much consideration of the "Exemplum" and its possibilities of unlocking, we will illuminate briefly certain aspects further.

4.2.1 A few important pronouncements about the exemplum

Wolff particularly made his task a more detailed description of the concept "example" (as object of investigation). On the one hand, he distinguishes between a mere uncritical "assimilation of knowledge" and on the other hand, "as-recognizing-reality" of that which must become knowledge. Thus, an "example" can involve both mechanistic as well as in insightful learning activities.

Together with becoming aware of the truth and validity of the acquisition, a child then obtains a greater degree of certainty about his achievements, with a corresponding increase in flexibility. A heightened readiness to learn as well as heightened intentionality can serve as didactic criteria for judging the attainment, or not, of our initial aim that a child be motivated. (The choice and acceptance of simple and elemental examples will make it easier for a child to understand and achieve this aim and thus he will show greater enlivenment).

Along with the recognition of the objective value of the example, not only is a pupil's life of knowing addressed but so is his life of willing

(feeling). This gives him a renewed life dynamic that is justifiable for an increasing efficacy and along with a feeling of greater security pushes through to venturing activities.

Thus, it is so important that each educator does not overlook or underestimate this moment of self-acquired security emerging from the recognition of and insight into what is viewed as essential for a particular area of reality in designing and judging the didactic event. As a fruitful moment in the event of teaching, this always will influence the fruitful unlocking of categorical forming.

Buck[10, 87] indicates further that as long as this "knowledge" (security) is founded on *a priori* or pre-scientific experience, in no sense must it be seen as purposefully acquired experience based on real mastery. For the mastery of such "enlivened" knowledge, supplemental learning situations must be designed in which a pupil is given the opportunity to observe contemplatively and to have true-to-reality experiences.

Connected to this, a didactician always must keep in mind that purely rational opinions and *a priori* experience will not address the emotional life of a child as strongly as, e.g., lived experiencing a more concerned involvement in matters via a demonstration experiment.[10, 88]

The mastery and mere memorization of facts without real "enlivened" experience in terms of an example sometimes can hinder the way because then this is going to invite a deficient motivational power in a pupil that must awaken his intention to learn. Such a "deadened" knowledge usually continues to exists as an appendage and never becomes an integral part of the total person. Wolff[10, 88] believes that a "good example" can be an outstanding didactic principle when there is a striving for insight into the essential of a general concept. Here a particular form (Exemplum) is one of a number of possible "cases" through which a general concept is recognized as a "type".

Learning contents can be taken as "examples" once they follow the preconditions (essences) of a particular type of concept seen as a recognized "case" of a general essence-relationship. (Later a finer

distinction is made between **case** and **particulars**). However, Wolff[10, 89] warns against a one-sided view by which examples are monopolized only for an inductive way of approach, i.e., from example to the general rule. Here one thinks of an example where in terms of a few geometric diagrams on a blackboard, a pupil can be helped to understand a general theorem. The insights acquired strip from the example certain characteristics that then are formulated as a general law. The opposite relationship, according to Wolff, requires that from a given rule (theorem) one can work back in order to recognize a particular example.

For practice this means that a learning person always must succeed in first listening or reading about a relevant example while at the same time identifying the essence of a general concept or structure. By performing a proof or engaging in mindful observing (aanskouing) a demonstration sometimes all of what the essence of a general definition includes, that until now had remained as a concealed abstraction, first becomes clear to a pupil. Here an example contributes further to clarifying a general theorem.

This will thus greatly depend on the successes the pupil has had in making his own the essence (truth) of a general concept, the extent to which he is able to point out future confrontations with similar examples as one of a sort or type. Thus it is so necessary that all pre-scientific knowledge must be led by direct observation to refined concept formation.

Besides the "natural science example" or definable particulars we also deal with cases of which the individual "examples" are not identical but yet manifest essentials of a type-structure and thus are seen as typical.

This possibility for deductive thinking in terms of an "exemplum" and the recognition of an individual "case" as one of a type or an exemplar as reflecting a general law that then simultaneously gives **sense and meaning to repetition and reviewing as necessary subsequent acts** whereby a pupil is forced to implement the truth (norm) of the newly acquired general theorem in judging new examples. Thus, e.g., working out arithmetic exercises (examples) is seen as practicing and illuminating what is

essential to a certain postulate or structure (work schema) that was made clear and visible. In each task, the essence is made visible to a pupil anew and this can contribute to bringing into perspective any existing misunderstandings and prejudgments based on earlier *a priori* and subjective lived experiences.

In summary, we will distinguish only a few "functions" of the example and try to illuminate the didactic significance of each:

a) The unlocking action of an example

Klafki[30, 329] has already recognized this unlocking moment in exemplary learning and teaching and sees its results as definitive for categorical forming Therefore, the choice of examples rests largely on certain inherent characteristics that already are on hand and that will address the pupil. The "structure" (or characteristics) that a particular example shows makes it possible for a pupil to discover a commonality or resemblances, also with possessed experiences already on hand. This immediately gives formative sense to a teacher's choice of a particular example(s) that now will make him more sensitive (mobile) in the further course of learning.

Consequently, there will be large differences in the formative quality (Gehalt) to be noted in contents (examples) that are lived experienced as near-to-reality; e.g., examples experienced or illustrated by aids (models, schemas, prints) than mere verbal explanations and explications.

It remains a primary didactic task that with presenting examples there always will be a striving to unlock reality. Each act of teaching must be directed to "something" that is separated out of a mass of unorganized ideas so that later an example can contribute as a substitute, variant, representation or as a model (monster) to illuminate something else.

In exemplary teaching we find that a clear relationship between the subjective and objective moments endures. In teaching via an example we always acquire the dualism that it simultaneously can be an example for someone and for something.

On the one hand, it will be an example for “someone” when the mastery of a particular something agrees with a fundamental form of spiritual life (values), an essential life attitude or a methodical way of unlocking.

On the other hand, it is exemplary of “something” when the content can be seen as representative of a series of structures or a number of similar exemplars. Thus, e.g., Gutenberg can be seen as a typical case of an inventor, or the Union Building as representative (exemplar) of a particular style of architecture.

The acceptance of a certain “something” as an example of a certain general concept, way of life or type means that at the same time there also exist other objects, ways of life and cases that can be considered as interchangeable.

Thus, an object only can qualify as an example of the concept “vase” if it shows particular characteristics that are considered essential to the concept, and also (the concept) is recognized in each other example as a certain sort of concept.

However, it also can occur that the same object at the same time can serve as an example of more than one concept. Simultaneously, a horse can be seen as a **draught-animal** or as a **riding animal** because it shows characteristics that belong to both concepts.

It remains a task for a didacticion to choose and present an example such that it serves to illuminate a general sort of concept or as one of a number of cases showing the structure of a type. For possible successes pupils must be prepared and introduced so that they will already have an intuitive attunement and direction-giving expectation for what is trying to be presented to them. We know that for any vivid experiences the activities of a pupil remain “blind” until led by one or another awakened schema of anticipation. On this basis it must be realized that even a demonstration lesson has less significance than independent research because a pupil is led via a detour and the re-presentation of the demonstrator to arrive at the fundamental characteristics. Direct perceiving and true observing (aanskouing) of a concrete example always will facilitate learning.

b) An example can contribute to pointing out the reality of a concept

A second achievement a didactician has in view is to show the truth of a general proposition with the help of an example. It then also is a principle customarily maintained in the natural sciences where a certain experiment is planned and carried out as an example in order to show a general law of nature.

However, this immediately raises a counter-question: are all concepts realizable? In other words: can all human knowledge about reality and his interventions in the world be usefully employed anew in practice? Kant(10, 103) makes an important distinction in this regard when he limits the "example" to establishing general concepts from experience (empirical) in contrast to "schemas" that rest on the results of pure structures of thought.

For him our question culminates in what he calls the "feasibility" of an idea. He offers as an example that it would be desirable for a Biology teacher, in his introductory lecture and discursive explanation of a theme such as "the eye", to proceed step-wise to point out to a pupil, via the real object or a model, firstly the whole but also each real sub-part, so that he perceives anew the characteristics of it and his understanding is "sharpened". Such an analytic observing of concrete reality or its substitute helps a pupil conquer all uncertainty because all knowledge again is explicitly verified, transformed or changed.

The problem of bringing a concept to experienceable knowing (knowledge) is in the possibility, or not, of evidence of its objective existence. On this basis a didactician can choose any example, as a human construction, that shows the definable characteristics in order to illuminate the related general law for a pupil.

In contrast, one must be aware that most mathematical concepts merely are structures of thought derived from one or another postulate. Therefore, the use of examples in mathematics, in the

first place, cannot serve to indicate that such a formulation is true but only as an aid to further clarify the general theorem or to make it easier to understand.

Certainly, in analogous ways one can reach the conclusion that it must be rather meaningless to try to realize an historical concept such as “statesman” in terms of a figure such as President Kruger, while a preferred beginning could be with a “known”, living statesman who immediately will have meaning for a child and his mental grasp.

c) An example also offers the possibility for deductive use

Above it was indicated that the example also can be used for clarification and reasoning that must serve to further illuminate an already given (existing) or known general proposition or sort of concept. The insights acquired by listening and learning about the general concept now must serve as criteria for identifying new examples. In doing so, an attempt is made to determine a resemblance (according to definable characteristics) between the general concept (its essentials) and the example that the particular object awakens. At the same time, with the identification of a particular object as one of a general sort, certain characteristics of the general also are going to be illuminated better.

Naturally, there always are distinct cases that only show a structural (visible) resemblance with other cases. Here one case cannot be replaced by or take the place of another.

4.2.2 Differentiating between “Exemplar” and “Exempel”

Before further investigating this interchangeability and modes of the exemplum, first we must attend to a further differentiation in the concept itself.

On the one hand, here we can acquire a relation between a particular and a universal where an example is isolated on the basis of the “radiating” work it does for a sort of concept. Such a particular, then, is an “Exemplar”. On the other hand, we have an

"Exempel" as a distinction, because it has acquired value in itself that elevates it to being generally valid. The same distinction is made by Gerner[19, 55] and is summarized as follows: "Wahrend das Exemplar auf Grund strenger Merkmalsidentitat das Allgemeine eine Klasse von Gegenstanden bgrifflich vertritt, reprasentiert das Exempel eine Norm."

Many didacticians who do not take this distinction into account, e.g., will incorrectly equate an "exemplar sort" of schema with an Exempel and apply it to make normative judgments.

(i) The Exemplar

First, the concept "exemplar" refers to the results of an event (human accomplishment) by which a particular example is identified and isolated on the basis of certain definable, essential characteristics (herausgegriffen). In general, an exemplar always is seen as one selected from a number that show the same determinable characteristics. Thus, exemplars are interchangeable without any serious consequences. It is just this "being-embraced", "being-contents" and "being-part" of a particular by which each already has the essential characteristic(s) of a general concept visible in it and this is what gives it the character of an exemplar.

The exemplar, as a particular example, only has meaning and validity in so far as it contributes to making a more comprehensive sort of concept easier to understand. Thus, e.g., a sample of "sulfur" scooped out of a bottle to investigate one or another of its characteristics, in itself has no significance, and can be replaced by another without any depreciation. An exemplar primarily is used to recognize a strong resemblance (unity) and to judge definable characteristics. Also, the content of a book can be classified as one of a particular sort on the basis of certain existing requirements (rules). In doing so the book then can be experienced, e.g., as an exemplar of what is meant by an historical novel.

This view of the exemplar concept has far-reaching significance for all subject didactic pronouncements. For most natural sciences (geography included) it is meaningful to know that it will make very little difference to a pupil what example is selected to present a

particular concept (natural law). The only condition is that the exemplar must already inherently include and make observable to a pupil the characteristics of the general rule, per definition. Hence, this will not break down the acquired insights of Boyle's law if one "particular" experiment/exemplar has been used, but what can happen is that the particular exemplar can insure better insight into a part-aspect that cannot be so clearly indicated by another. An exemplar always remains only a "reflection" of the whole and the characteristics of the particulars still always must be self-disclosed.

Naturally, a cultural historian and politician will have another view of the matter. For them each exemplar, in addition to its value as a particular that illuminates the general, also has a particular value. For example, on the one hand, a certain stone can serve as an exemplar for a particular sort of rock formation, and thus is replaceable by a number of other exemplars. But on the other hand, this particular stone fills a certain space in reality, or in history it has fulfilled a particular function at a particular place and time that gives it specific value (cultural value) that cannot be taken up by any other stone. This brings us to the second distinction, i.e., that of the "Exempel".

(ii) The "Exempel"

Both concepts ("Exemplar" and Exempel") have an isolating or "loosening" from greater reality to thank for their original appearing. Scheuerl[49, 51] points to the possibility that subsequently they can be guided in different directions. Thus, he distinguishes the following: "Sie liegen nicht nur auf verschiedenen Ebenen (einer wertfreien und einer normativen), sonder sie sind auch ihren Begriffsumfangen nach nicht miteinander zur Deckung zu bringen".

Where an exemplar mostly is used in the more exact natural science subjects and mathematics on the a basis of their objective values and can be exchanged with other related exemplars, there an "Exempel" points in a different direction.

Now it can happen that a particular example shows so much value in itself (it so clearly reflects the essence of an area of reality) that it is elevated to a place above other sister-exemplars. Where the

particular now will serve as a replacement for all of the other exemplars (that all illuminate the same insight) and can serve as a pure representation of a general norm, it must be presumed that the particular now is elevated to a "model" exemplar or Exempel.

The Exempel acquires general validity because the new meaning that now is attributed to it points to itself. Scheuerl[49, 50] says of this: "so eignet ihm als Exempel die Intention auf ein Wesentliches". Thus, if its essence first is disclosed, an Exempel always can serve as a yardstick for evaluating new examples. Since a norm only can be realized in terms of such an Exempel and cannot just be "handed over", its masery and recognition usually will be paired with a degree of affective tension (demand) because a penetration to the essential of the concept is a fundamental precondition.

Although the mastery of such an Exempel can have wide-reaching significance for a pupil, it is a difficult task that certainly requires very careful didactic considerations. A mere repetition of a large number of examples cannot be relied on with the hope that what is essential will become visible. Here we have to unlock the essence and what must be taken as a yardstick for judging further. Thus, the emphasis falls more on a teacher working in depth than on a horizontal broadening (completeness).

Hence, it appears as if there is a direct relationship between exemplary teaching and categorical forming because the mastery of each Exempel can be seen as a categorical unlocking of a particular area of reality. Formative contents that are chosen on the basis of their formative value and formative sense also, at the same time, on the basis of the formative quality (gehalt) that they inherently already show, potentially will be exemplary and make the mastery of an Exempel possible.

The number and extent of the intervals allowable between subsequent examplars there are and the number of repetitions that will be needed before the essence of a matter is unlocked for a pupil largely culminates in a methodological question and must be dealt with accordingly.

In order to push through to the true significance of the Exempel there is not much reliance on fixed, definable characteristics that in the case of studying a "pattern" can be imitated mechanically. Here we have to do with an insightful mastery of what must be "selected out" as the essence of a matter and used as an "example-of-something". The event that makes the disclosure of an Exempel possible, therefore, is in the terrain of the ethical-didactical (the Axiological).

There is no justification for activities grounded in the knowledge of rules that, in their turn, only can be mastered in terms of thoughtless exercises, analogous thinking and by imitating recipes, and formulas. There can only be a breakthrough to the essences of a matter by independent lived experiencing and disclosing that, in their turn (i.e., the essences), appear as yardsticks in the Exempel and push through to refined concept formation. What had earlier existed in a pupil only as an "idea" or flight of imagination can (be moved by a genuine interest and intentionality awakened by an enlivened emotional life) now, through true observing (aanskouing) and reflective activities, becomes a feasibility. Knowledge of a norm and the expression of a value judgment are attainable only if a pupil first makes the insightful knowledge about the essences of an area of reality his own possession. Consequently, the concept "Exempel" also shows a close affinity with the idea of **elemental forming**. When by reduction, a matter is stripped of all (extraneous) details or can be led back to its original structure as shown in its "first" disclosure, its essence can be made more easily visible to a pupil.

Further: since a (learning) person necessarily always remains dependent on examples to arrive at knowledge about his Umwelt, attention also must be given to the concept "**elemental**" in it didactic perspective.

4.3 THE ELEMENTAL AS A NECESSITY FOR EXEMPLARY TEACHING

Of particular significance is the result that Klafki[30] came to after he had investigated the problem of the "elemental" and "categorical forming" fundamentally. He will suffice with the root word "Exemplum" for any paradigmatic teaching event because, on the

one hand, it limits the scope of the concept and, on the other hand, remains broad enough to allow the presumed relationship of the particular and the general to appear.

For Klafki[30, 33] the fruitfulness of the idea of the "elemental" is that once again it brings the learning content to the center of our contemporary didactic conversation. The notion that has become crystallized once again for didacticians is that in order to acquire insight into the essentials of reality, the formative contents must be reduced to their "elementals" and made an aim. Also, Pestalozzi already was convinced that a pupil only can reach the greatest certitude regarding fundamental factualities by truly observing (aanskouing) "simplified" examples. Where insight into a characteristic common to a number of similar examples are abstracted and the unlocking of a wider and more complex concept is made possible, this has a close relationship to the event of forming. The most abstract and complex concepts usually only acquire meaning for a person if by deductive reasoning this can be reduced to a vivid example. Insight into the characteristics or structure of a higher meaning always is made in terms of a discovery from a concrete case.

Schorb's[50, 81] view of the exemplary is in great agreement with the above. For him the exemplary is an "Auswahlprinzip fur Bildungsguter, das sich mit den Begriffen des **Fundamentelen**, d.h. des fur einen Werklichkeitsbereich und ein Schulfach **Grundlegenden,** und des **Elementaren**, d.h. von der Sache her **Einfachen**, vom Kinde leicht zu Fassenden beruhrt u.z. T. uberschneidet".

For teaching this means that there must be a search for typical or classical cases, elemental and fundamental examples that, as fundamental structures and primordial concepts, once again place a particular area of reality at the center of didactic theory and from which one can proceed to unlock a general concept. So now instead of the excessive concept of material forming there is only a directed deepening that brings about fundamental categories.

Therefore, the aim of choosing elemental learning contents is not primarily directed to acquiring an initial firm place to stand

(platform) but in reality to serve as a mirror or "center of gravity" to make a greater whole and a more complex concept visible. Thus, a chosen example must, on the one hand, allow what it inherently includes as fundamental (elemental-sense) for a concept to be made visible. But at the same time it must be "elemental"(elemental-matter) enough so that a pupil at a certain stage of becoming can understand it.

Pestalozzi[30, 31] involved himself for his entire life with formulating and bringing forth the **idea of elemental-forming.** According to him, all formative content could be reduced to the three elements of number, form and language. Where these elements must come into active play for each part of reality and, at the same time, unlock the essential characteristics by which other examples can be identified later. For Pestalozzi, in the area of language, the elemental is in the sounds, the idea of form in the square and for the number system in the postulate: one and one are equal to two.[30, 51]

First we first must mention with merit Hugo Moller[26, 114] who points out that the elemental once again has acquired a prominent place in contemporary didactics. After him, especially Klafki[30] has attended to the concept (elemental) and worked out its relationship to categorical forming to a high level.

For Klafki[30, 83] the "idea of elemental forming (Bildung)" simultaneously embraces the objective and subjective sides of the formative event and elevates the artificial separation of "formal" and "material" moments to a new unity (categorical forming).

Elemental forming and its realization in elemental teaching must be viewed as an important counter-pole for the actual danger of learning material overload. Forming only is possible when a pupil succeeds in looking past what is extrinsic and haphazard and sees the essence of the matter. For displaying a degree of formedness it is necessary that a learning person separate out the essential from a conglomerate and multiplicity so that it can be given a greater general validity.

Where the core idea of exemplary teaching is that there must be a reduction to the simple, in no sense does such a dismantling of the

complex mean the value of the idea is diminished. Klafki(30, 35) answers this as follows: “Die je einzolnen Gegebenheiten, Gefuhle, Forderungen, Aufgaben, werden nur wahrhaft begriffen und bewaltigt wenn sie von ubergreifenden allgemeinen Gehalten her verstanden worden”.

Consequently, the idea of elemental forming is nothing but a return to the ideas of an unfolding and broadening of human potentialities that correspond to nature and are near to reality. Thus, for his educating (teaching) a person always must be understood as a totality. That is, a formative event must be designed such that a harmony is brought about between his potentialities and the demands as well as admonishments of his Umwelt.

Klafki(30, 83) summarizes the notion as follows: “So gesehen umfasst die **Idee der Elemenarbildiung** zugleich die Objekt-seite und die Subjekt-seite des Bildungsgeschehens, sie hebt die ausserliche, Zweiteilung des “**formalen**’ und des ‘**materialen**’ Momentes in einem einheitlichen nouen Aspek auf, der uns durch den Begriff ‘**kategorial**’ zutreffend gekenzeichnet erscheint”.

A pupil must be placed in learning situations were he can associate with elemental learning contents in simple ways in which he himself can investigate and try out possible solutions and by an ordered venturing, re-disclose the essentials of a matter in an original situation.

Any simple presentation of learning contents must contribute to making it easier to show the essence of a general concept or coherence. In that way human becoming is accelerated and the potentialities of a pupil unfold more quickly.

Pestalozzi(30, 19)indicates that the basis for all teaching always remains the family. He summarizes this as follows: “die Elementarbildung in ihrem Wesen nichts anders, als ein erhobener Ruckschritt zur wahren Erziehungskunst und der Einfachkeit der Wohnstubenbildung”.

A teacher always must try to encounter a pupil at the stage of becoming at which he finds himself at this particular time, and to

seek junctures with these potentialities. In doing this, e.g., for a pupil in introductory natural science, there is no greater concern than that by independent experimenting he will succeed with a lens in getting a little fire going. The insight and knowledge he acquires in this way about converging rays (of light) and the existence of a single point of focus at a fixed distance from a lens will remain with him for the rest of his life. Any later abstraction, e.g., a similarity that depicts the concept of convergence or bundling together will be easier for him to understand.

It also especially was Eduard Spranger who had sought for "whole-part" activities such as that of weave and fold, cook and bake, spin and weave, all of which can serve as fruitful examples for future creations and insightful concept formation.

Thus, it must be seen as a task for each subject didactician, especially in the primary schools, to rely less on written argumentation and oral explanations that for the most part lead only to an excessive verbalism and the acquisition of knowledge that is alien to life. Much rather, they must search for primordial forms and basic activities that clearly reflect the unique nature of the subject matter area. This does not involve so much the acquisition of skillfulness in dealing with apparatuses as it provides a child the opportunity to truly observe (aanskouing) and experience "genuine" human forms of living and ways of living.

Thus, e.g, a physical education teacher can plan lesson situations with more difficult exercises emanating from basic activities such as jumping, pushing and rolling that all immediately will have formative sense for a pupil. Similarly, a pupil in handiwork and technical subjects cannot finally push through to the essence of their subject and their potentialities if first they have not acquire complete skillfulness in certain simple skills such as sawing, filing and seaming.

Experiences gained from concrete reality form the ground structures and observational basis for later overarching coherences and analogous structures of thinking. Each simple disclosure and fundamental insight helps to form valid and meaningful concepts

that, as unchanging knowledge, provide firm points in each person's life.

Exemplary teaching and learning, on the one hand, require of an educator that he must be ready sometimes to go play with a pupil but, on the other hand, also that a boy be given the opportunity independently, with or without guidance, to learn to build a kite or a sailboat and go try it out. Similarly, a girl must learn to make her first clothing for a rag doll.

Such lived experiencing of reality and original experiences never must be assumed to be too simple. Because the achievement of a pupil depends directly on the contents and skillfulness that he must be able to master, the **principle of elemental-izing** remains particularly significant for didactics. Moller[26, 121] calls elemental-izing the event by which a person succeeds in " dieses Element ohne wesenliche Verkurzung oder Entlerung seines Gehalts auf ein Einfaches und deshalb leicht Zugangliches zu reduzieren".

4.3.1 Dangers and limits of elemental forming

a) Because elemental forming only is directed to establishing high points (centers of gravity), there is the danger that examples can be united less easily with a greater unity or coherence.
b) The elemental, as unlocking the essence of a concept, always remains the direct aim of each presentation. Therefore, a learning situation cannot immediately be "turned over" to a pupil at the beginning, but all learning activities must be focused on as the first aim. To make the onset of learning meaningful a teacher always must look for links to a pupil's existing knowledge. That which is ontically given constitutes the ground of the matter and must be pointed out. The choice of elemental contents that, as pure cases or classical examples, already carry weight with a child will make our teaching task easier. In natural science we have a great number of classical examples such as the Leiden Jar, the experiment of Archimedes and others by which links (to a child's foreknowledge) can fruitfully be found.

c) However, a danger always and still exists that such an event of reduction of the fullness of a phenomenon can lead to a one-sided view, a watering down and schematizing. A good example of this is the proliferation of revisions by most pupils with great success at mechanical ways of executing without the essences of, i.e., insights into the counting up (adding up) a series having broken through.
d) Insight into the relationship between the particular and the general also quite easily can lead to each special case later being made absolute without further verification.
e) It is one of the most important as well as most difficult tasks for a didactician to see such elemental content and to make it visible to a pupil. The fruitfulness of exemplary teaching is inseparably connected with the quality (gehalt) of its formative content. The reflection of a greater coherence or complex structure occurs most easily in terms of a typical case or good example.
f) The elemental content must always be taken from the world of a child as a meaningful whole for it to have meaning for him, but in addition exemplary teaching and learning can only be done justice if the essential (core) of a particular area of reality is thereby unlocked. Consequently, reality as well as the child always must be taken into account and interrogated if the learning content is to be representative of the matter that it must insightfully disclose, and also be simple enough for a child to understand. Therefore, elemental forming always must be realized on a concrete-realistic level so that the knowledge acquired can have greater formative value.
g) Because elemental forming largely remains directed at acquiring fixed points (island principle), it is necessary that after that there will be a working through to furnishing supplemental information. Such a further orientation to and broadening of knowledge through projects (themes) will fill intervening spaces and gaps between examples and make reality more synoptic. Between such well-established and anchored pillars of exemplars, additional learning situations must be designed by which connections are laid by supplementary programs on the basis of particular directions of interest. The beams between the pillars, however, must never carry more “weight” (value) than the pillars themselves.

Thus, there is a danger that this broadening information can be overdone and take up too much time.

In order to be able to really understand the richness and fruitfulness of the exemplary theory, it will not be sufficient for us to work only with Wagenschein's theory of the **exemplar**, Klafki's idea of the **elemental** and **categorical forming**, Moller's **elementary learning**, Ebeling's fundamental law of "**island forming**" ("Inselbildung"), Heimpel's principle of **paradigmatic** teaching and learning, Spranger's pedagogical insights about the **fruitfulness of the elemental**, Flitner's ideas about **fiction** or Scheuerl's structure of an **exemplary ground theory**. Our panorama must be broadened to include other modes, nuances and variant ground themes. In the pedagogical literature of the centuries, and especiallythat of the last decade, we find a whole series of words (concepts) that with little variation or change still are subsumed under the same fundamental concept without the meaningfulness or validity of what will be said changing much. All of these words such as Exemplum, Exemplar, Exempel, paradigm, example, reflective image, representation, type, specimen, model, species, sort, pure or pregnant case, analogue, category, elemental, fundamental, "pars pro toto", fiction, classical surrogate, anecdote, allegory, proverb, fable, etc. point to a relationship between a particular and a general where insight into the meaning of the one will irradiate and illuminate the other. Here this is not so much a part-whole relationship but much rather a center of gravity that is indicated.

Here a representation can involve simple objects without mysteries (such as teaching controllable arithmetical addition) or it can take a form where the general shows an "open" structure that cannot be defined. Hence, this can involve concrete examples, abstract laws or even a spiritual attitude. The representation can vary from true observing (aanskouing) and true to life lived experiencing to a mere proposition of "absent" (abstract) structures of thought.

In order later to be able to see the exemplary theory in a didactic perspective, we are going to discuss more closely a few alternatives of the exemplary.

4.4 A FEW MODES OF THE EXEMPLARY

The field of play in which potential exemplary teaching and learning possibilities are seen is just as broad and varied as the reality and world they strive to present. Thus, in an exemplary approach there is no place for a methodological monism but the possibilities always must be allowed to remain open and unclosed for fewer or greater variations and changes.

a) The paradigm

The relationship that exists between reality and a representation (example) in a paradigm only are accomplished in a general and undetermined form. The meaning and validity of a paradigm in many respects are just as comprehensive and multi-purpose as the more familiar word "example". This only says that a particular can be pointed out among others or can be substituted for another. For Gerner[19, 154] this means: "er besagt im Grunde nur, dass ein Einzelnes 'neben' Anderen 'vorgezeigt' wird. Ob dieses Vorzeigen der erestmaligen Erschliessung, der nachtraglichen Erlauterung oder Einubung dew anderen dient, ob die Vertretung ausdrucklich oder stillschweigend, in normativer oder bloss klassifikatischer Absicht geschiet, bleibt wie uberhaupt jede nahere Bestimmung offen".

"Paradigm" is a Greek word with a comprehensive meaning and therefore it can be used as a substitute "Oberbegriff" for all of the other nuances of the exemplary. Heimpel[26, 91] made the concept "**paradigmatic**" teaching known to contemporary didactics by introducing it as a principle of teaching and ordering learning material in History. He tried to create an image of events during the Middle Ages by choosing a number of paradigmatic forms such as Charlemagne, Henry III, Mohammed and Joan of Arc, each as depicting high points in the course of history. He says there can be equally good other high figures chosen because this does not have to do with a complete overview but much more with a concise representation of centers of gravity by which general opinions and typical structures are made visible. When a pupil possesses these keys (essentials) of the subject area of a particular historical era, it becomes possible for him to independently handle other themes in

a similar way. He summarizes his ideas as follows: “dass sich Individuelles im Individuellen spiegeln soll”.

For Scheuerl and Siewerth[54, 94] in teaching a subject, also History, this has to do more with a thinking through and penetrating into indispensible and fundamental concepts and structures that also later will become visible in a person’s life as a world- or life-view. Their choice of contents for exemplary presentation in History differs radically from that of Heimpel and will include such themes as: the changing field of tension between Kaiser and Pope, the mystery of **belief** as manifested in the Christian Church through the ages, political freedom, etc. For paradigmatic forming, this makes it not just a matter of achieving or mirroring and giving out particulars via consciously or non-consciously classifying-normative or receptive ways. We think here of two illustrative examples:

i) The real teeth of a house cat can serve as a “paradigm” for an investigation where the teeth of all sorts of cats will be investigated scientifically.

ii) The mood (emotional moment) that can be awakened by a pupil dealing with a particular poem as “granting mercy” can serve as an example of a moral attitude.

The concept “paradigm” thus is very broad and indeterminate because it stretches over a wide field from the most concrete to the most abstract objects. Therefore, it always is necessary that there also is illumination by other complementary forms.

(b) The typical case

A very old truth can serve here as a principle, namely: It is words that awaken but it is examples that draw. The exemplary principle lends itself to an heuristic” way of learning; a pupil is placed in situations (conversations) in which it is he who must search for the truth. Thus this form of teaching always leads from the known to the unknown and, therefore, makes it necessary that the pupil should be “encountered” on the level on which he now finds himself and be led from there. Where links must be sought to his pre-scientific experiences, in no sense can one begin with a rule or fixed characteristics, and thus, there can be support for further

illumination only from realistic and illustrated structures. Hence, we will not give a pupil a defined classification or formulated typology beforehand, but rather we will design situations in which a pupil discloses such quantities.

In paradigmatic teaching and learning, whether a pupil is going to be claimed and enlivened by it will depend primarily on the quality of the individual case. Through the heightened interest that a pupil shows for the matter and on the basis of the structural magnitude that addresses him, he will step up to the matter and then strive to understand its **authenticity.** Even Pestalozzi had overlooked the importance of quality in his reduction of reality structures to the elemental categories of number (quantity), form (space) and language (symbol).

(i) Now what can be understood as type?

Klafki[30, 445] carries the concept "type" back to the root word "Typus" in order to give it a narrower and more valid meaning. A "**typical case**" is that "something" that calls a particular "Typus" into appearing. Different from an example, where the relationship between a particular and a general sort is precisely definable and thus is static, a more flexible and more difficult to define relationship exists between the individual case and the type that is visible in it. For refined concept formation, then, there also must be a distinction made depending on whether the emphasis is placed on the simple (elemental), the unique (classical) or the typical aspect.

The recognition of a type largely remains bonded to the observable. Scheuerl[49, 52]) correctly says of this: ""Typen sind wesenhaft keine klassenbgriffe". Exemplary teaching in terms of types does not involve a certain law, rule or principle becoming visible but much rather "looking into" a particular structure. Thus, there is no lessening of the value between the type and the individual case that is viewed as one of the type because the same characteristics are present in both to a greater or lesser degree. However, the type-concept always remains coupled with a dialectic describing. On the one hand, the individual cases each show something purely objective-concrete, thus possess a degree of uniqueness. On the other hand, each case also already shows a structure that more or

less corresponds with what is seen in a number of cases and thus can be taken as something general or typical.

Different from exemplars, individual cases of a particular type are not arbitrarily interchangeable because no fixed characteristics (identity) exist as a criterion for "belonging to a particular sort".

Scheuerl[49, 53] points out that judging cases as one of (belonging to) a particular type cannot be done on the basis of a common, defined formula but only through trying to acquire an order from illustrated realities that still remain observable.

There also is the additional possibility that one particular case can be loosened from its type-concept on the basis of an appreciation of it for itself that can elevate it to an Exempel. Scheuerl[49, 53] formulates this so: "Wesentlich fur den Typus-Begriff ist lediglich das Mehr oder Weniger der Approximation an eine Hochform. Und diese Hochform moglichst deutlich hervortreten zu lassen, darauf kommt es der exemplarischen Lehren primar an, wo sie ausgesprochen oder unausgesprechen Typisches zum Exempel erhebt". Such an Exempel then can be applied as a criterion for pointing to other cases as one of the particular type.

(ii) Examples of the type-case

Fischer[16] shows us that the meaning of the German word "Beispiel" does not correspond with example or afterimage but actually means that there is "something" held before or presented with the aim that thereby later a pupil will be in a position to be able to choose. This shows an agreement with the meaning of Exempel since it holds up a norm on the basis of which a judgment can be made. However, with a type-concept the judging always remains dependent on the degree to which the type is visible in the structure of the separate cases.

However, we also know that the ways in which observing is possible and the clarity of each case can differ will depend on if a learning person is involved with real or ideal types.

---

[16] Fischer, K. G.: Ped. Rundschau, Feb. 1969, p. 96.

Already since the days of Max Weber there have been arguments about the term “Ideal type” and its use in different areas of science. It has seemed that it especially has possibilities in the human sciences because the identification of “some type” in each individual case already implies an act of idealization.

Scheuerl[49, 58] goes yet further than idealizing from a particular reality: he differentiates between the terms “Gestalt” and “Model”: “Das ’Heraussehen’ des Typischen ist nicht dasselbe, wenn man die charakteristichen Zuge individueller ‘Gestalten’ (etwa historischer Bewegnungen, Epochen) in die ‘reine Form’ transponiert, um sich ein ‘Modell’ konstruiert, um funktionale Zusammenhange innerhalb eines Wirkungssystems (etwa eines Molekuls, eines Marktes, eines Staatenverbands) besser erfassen und in moglichster ‘Reinheit’ studieren zu konnen”.

All of these pronouncements necessarily must have important consequences for our elemental teaching because here there is no blind reciprocation and “transfer” of knowledge from one individual case to another. Each new case first must be considered in its uniqueness as one of a type.

Gerner[19, 55] summarizes this beautifully: “Die entwertende Nebenwirkung die der Subsumtion eines Individuellen allemal anhaftet, ist auf ein Minimum eingeschrankt, wo individuelle Tatbestande nicht als Exemplare durch ein Exemplar, sondern als typischen Individuen durch einen Typus reprasentiert sind”.

Hence, types only can exist as individuals alongside each other and only when a higher category is seen in them and they are subsumed under it.

However, it is possible for a pupil later to have at his disposal knowledge of a number of typologies that enable him to recognize a new problem as one of a certain type or try to understand it accordingly.

Thus, it is a task of didactics to offer pupils the opportunity to more closely learn to know about such typical cases. Klafki[30, 445] mentions a number of such types: a desert as a geographical type, a conifer as

a biological type, absolutism as a political type, a Middle Age citizen as an historical type, an esthetic person as a type of life attitude. Because a pure and a classical case are very close to a typical case, we briefly will touch on each.

c) The pure case

The pure case also can be used to help combat the overload of learning content by now making room for accepting a smaller number of "authentic" learning results instead of (requiring) that the learning contents be known in their completeness.

Usually when an uninformed person carrying on a colloquial conversation, ordinarily no difference is made among the various classifications of the different "cases". There are those who will see each new murder only as a **pure** "case" of murder just as each short circuit in the electrical circuitry of his house's wiring is seen as a pure case of a short circuit.

However, we acquire cases where the idea of "authenticity" stands out strongly. The concept "case" assumes also that the emphasis will fall on the general in a particular situation. If a pupil already is familiar with the meaning of a definable sort of concept, the name of its exemplar will be accepted by him as "nothing new", with the consequence that he will remain passive. On the other hand, each individual case can be construed by a pupil as a pure case -- say of love, murder, plain courage – with the consequence that as a unique event it acquires particular value and claims further interest in it. On the other hand, naturally he also can recognize the event as one of a "type" of love relationship with a more general sense. Thus, we see that the entry from the side of a pupil each time is first directed to a particular and only then does it become clear that he has to do with an unambiguous (pure) or a more ambiguous (typical) structure.

Also important is the knowledge that it just doesn't matter if our case (event) is nothing more than a flight of fancy (imaginary) or a real event. This does not have to do with the reality or truth of the case as such but rather with the structural relationships that it makes visible. Hence, it can happen that a mere theoretical creation

of a certain situation (reality) can be proposed that is so true to life and genuine that its "gestalt" appears to the hearer/reader as "typical". It is mostly in the descriptive and creative subjects such as art, music, literature and poetry that such human creations can awaken a feeling of truth and uniqueness and can be typified as a pure case. Naturally, the concept "classical case" is very close to this.

d) The classical case

For many persons the concept "classical" has a very narrow and one-sided terrain of meaning and validity because they couple it with a particular historical-cultural span of time and, to be sure, that of the Greek-Roman era. It is customary in our daily conversing to label a great work (art-, music-, historical-, literary-achievement or attitude) of outstanding quality or exceeding rareness as "classic". (Who of us has not listened to a number of "classical" compositions on a radio).

The basic reason for the connection between "classical" and the Greek-Roman culture—such as with the name of "classical languages" still being used—certainly must be sought in the fact that during that period of time a large number of persons with extraordinary talents had delivered a variety of achievements of high-standing value.

In the broadest sense of the word the concept embraces all such paradigmatic cultural contents and cultural forms that can be viewed as of central significance (formative value) for human achievements. Because the possibilities of achievement (creating, establishing) are so closely related to the right attunement of a learning person, we can broaden the concept "classical" to the didactic-pedagogical forms of appearing from the past that simultaneously serve as worthy of emulating and as valuable. The deep power of influence of the fundamental value and sense of the classical content, thus, represents a fundamental direction for the inner activities and disposition of the person addressed. Klafki[30, 448] then also says of this: "Das Algemeine des Klassischen ist immer eine als gultig, vorbildich, verbindlich **erlebte** menschliche Haltung oder Leistung".

In order to unlock this "value-content" and "value-direction" to make them effective, in designing a didactic situation there must be a going out from cultural contents (that will embrace classical contents) so that a meaningful connection can be established with what already has been brought up by a child as actual questions and problems. (It is unnecessary to isolate "classical" forming and reduce it to an event that exclusively is realizable in terms of content in which, as a creation from the past, already has the label "classical" hanging around its neck).

Each acquisition of a pupil in such a special and fruitful learning situation, as his own achievement, will influence his future actions and bearing and will allow him to show a (degree of) formed-ness. The quality of forming such as is brought about through classical contents in particular must be judged still higher because the classical is not "von der Bildungsarbeit einfach als Ergebnis des, **sinnvollen Selbstgestaltungsprozesses des Geistes'** aufgenommen werden kann, sondern dass jede Zeit und jedes Bildungsideal sich aus dem Ringen um die eingenem Probleme heraus um siene eingene Klassik bemuhen muss".[30, 447] Only where the experiencing and lived experiencing of a child are involved with **realizing values** can there be mention of formative contents.

The essential formative work of local contents, thus, is found in the general (achievement and bearing) becoming visible in the "ganz individuellen". The general classical value of something (great creation) can be acquired in no other way than as something individual. Where this unlocking of the general now is experienced by a pupil in the form of a particular person from the past or his personal work, it will address him strongly. On the basis of a greater intentional directedness and enlivened interest, his actions now no longer can be seen as a mere imitation of what occurred earlier. Now he is going to try to give "form" to his own creation. The "classical case" is no model but only a direction-giving and inspirational example.

Klafki[30, 449] indicates to us that the "classical case" thus has particular significance especially for the areas of historical-political, literary-cultural and anthropological-philosophical educating

(teaching). The presentation and mastering of classical formative contents will allow a pupil to acquire greater mobility and enlivenment so that when a problem-awareness is awakened in him about actual tasks in the present and possibly for the future, he always will be able to reach back into the past in order to search for a more certain solution (achievement and bearing).

Weniger[30, 449] points out, however, that the possibilities of classical forming are not unlimited but remain bound to certain limits. He writes: "fur viele Aufgaben, die unserer Zeit gestellt sind gibt es keine Klassik, wil die Aufgaben ganz neu sind, ohne Vorgang und ohne Grundlagen in irgendeiner Vergangenheit und ohne Anhalt an irgendeiner der bisherigen Verhaltungsweisen und Lebensformen".

In summary we can only note that the "classical case" and the "pure case" show a very close relationship with only this difference: the classical case always is realized in terms of contents that in the past already had acquired, as a human achievement, an estimation of value. The classical case's being bonded to a person on the basis of his valuable creation places it on a higher level in the formative event than a pure case.

e) The specimen and the model

As further supplementation and disclosure of the modes of the experience of the exemplary, we choose the two concepts "specimen" and "model" on the basis of the commonality that both show as interchangeable examples, i.e., that of "one for all".

We can distinguish between a specimen as an exemplar (cut-out) of reality and a model as a concrete, visible representation of reality. Earlier an articulation was given of the typical, pure and classical cases as more ideal embodiments of structures, achievements and attitudes/bearings. With the help of such concrete "examples" there will be an attempt to present to a pupil an unambiguous and compelling "norm" of reality about the truth of which later there need not be any doubt.[19, 56]

(i) The specimen

According to Scheuerl[49, 63] the concept "specimen" already possesses a number of significant differences that all refer back to a particular common core, i.e., that a quality of reality itself can be tested in terms of a "selected" example or specimen. (This also then is the way of selecting a specimen, e.g., by rock-, wool- and seed-classification). The word "specimen" ["monster"] shows a great correspondence with its equal in the Italian language "monstra" that, in its turn, is a derivative of the original Latin word "monstrare". Scheuerl[49, 63] says: "Muster ist zunachst das Gezeigte".

What the selection of a specimen aims at and that can be pointed to in the specimen itself must be taken as a criterion for future evaluations. Therefore, it is going to be easier to select a specimen from a matter whose elements clearly show homogeneity. The characteristics (properties), as attainable from the specimen, can then be transferred just as they are (i.e., unchanged) to a greater reality. We say the specimen can be interchanged with the real object.

However, where the **specimen concept** is imported into carrying on a pedagogical conversation, it is necessary that the **characteristics of rigidity and narrowness are maintained and shown that then sometimes can be confused with the normative.**

Because the concept "model" allows for more freedom of views and latitude for representation, it can be used with greater fruitfulness in our didactic-pedagogical theory.

(ii) The model

It is recognized everywhere that originally all knowing, as *a priori* experiential knowledge and pre-scientific views, can be tied to one or another sensory perception and lived experienced totality. Thus, vividness and illustrating visually are basic to all learning and teaching.

In a specimen as well as a model the characters of exemplifying, representing and providing a snapshot remain common fundamental notions. However, what is different and new with a

model is the possibility of a greater or lesser degree of availability (Verfugbarkeit). That is, it is possible for a presenter to "transform" and "dismantle" a difficult and abstract object in such a way that only the moments that are important for the [immediate] present are shown prominently.

There also are a number of additional benefits connected to the model that make some teachers consider it to be more suitable for certain aims than the real object. For example, an airplane-model can be tested out in a wind tunnel without running the risk that a human life can be endangered. Ventilation apparatuses and techniques can be tried out without great monetary costs.

However, a model remains only a provisional design and cannot be taken as an absolute norm.[49, 65] There always are possibilities for more detailed disclosure that will make changes and improvements necessary.

In addition, most models are very simple and easily can be separated from each other and again rebuilt from bottom to top. However, the danger also always exists that because of the greater abstractness of a model as a human representation of reality, it sometimes can give rise to false ideas and faulty perceptions. Thus, e.g., the use of models of atoms easily can lead to inaccurate concept forming by a pupil since his view of a real atom itself remains stuck on a concrete-observational level and atoms are brought into congruence with little plastic balls. The same danger exists in the use of many other teaching aids. Certainly of importance is the possibility that many details in a model can be left out and what is essential can be illuminated. Thus, it is necessary that a model always is constructed for a particular aim. In so far as the usual concrete-observable model is concerned, it is a very objective teaching aid that usually stands opposite a child in a cold and alien way.

In pedagogical discussions and didactical explanations, often use is made of the model concept to broach and illustrate visibly certain political, social and spiritual realities. Because a person is more closely involved in these matters, they can have a more direct influence on the ups and downs of his subjective life, a model can

be an embodiment of a priceless value for a better mastery of and orientation to the world. The greater clarity and intelligibility that can be attained with such a modeled description make it possible for a pupil to be able to arrive at concepts of greater clarity.

Today it is not unusual to read in an education journal of a model situation, model material, model lesson or even a model school. Of particular significance is the knowledge that behind each of these words there are ideas of a greater suppleness and freedom that are closely coupled with each concept, situation, learning material, lesson and school. In itself all of this is a progressive step, without giving attention to additional disclosures that can be made and that, along with the concept "model", also can convey the idea of a reduction to the essentials (through stepwise omissions or categorical constituting and construing).

Although so far we have only broached a few slices from the totality of possible modes of exemplary experiencing and thus equally important modes have been left out, for the sake of the depth aimed for, rather we will focus on further disclosing the didactic significance of the exemplary principle for teaching and how this can be realized in subject didactics.

4.5 DIDACTIC POSSIBILITIES FOR IMPLEMENTING THE EXEMPLARY PRINCIPLE

The exemplary is taken up anew in teaching theory and practice because it shows possibilities of serving as a counter-pole for: on the one hand, any further inclinations toward pedo-centric teaching and, on the other hand, the danger of an excessive objectivistic tendency to "scientize" the teaching experience. Viewed in this light, exemplary teaching means a reduction to the simple and original by which potential accesses to complexes can be disclosed.

In order to determine the place for and essential characteristics of the [exemplary] concept for the events of educating and teaching as well as to indicate the possibilities for implementing it in a few subject didactic areas, we are going to try to evaluate a number of its most important characteristics. The aim is that in this way we

can establish a number of guidelines that can serve as points of departure for answering the didactic question of "how".

4.5.1 The exemplary contributes to subject matter unloading in place of overloading

There certainly is a degree of meaningfulness in beginning with the contrast between "unloading" and "overloading" because it was just the problem of learning material overload that had given rise to important decisions at the Tubingen Conference. The hope expressed was that, in the future, didactic thinking would remain more directed to a pushing through to and unlocking of the essence of a matter above any expanding and supplementing for breadth. The notion also was arrived at that in the first place achievement is not possible without **deepness**. Deepness and original creations are, in their turn, again only possible by accountably restricting the quantity of learning material that must be made one's own.

Heinrichs[26, 68] sees this matter such: "Arbeiten-Konnen ist mehr als Vielwisserei". This awakens in us the notion that insight into and understanding of relationships among already mastered structures and new examples that are presented can be concealed by the abundance of unorganized contents. If there is an excess of knowledge, its form (structure) always will remain scant and cumbersome on the basis of much meat and little muscle.

Where a school, as an educative institution, must offer a free space in which a child's potentialities can be led to the best unfolding and where he acquires the opportunity to work on his own responsibility and sureness, from a didactic-pedagogical perspective this must be seen as **a** defect that a child is "overwhelmed" with a confusing amount of in-streaming "information". Because the abundance of learning material necessarily must lead to not everything being assimilated and integrated, it remains drifting around in "suspension" as seeming (pseudo) knowledge that is very difficult to make explicit once again. Meyer[42, 17] sees exemplary teaching as a **didactic necessity** in order to realize the "**creative joys**" of one's own acquisitions.

Where there is the notion that useful forms of learning material and principles of choosing learning material no longer can keep pace with the demands placed by the snowballing and ever growing complex "knowable", there is a search for didactic principles and forms of ordering that can help overcome the actual distress from the overload of learning material and its attendant negative influence on teaching.

Thus, a number of authors, such as Derbolav, all allowed their voices to be heard against the systematic objectifying and progressive [step-by-step] linearity of the forms of presenting learning material in our modern area of science.

It was then, especially thanks to the "spirited" and scientific lecture by Wagenschein, that such a fight against the overloading of learning material since the beginning of the 1960's was tackled with diligence. Wagenschein had tackled the problem such that he also cut to the root of the total event of forming. In addition, he saw the essence of the exemplary principle in "die Reduktion der Gesamtheit verfugbarer Lehrstoffe auf solche von beispielhafter Eigenart, die gliechsam stellvertretend fur eine Fulle anderer stehen".

Although his insights are relevant to his teaching of Physics, it remains fundamental for all subject matter and with slight adjustment can be made applicable to other scientific areas.

His findings are summarized as follows:

(i) The rapid and continuous expansion of learning contents have the consequence that an average and weak pupil become overtaxed, and

(ii) this leads to an uninspired, listless, narrow-minded or at most functional relationship between pupil and learning material. Because a pupil is not claimed in his totality, the possibilities for creative work on the basis of a push from a heightened tension are minimal.

(iii) Where there is such an abundance of learning material, very little opportunity is allowed for original discovery and the lived experiencing of the contents as being true to reality; thus there is a thoughtless imprinting of great

> quantities of factual knowledge and the mechanical imitation of manipulating techniques.

Owing to the conservatism that has become a synonym for educating and teaching, anyone who enters the terrain of a school (teaching) with the exemplary ideas of renewal must expect a degree of skepticism and resistance. Thus, on the one hand, there can be objection raised on the basis of the views from the earlier idea of material forming that still is to be brought forth by many as tradition. Glogauer[21, 138] refers to this danger point when he says: "Diese materiele Bildung ist die eigentglich Ursache der Stoffuberdung in unseren Schulen geworden". Therefore, in many subject matter areas we still find "inflated" curricula and voluminous textbooks because completeness is placed before everything as a first requirement. Along with this usually there is a linear ordering of learning material that results in (following) businesslike logic and a step-wise form of presentation where each object (theme) is taught as completely and systematically as possible.

However, today we know that any striving for completeness without overloading and a related "superficial-izing" must be viewed as "Utopian".

The result of such persistence with the ideas of material forming was that there must be a grasp of fixed methods and rigid ways of coping in order to try to overcome the confusion created by the great quantity of factual knowledge. The result then was a form of teaching that led to step-wise explanation from the simple to the complex, to the logic of a chronological (ordering), from an introduction to a particular schema. These types of teacher work schemas usually differ very little from an elaborated encyclopedia or those sublimations and sedimentations from a popular textbook. Hence, here was an erroneous attempt to realize formative aims by presenting a series of learning material in fixed and systematic ways. A Skinnerian program [of instruction] is a good example of such a linear form of ordering learning material.

But today it has become impossible to try to learn everything that appears on our landscape. Any overloading necessarily will have

the consequence of sacrificing a deep penetration and insightful understanding. On the other hand, Dilthey[30, 324] already had recognized the deep truth behind Pestalozzi's elemental methods. For him achievements are not possible without working in depth. Such deepness, in its turn, only can be possible by delimiting and reducing the learning contents to what is essential. When the contents are reduced to essences and are made understandable via the exemplary principle they also are remembered better. The relationship that arises between learning in terms of simple examples and the full life of a person shows the same characteristic as the dialectic of "essentialness" and "completeness". The essential (fundamental) only is attainable by a learning person if he ignores the fullness (amplitude) [of the contents].

Objection also can be expected from the side of the explicit and non-explicit adherents of the idea of "general forming" as also is still manifested in this country in the beginning classes of middle schools. Indeed, it is an indisputable truth that when pupils are expected to study simultaneously such a large number of subjects, this necessarily must lead to forming that is "thinner" and more superficial.

When we search for ways and directions to provide solutions we cannot neglect the four principles that Glogauer[21, 165] prominently states for choosing formative contents, i.e., "Strukturgemassheit, Angemessenheit, Lebens- und Werklichkeitsnahe und das Exemplarische". That is, it holds as considerations in the choice and presentation of learning contents that:

(i) They ought to be in agreement with the structure of the presented contents themselves.
(ii) The learning material must be actual and this actuality must be expressed in the presenting.
(iii) The ways of presenting must be chosen on a basis by which a child becomes aware of (experiences) and gains insight into (understands) their being near to life and reality.
(iv) From this, the contents must be seen as representative rather than encyclopedic.

The first principle of structure-agreement refers to building up the structure according to particular justifications as well as taking into account what is characteristic and striking about the unique nature of a subject matter.

Behind the principle of "angemessenheit" [appropriateness] are the thoughts of correct choice and the scientific arrangement of the contents in accordance with the stage of becoming of a pupil. Such a point of departure shows a clear awareness of the categorical unlocking of reality. Now the danger is that if too much value is attributed to these two objective (external) factors the harmony in the relationship between person and reality becomes disturbed. Thus, the possibilities are much less for realizing the aims of forming (acquiring norms and values) by alienating the learning outcomes from life as "dead" knowledge.

This gap, however, can be corrected to a degree by presenting near to life and near to reality cultural contents that already more or less have acquired local lore value for a child. Giving meaning and self-disclosing the essence of a subject only can be possible with such a concerned involvement.

In practice many times one sees that a teacher begins a geometry lesson with the question: What is a point? And before a class member can venture an answer, the teacher continues with a formal, rambling explication of the concept. The small bit of experience (knowledge) that a child acquires in this way remains unassimilated. However, because it also is impossible for a child to clearly state in language such an abstract concept usually there is satisfaction with describing and naming a number of visible characteristics. Formative contents chosen from the lifeworld of a child that from the beginning have meaning will address him more strongly and provide greater enlivenment to his actions.

There also must be agreement with Glogauer[21, 168] about the merit of the exemplary principle in choosing and ordering learning contents, although it only points to a few dimensions of the total concept. Exemplary teaching embraces a wide field by which the idea of learning material overload is included in terms of elemental and fundamental contents. Thus, exemplary teaching and learning

must be employed with generally valid or primordial phenomena that, as particular matters, can be representative of a general magnitude. Therefore, the presenter is forced to choose from a wide field of possibilities only the illustratable core area that, as a ground form, illuminates the fundamentals of the total problematic. This center of gravity from a reality can be organized into a minimum curriculum to serve as a point of departure for a punctual or spiral form of ordering learning material. With the exemplary principle it is possible to reduce the reality to what is essential without bringing about a reduction in the value of your learning results. The formative event (elemental forming) always remains an introduction from the observing to the concept, from the known to the unknown and from the particular to knowledge of the general.

Also important are the views of W. Flitner[68, 25] in this regard. In his explication of the concept "fundamental" he presents a number of guideline to us for choosing contents based on the following important considerations: "replacing" the complex by the elemental, the very demanding by the simple, the undifferentiated by the original, the difficult by the easy, the structured by the fundamental.

The mentioned variants of exemplary learning and teaching can each be harnessed to help lighten the burden of learning material overload. However, this does not yet point to the possibilities of the "Exemplar" as a **replaceable or interchangeable** form of meaning of the exemplary. In order to be able to implement the full field of meaning of the exemplary, the possibilities of the Exempel, as norm provider, for unloading (the burden) must be sought, found and connected with.

Scheuerl[49, 51] also correctly indicates that the exemplary, as a "relation" concept, is not bonded to any substance or substantial quality. Therefore, a large variation of objects and events can be placed in exemplary relations (both deductive and inductive) with each other in which the general is reflected in the particular in more than only one moment.

The exemplary relationship thus always shows such a dualism: “Es steht zwischen einem Etwas, das es representiert, und jemandem, fur den es dies tut. Es schlagt eine Brucke.”[49, 27]

A second possibility for “unloosening” the yoke of the overload of learning material and didactic objectivism can be made feasible by an accountable differentiation, an idea that has been worked out well by Van Gelder[62, 30] and that seems to be of great significance for practice, especially in teaching calculus. On the one hand, for him this has to do with presenting “core learning materials” that in a classroom form of organization must be clarified for all of the pupils. (Core learning materials, then, only are the basic concepts that allow the essences of a particular theme to appear). On the other hand, for Van Gelder this has to do with a continuation and broadening at the beginning of the exemplary, in a “looser classroom context,” where in terms of supplementary programs (information) with appealing themes can be worked on (project teaching) following individual interests and talents.

Because this primarily has to do with a teacher striving for a penetration of the core learning materials at the cost of knowing everything, this also makes possible a differentiation in tempo that particularly rescues the weaker pupils from being overloaded. Thus, also important are his ideas of bounded and free assignments. With “free assignments” one always can think of considerably decreasing theoretical work (especially with weaker classes) by means of more practical applications and actively doing things.[3]

While the exemplary in its broader meaning must be seen as a principle of forming, it can be valid in a more comprehensive field than that of (helping reduce) learning material overload.

4.5.2 The exemplary “elemental-izes” without atomizing

Earlier in the chapter the concepts “elemental” and “elemental-izing” were treated fully. Already in his writings Comenius had accepted the approach from the simple to the difficult as a fundamental principle for all teaching.

Where the exemplary principle strives to try to neutralize the actual danger of overloading learning material and splintering subject matters with working in depth and by thematizing, in reality there must be a striving for originality and deepness at the cost of completeness. Thus, exemplary teaching is compelled to search for contents that, in addition to working with what is "exploding" (breadth), there is a search for contents that also concern intensification (working in depth). With an exemplary form of teaching the learning material contents can be abridged by searching for a number of penetrating thematic concepts, each of which can concern a child as a smaller or large slice of reality (elemental contents) for a deeper lived experiencing by a child. At the same time, this allows a teacher an opportunity to design the situation in such a way that a child can linger longer with the contents in order to better gauge their elementals [essentials]. And although each small slice of an area of reality must serve as a paradigm for unlocking a more general field, it also forms a magnitude (unity) that can be taken as a yardstick for judging other individual cases. The word "Gegenstand" then also refers to the validity of such a claim because it always means that the matter or thing standing opposite is lived experienced as a totality (structure). Such a general or global notion is acquired by an implicit working (results of an experience). Thus, this always is the fruit of a spiritual structuring and attributing meaning that cannot be equated with the "sum total" of separate perceptions or a mere intellectual union.

Many of a person's higher insights and complex views acquire their distinctive validity in such a reduction to something meaningfully thing-like or paradigmatic. For example, a pupil cannot break through to the essence (concept forming) of the general theorem of the sum of the interior angles of a triangle by only making exact measurements of a number of such angles but by the insight into what was stated in the hypothesis as essential breaking through. Here the elemental serves only as an exemplar to make it easier for the insight to break through by which the general statement simultaneously becomes illuminated.

The exemplary, then, is a counter-pole for all specialization. Any reduction with the aim of deepness does not mean "particularizing"

but a search for the particular (simple) that reflects the greater, the general and the difficult. Derbolav[19, xi] sets as a teaching aim: "Uberwindung des alles wahllos aufgreipenden Wissenzyklopadismus wie Uberwindung des blickverengenden Fachspezialistentums, kurz Wiederherstellung der Bildungsfunktions unseres hoheren und Hochschulwesens".

However, a didactician can have the incorrect view that mastering a subject only is possible by way of a step-wise building up and logical structuring in terms of separate elements. This shows an ignorance regarding the concept "logical [structuring]". As a didactic form of manifestation, logical [structuring] need not follow a linear building up by following a structure of synthesizing. This is so only where the sum total of the parts is less than the whole. Just as well, a punctual representation can be followed where beginning from a point of light (elemental) there is a diverging and radiating to illuminate all sides (of a matter). The intensity of the source of light (the quality of the formative content) will determine what field is going to be illuminated. Here the particular serves as a reflection of the general. The last forms of logical [structuring], i.e., those of the spiral forms and concentrated representations, that lead to a way of coping that already is applied in teaching with great reward. Here there is a progressively wider and deeper working from a fundamental core of learning material following unique developmental [elemental] and subject matter considerations.

In both of these last-mentioned forms of logical [structuring] in no sense can there be mention of an atomistic building up and accumulation of elementals. There is a boiling up and rising center of gravity (elemental content) that leads to a general aim. Both of these ways of logical structuring can be used fruitfully in an exemplary form of teaching and serve as a counterbalance for a form of presentation where in a mechanistic way there is a straightforward (linear) progression along fixed steps of learning that are "carried" from one step to the next. Hence, there must be a search for formative contents (core learning materials) with formative value and formative sense that not only will serve an "infectious" and irradiating working on the particular but that later can be supplemented with additional information so that a comprehensive generality (validity) can be unlocked.

As Wegmann[68, 27] so aptly states, a directedness to thoroughness still later possibly will show gaps but the originality of each elemental will remain untouched. This implies that each exemplary acquisition always shows uniqueness and as "a "genuine learning result" necessarily must show greater flexibility.

Kopp[34, 91] sees this possibility for greater transferability as the highest value of the exemplary. He then mentions such cases as: the transferability of methods of solution, of study/work techniques using reference books), of laws, rules and theorems (expansion of a warm body), of causal sequences (effects of erosion), of images (church with Gothic style), of forms of living (nomadic tribes), of meanings (the mystique in ballads).

Therefore, it is clear that only realities can be chosen that already show the inherent characteristics to be able to serve as an exemplar of a general sort or that as an individual case illustrates the structure of a general type. **Only when that which is fundamental is seen in the example can the methodological way begin to acquire form (following the three [i.e., inductive, deductive and abductive] forms of logic).**

From experience we also know that a person always is in search of fixed points (individual beacons) that stand out as islands in the ocean of his lifeworld in order to be able to orient himself. He can find his way more easily in terms of such beacons than when he must depend upon what others try to indicate for him.

Consequently, we cannot agree with the view of Wegmann[68, 121] when he makes the statement that the exemplary fundamental-izes without systematizing. Here he shows a one-sided view of the word "systematizing" that, just as "thinking logically", cannot be reduced to the level of a linear construction. Indeed, there is a system in each exemplary action by which one is led from the simple to the complex, the easy to the difficult, the differentiated to the general.

Wegmann[68, 223] also replaces the concept "elemental" with "fundamental" so that each beginning already has taken its point of departure from a fundamental principle. He claims that such a

modification will contribute to disengaging the idea of an atomistic and rational construction that is possible with elemental forming. For us this seems to be an unnecessary step when it is accepted that in each elemental there indeed already is something fundamental and original that must be unlocked.

4.5.3 The exemplary is motivating rather than informing

Roth[48, 278] broaches an interesting aspect of our task of teaching and educating when he says: "What is needed in our time most certainly is not informing and orienting but exemplary deepening". Here deepening means that a teacher not only addresses the intellectual moments of a person but also must awaken a pupil's spontaneity. Thus, genetic [developmental] considerations also must be taken into account regarding what for a pupil already is known (valuable). Because the elemental and the fundamental contribute to placing the learning content in a new and more meaningful light it again becomes worthy of inquiry. However, it is not necessary to always begin from the bottom with a problem. A didactician must seek a child on the level that he now is and look for connections with this level in his presentation. Therefore, the motivating statement of a problem (aim) and introductory content (example) chosen, in terms of which the problem can be disclosed, cannot be too easy or too difficult. Hence, a teacher also cannot suffice with a formal explanation and rational narrative because the essence of a paradigm cannot be passed on, but always must be proffered as a first aim (problem) for a child to disclose for himself.

The introduction and execution of the exemplary principle is a didactic necessity where there is a striving for originality. A greater concerned involvement has the consequence that the interiority of a person is addressed more strongly and this enlivens him. The exemplary experiences and the accompanying unlocking of reality help to stir up the cognitive, affective and willing moments of a person and stimulate his creative fantasy. Where such an approach humanizes teaching anew and loosens it from an excessive objectivism, at the same time this accommodates a motivated and therefore a contented person. From the above it is clear that teaching cannot be focused on an accumulation and collection of information because, in order to stimulate interest and direct

actions, the aim must stand out as a clear and separated meaningful unity.

Greater inner mobility and motivation, firstly, are connected with the demanding character of the contrasting contents and their unlocking and radiating character. The "attractiveness", or not, of the modes of presentation and form always have a secondary position.

Where the formative value and formative sense of the elemental and fundamental contents become visible in an exemplary form of teaching with an originality and "freshness", at the same time, this provides for a favorable learning climate within which a child undergoes a degree of thrill (affective moment). Certainly there are expectations awakened in him that find expression in an anticipated (rational moment) formulation or question. The heightened tension of attending and enlivened interest, on the basis the "ascending" importance the experience now have acquired, ensures that a pupil mobilizes power and really sets himself to learn and to search for a meaningful view and form.

The exemplary principle always implies that beginning from a certain center of gravity (general or specific) the learning activity of a child must be carried further via deductive and inductive reasoning. Here Klaffki[30, 329] makes the important distinction between the **unlocking** and the **clarifying** function of exemplary learning in so far as the latter contributes specifically to awakening greater motivation on the basis of increasingly becoming aware of the problem of what must be taken as a fundamental (categorical) precondition for a particular area of reality. Where, at the same time, this also gives greater certainty regarding a possible methodological way that can be followed, this contributes indirectly to a greater and changed independence in future thinking and conduct. In this way, a pupil will show a greater formedness.

In practice, a teacher quickly experiences that even the most interesting and demanding learning contents cannot be held onto for long. Thus, he is forced to introduce variation and change. Hence, a formative event is not continuous. The mindful observations (aanskouinge), lived experiences and encounters of a

pupil always are separate leaps on the way to a greater mastery of reality. The spaces that necessarily are allowed between the paradigmatic acquisitions do not refer so much to deficiencies but to possibilities to be worked on further on one's own initiative.

Exemplary teaching also is very quickly going to lose its effectiveness and impact if there are not accountable ways to provide for variation and supplemental programs. Roth[48, 277] says of the exemplary that it still is "a supplementary teaching method that necessary determines the direction the methods of **orienting** and **informing** will take". Where exemplary teaching works more in depth in order to unlock the essences of a matter for a pupil, it is necessary to carry forward its "resonance" (radiating power) with additional supplementary courses and broader information. Wagenschein[42, 21] sees the value of such orienting contents otherwise "sondern breiter indiwidueller Tatigkeitsberichte, nicht zum Nachmachen, sonder zum Anstecken".

Sometimes it is necessary that the exemplary be preceded instead of followed up by an informing and orienting introduction that prepares a pupil for the valuable unlocking of the general principle that is made clear in a good example. Thus it is necessary to first give the pupils certain information and provisional materials before they risk a dangerous natural science experiment. Just as a teacher first provides a background sketch, in broad strokes, about who the poet was and the circumstances that had given rise to writing the poem before it is going to be analyzed in detail as a certain genre. In general it is found that with the appropriation of exemplary experiences, to some extent there is a quantity of information for orienting already acquired. Hence, in addition it also is necessary to give a brief orienting summary and orienting formulation.

4.6 THE SIGNIFICANCE OF THE EXEMPLARY FOR PRACTICE

The exemplary principle always refers to a relation that can exist between an example and a rule or law, a case and type as well as a concept. Thus, the principle of reciprocal unlocking between the particular and the general can serve as a guideline for any choice and ordering of formative contents. A fundamental condition for exemplary teaching, then, is that there must be a search for simple,

primordial phenomena and elemental structures to make possible the fundamental or "always similar" representation of a particular area of reality. From our above pronouncements and disclosures it has become clear that the exemplary way includes possibilities for the assimilation of insightful and flexible learning outcomes. Such a didactic deduction only can be acquired as an axiomatic truth if the demands of this form of work make spontaneous learning possible. The latter cannot be acquired in terms of a fixed, uniform exemplary teaching form for all subject matter but requires that there is a congruence with findings from the psychology of becoming that give impetus to some degree of "adjustment" to the choice of the general-exemplary and particular variants of the principle. Thus, e.g., in languages there is a falling back on one or another classical case as a yardstick, in religious teaching the parable is well-known, in physics the model, in geology the specimen, in geography the typical, in history the "story", in arithmetic the exemplar, etc.

Only via exemplary learning in terms of an adequate mode of a paradigmatic form of teaching is a presentation meaningful for a pupil and the "uniqueness" and "differentness" of each unlocking is done justice. These variants of exemplary teaching and learning extend over a wide field from the more concrete-interchangeable specimen (exemplar) to the most abstract-unique parable. Thus, exemplary teaching lends itself to use in most subject matter and over a broad range of ages.

In subject didactics the exemplary cannot merely be "transferred"; indeed (with purposeful modifications) it can be made fruitful. Each subject matter area shows a unique nature and structure that necessarily must influence the character and form of the teaching.

The first great difference to which attention must be paid is the distinction between the exact natural sciences and the more supple concepts of the human sciences. In the natural sciences the essences of a general sort of concept already are visible in the separate, interchangeable exemplars and an example only has significance in so far as it contributes to illuminating the general. Because this forms part of a concrete-observable reality, it can always be disclosed by the pupil himself since experience is

acquired of them in terms of directly observing mindfully (aanskouing), lived experiencing and encountering or an illustration (model). An example can serve direct experiencing, on the one hand, where a pupil independently lived experiences the power of attraction of two magnets that are brought near each other. On the other hand, he can experiment with a model (little house clock) to acquire a better sense of the general concept "electromagnetic induction".

In the human sciences, e.g., in history, matters proceed much differently. History deals with concepts and ideas of the past that no longer are part of the contemporary lifeworld. Here a child must rely on sources for his acquisition of knowledge. Thus, a degree of subjectivity always will be coupled with his insights by which the essences sometimes can be very distorted. (In this light it also is understandable that writers such as Flitner and O. Bollnow only see limited value in the exemplary in teaching history and languages.

In contrast to the natural sciences where one works with interchangeable and definable exemplars, in the human sciences very few identical replications and identical examples are found. Each new case always shows a uniqueness that allows it to acquire its own significance, although it can be recognized as one of a particular type. The typical structure of an individual case only can show a greater or lesser degree of congruence with the general-type-concept.

Thus, the primary task of a presenter is to design a situation in which a pupil's activities of thinking and doing are directed to self-disclosing the essences of a particular example by which a more general concept becomes better understood. Henceforth, there then can be, by inductive reasoning, an abstracting from a particular example or individual case to a disclosure of a general-sort of-concept or type.

However, the additional possibility also exists that in any of the subjects there is a certain example (exemplar/case), on the basis of its exceptional quality, that is set apart and elevated to an Exempel (criterion) in terms of which new sister-exemplars and cases of a

particular type are pointed out. Such a going beyond the particular and its validity only is possible by further abstracting when a pupil has completely learned to mastered the particulars, as a primary aim of exemplary teaching.

On the other hand, the exemplary approach can begin with the definition of a general statement (law, rule, implication) or description of a typical structure. After this a pupil can be expected, via deductive reasoning, to identify new examples as one of a general sort of as a case of a particular type.

Thus it is clear that self-disclosing [an essence] occurs each time as a personal achievement and therefore there is not a mechanical "transfer" or imprinting of examples. Unlocking reality and building up a categorical structure each time remain a unique attempt that accompanies insightful learning and refined concept formation.

The distinction between the natural and human sciences is stated clearly by Haerkotter[24, 234]. He then also mentions that the natural sciences largely are concerned with "das reprasentative Beispiel soll, Spiegel des Ganzen' sein, paradigmatisch, stellertretend, modelhaft fur eine Vielzahl van Fallen stehen".

However, there is still another possibility of exemplary teaching that offers a pupil experience by which he: "das Seltsame, Erschreckende, Erheiternde, Unwahrscheinliche. Abstossende in seiner Spontaneitat herausgefordert wird. Ist sein interesse erst einmal geweckt, wird er selbstandig weiterdenken und arbeiten. Das erfordert vor allem einen zwingenden Einstieg, welcher die Passivitat des Schulers uberwindet. Das Lehren soll Winder fahren sein, es muss nach Wagenschein Plattformen auf der Subjektseite des Lernenden errichten, eindringlich, in den Seelengrund hinein. Die Spiegelung muss das Banze des lernenden erhellen. Es wird also nicht Stofffulle paradigmatisch auf Beispiel reduziert, welche dann wieder die Vielzahl der Falle erhellen, sondern der Einzelfall wird in sich selbst tiefer bewaltigt".

This second aspect of exemplary experiencing has particular significance especially in the human sciences because here the

subject-directed announcements as well as the object-directed actions of the topic emerge from paradigmatic teaching and claim the pupils rationally and emotionally. The exemplary now also shows a close affinity to the earlier pronouncements about the ideas of "transfer of knowledge" although meaningful differences are noticeable, as appears to be the case with the view of Thorndike[17]: "Learning is always specific, never general, when it appears to be general, it is only because new situations have much of the old in them"(sic). The essence of the "transfer" idea already is included in the realization of each exemplary intervention, on the one hand, where unknown examples, on the basis of a determinable characteristic or "different" structures can be distinguished as one of a comprehensive sort of type. On the other hand, with the illumination of the general through its reflection in the particular, there always is the possibility of applying the acquired law or typology in new situations.

In addition, most didacticians agree that striving for originality and perspective in an exemplary approach necessarily requires that there should be less splintering of subject matter. Although large differences still exist with some about the way and form of executing that exemplary teaching and learning must acquire in practice, a thematic treatment is suggested by most.

The thematic treatment of the overarching scope of formative sense and formative value will prevent exemplary experiencing (as an event of becoming) from resulting in establishing a "model-like" and paradigmatic representation of the world (island landscape), providing that the emphasis is not on a quick unfolding at the cost of a more spontaneous unfolding. The emphasis always must be on the insightful acquisition of original and near-to-reality experiences and the mastery of fundamental truths. Thus, there can be no reliance on superficially knowing-it-all or on a disorganized quantity of information. Only a teacher will be able to decide about what contents will have value for an exemplary form of teaching and about how many paradigms will be needed for the unlocking. Because separate examples and cases certainly reflect characteristics of the general, there cannot be a chronological and complete

[17] Thorndike, E.: Ped. Rundschau, Feb. 1969, p. 102.

handling of a subject matter area. Much rather, there must be an attempt to point out core moments and illuminate them from a particular perspective. Also, Heinrichs[26, 1127] indicates that although with exemplary experiencing "unfilled" gaps must arise, the value of the concerned involvement and original viewing, as additional orienting help, will compensate for them. Hence, a task of the didactic design is to provide the opportunity for self-activity and allow him "entry" into the field of tension of an actual problem in order to acquire the essence of and attribute meaning to the matter.

Exemplary teaching is not an "artificial" or required addition to the series of possible didactic principles, but only the result of a renewed scientific reflection on the reality of teaching and learning as forms by which human becoming is manifested. Where the exemplary principle always must be viewed as closely connected with the idea of categorical forming, the harmonious interaction between subjective and the objective moments is a fundamental precondition. On the one hand, the ways and forms of learning exemplary experiences must maintain a harmony with reality itself, but on the other hand, ways of working and thinking require a push through to spontaneous learning. Where a categorical unlocking changes a child and his totality, the acquired insights and new attitudes now are accepted as ways and forms of living.

However, in introducing new learning material or preparing for a new subject matter area, one cannot begin at the foot of the tower, from the most simple and concrete-observable and completely work through a step-wise progression to the top (complex) point. An example must be chosen such that it finds a connection with the learning contents that have meaning and value for a child at a particular stage of becoming. Sometimes it will be necessary to visit a subject matter for longer periods so a child can acquire the practical and theoretical experience that is necessary for learning the essentials of a matter before a leap to a higher categorical structure can be expected. In geography it thus is possible to single out a familiar individual case such as the "Namibian desert" and insightfully deal with it with the pupils before it is expected of them that they formulate the general structure of the geographical type "desert" and show other cases as typical.

Of pedagogical significance is the knowledge that a good example can contribute to reducing the degree of confusion and doubt about a topic and allow one to attain greater confidence about what must be accepted as "truth". Because a learning event is not held back by a breaking through of insight and concept forming, our teaching always must make provision for forms of practice and supplemental programs that only can be acquired as one's own possessed learning by application in a number of new situations.

In close connection with the idea of practicing to one's own possessed learning are the forms of practice that are grounded in analogy-activities. In no sense does this involve the thoughtless "imitation" of examples but with thinking and actively doing in which a pupil is compelled by a number of connected assignments to go beyond the exemplary unlocking of the essentials of the particular and to productively and creatively-independently build up a new structure or notice related matters. Now a child must apply the insights and knowledge from the earlier unlocking to evaluate the unknown in a new, different situation. He must venture and make a leap from the known (particular example) to the unknown (practice learning material).

Hence, depending on the above didactic pronouncements, the degree of difficulty and the unique nature of the learning contents, as well as the level of becoming and potentialities of a pupil (group), a subject didactician now can design a lesson situation that makes provision for such daring and sometimes "dare-devil" analogy-leaps and that stand in sharp contrast to a form of teaching that leans on a step-wise, linear progression without any "gaps".

However, we must not neglect once again giving attention to the fact that the presentation must not allow that basic concepts and fundamental knowledge structures and relationships are "leaped over" -- and especially on the level of preparatory or introductory lessons. Learning on the basis of merely outwardly imitating, prompting and repeating have no place in such an approach.

An additional and unavoidable aspect that must be touched on and that is closely connected with the idea of the thematic structuring of learning material (epoch teaching) is that of lesson organization.

The original idea behind implementing the exemplary principle was to try to lighten somewhat the overload of learning material. Along with decreasing the "pressure of learning material" (overloading) there is the idea of less "time pressure" (single periods) so that opportunity is allowed for greater "pressure to think" (self-discovery).

Exemplary teaching, thus, only can be done full justice when, in a lesson situation, there is a going out from original themes and fundamental paradigms while following a concentric or spiral form of ordering during a double period (block period) after the unlocking of the essentials are sought. It has become impossible to expect that exemplary experiencing (that begins with the motivating and fundamentalizing start in terms of a particular example, moving on the way from categorical unlocking and supplemental informing and orienting interventions to ending in the forms of practice and application of the activities of thinking, doing and making analogies) can be reached within a single period or can remain limited to one particular subject area. For its greatest formative value, the exemplary principle must push beyond the boundary of a particular area of science.

Consequently, in the exemplary, provision also must be made for a more loose class coherence where after a classroom explanation or demonstration of an example there can be a working through to group work, group discussions, source studies and excursions by which concerned involvement is experienced, but also supplemental information and orientation are acquired. Sometimes it will be necessary that certain information and orienting explanations precede studying the unlocked example, especially where the last mentioned includes possibilities for "irreparable" damage such as in driving and religious instruction.

From the above, it is clear that the exemplary principle opens a wide field of possibilities without compelling a fixed methodological way and that in each subject matter can lead to fruitful teaching and learning, i.e., to forming. This requires that a teacher is schooled to notice the exemplary contents that show a congruence with the demand for spontaneous learning and the awakening of interest in a child at each stage of becoming. Thus, in spontaneous activities

(skipping, rolling) there already are the fundamental experiences by which, in physical education, connections must be found for later, more formal rhythmic and tumbling exercises. Similarly, in the Bible there only is an illustration of a credibility that each person must discover for himself.

Because these crystallizations of the exemplary principle finds form in the various fields of science, it is an extremely important and difficult aspect of the exemplary theory and here an attempt will not be made to go into detail in such a limited space. This can have a dangerous and possibly confusing consequence. Therefore, we will suffice with a list from the contemporary literature that broaches this aspect:

a) Gerner[19] – History and Geography.
b) Giertz[20] – History.
c) Haerkrotter[24] – German (grammar and poetry).
d) Hintermeier[28] – Biology.
e) Klafki[30] – Natural history, Mathematics, History, Politics, German, foreign languages, Music, practical subjects, Religion, Philosophy.
f) Kluge[35] – Physics.
g) Landgraf[28] – Zoology.
h) Meyer[42] – Mathematics, History, Geography, Biology, Literature.
i) Newe[45] – Geography, poetry, Philosophy.
j) Patsch[67] – Religious teaching.
k) Scheuerl[49] – Natural history, Geography, History, Sociology.
l) Schwartze[52] – Mathematics.
m) Siewerth[54] – Politics, German.
n) Skorsky[36] – Study of electricity.
o) Wagenschein[65] – Physics and Mathematics.
p) Warnke[67] – History and poetry.
q) Werner[70] – Vocational teaching.