FROM Jünemann and Weitmann: Die künstlerische Unterricht in der Waldorfschule.

In the lessons in the 8th class one observes that the paintings of the students often show a marked overemphasis going into the sculptural, that is, going beyond the realm of painting. Light/Dark contrasts are characteristic in the pictures. If we went to meet this need for form and Light/Dark, then one must seek other means of expression than color. Painting is omitted at this time, to provide a creative pause!

The realm of plastic form has not yet been dealt with in this book. The child, however, develops a need to create and shape a form, just as much as to paint and draw. For the teacher it becomes necessary to enter in a living way into these formative forces by practising, as was described in connection with colour. Again he must put aside his aesthetic ideas and keep to what can be experienced directly. That is the human organism itself. The forces which form it are sculptural. It is a completely new experience to form the different organs such as lungs, kidneys, liver, heart in their spatial relationship to one another, the asymmetries between them, and to comprehend their form out of the rhythms of their concerted action. It is surprising to experience how, in modelling, the human lungs must be upright in contrast to the animal's which lie horizontally. Rudolf Steiner maintained that this anatomical modelling was fundamental in teacher training. Not to copy the outer form, but sensitively to search for the form-creative powers and make them visible in form: this is the task. It reveals the marvellous relationship between the forces which form the organs and the free use of these forces by the sculptor.

Personal experience of plastic form also provides the basis for teaching in the lower school. There elementary solids and spatial forms are started as a supplement to the form drawing of the 9th year. Modelling follows naturally on the Man and Animal block. The ideal the class teacher has in his mind's eye is that the children live in plastic forms. It begins in an elementary form in the 4th class; Zoology and Botany follow, then teaching returns to the study of man which continues to be the Biology subject for the 7th - 10th class.

In the first study of Man one will mainly distinguish between the spherical aspect of the head, that which is only partly spherical in the trunk, and the raying limbs. The forming hand of the teacher inspires the children to form the various shapes in clay themselves. All nature instruction during the following years remains connected with the study of Man. In this the teacher has many possibilities of coming to meet the inclination of the children to produce plastic forms. If he has first trained himself in art and in modelling as has been described, he will be able to guide the children's desire for activity in the right way. On the basis of the plastic formative forces developed in the lower school, the subject of modelling can be begun in class 9. Puberty makes the young person aware of a feeling of heaviness in his own body; he feels the process of change that goes on in him. One can take this process of change as a starting point. Starting with polarities is fruitful in every case. In the 3rd/4th year at school, spheres and pyramids were modell in connection with form drawing. Round and planar (limited by edges) surfaces were experienced as corresponding to curved and straight lines. In form drawing "the eye learns to see what the hand does", while now the feeling hand is the fitting and complete tool to experience the form in space.

In forming a sphere the hands are as it were in the service of the sphere forces that come in from the outside in all directions and bring about the spherical form. The unformed lump of clay is moved about in the cupped hands until a regular round form is reached. One tries as much as possible to get the feel of the forming process, and also to feel the resistance, the counter-pressure from inside. The form appears as the result of this interplay. Whenever forms are created, it is the

experiencing of forces that really matters. The eye, indeed the whole feeling, touching person experiencing himelf to be in balance, also takes part in modeling. After forming the sphere from outside one moves on to forming it from the inside as one slowly transforms the sphere into a hollow ball. Here the thumbs must take the most active part. In the process of pressure and counter-pressure the desired form will gradually appear. These first exercises provide a fundamental experience of concave and convex. The round requires the opposite of the form which consists of planes and edges. We choose the tetrahedron because it can be formed in relation to the hand. We start with a clay ball, the surface of which can be covered on all sides if the hands are put together crosswise. If one bends the palms into angles there arises in them the beginnings of a pyramid with a three-sided base.

It appears as the metamorphosis of a sphere. The impression of the hand as an organic form has a spherical character, it is slightly concave - the regular form of the tetrahedron must therefore be created afterwards by evening out the surfaces. It is only then that the reciprocal nature of the two solids really emerges. Only the experience of how it comes into being can make the polarity conscious. Try and review in retrospect: a spherical form arose as if held in balance between inner and outer through the movements of the cupped hands. Then followed a will impulse, power was exerted: the hands became angular and pressed on the form. The use of force caused a change in form: the sphere changed into a form of planes and angles. The forces from outside dominated over those from inside.

SHAPING FORMS AS THE EFFECT OF FORCES.

Anyone able to experience this will gradually understand the way all form is produced in the world. A crystal will reveal different formative forces to him from those which a swelling fruit will reveal. His experience of the formative forces is different looking at the angular, carved forms of an alpine landscape than in contemplation of the gentle hills of the lowlands. And the different leaf shapes between root and blossom of a plant reveal the living interplay of opposite polar forces. We can make the principle clearer with the aid of a diagram. A circular line can be organized in different ways, it may be wavy or in zigzags, like waves or little spikes. The wave forms can also take a particular direction, so that movement comes in. The plain circle shows total harmony in itself while the other circle forms show interaction with the surroundings. In the wavy circle the wave



appears to bulge outwards, the inner forces dominate (2), in the spiky circle (3) the outer forces appear pushed inwards, radiating in, stronger than the inner forces. The fourth figure is a metamorphosis of the second. Here the wave forms are bent in one direction and the circle seems to be rotating. A new will impulse from within has produced a movement. Whenever we come across pointed, outwards projecting curves or wave shapes we experience the differentiated feeling, of "conquering" or "overcoming" or "being realized".

After the introductory exerciseson sphere and pyramid must come a transition to form that is truly plastic, the organic form. This can be done in a simple and natural way. In the shaping of the pyramid the students have already experienced the forming power of the hands. Now they are encouraged to produce further forms that arise solely by pressing the hands against a preformed ball of clay. The ball should at first be no bigger than the hands can easily encompass. Through different hand positions and the effect of different pressures, which they try out for themselves new shapes are produced which could not be thought out in advance. A field of discoveries is found. Soon an abundance of forms is created, stimulating the

imagination in many ways. Of course the forms which arise in this way are not real individual creations, but in spite of that they are important to look at and to learn from. It is striking how many of them show unity of design and living movement in the surfaces. Total satisfaction is achieved only when surface irregularities are evened out in a further stage. Even these simple forms will help us to understand the secret of sculptured surfaces, which lies in the doubly bent surface. A surface which curves only in one way has still no real relationship to space, it is dead. Only when it curves in another way as well does it get its own individual life. Only thus does the form come to its own individual life. Only then does the form come to speak. Rudolf Steiner spoke here of the archetypal phenomenon of the inner life.

All students can become involved in such exercises; even the supposedly ungifted ones will achieve something. No more is demanded of anyone than to use his own two hands in the way suggested. Intellectual concepts disturb and should be overcome.

Looking at their work together, the students discover similarities in many of the forms with shapes found in nature - seeds, buds, fruits, nests, organ and bone forms of the most different types. The different forms produced have an attractive quality, on the other hand they also appear lost and lacking relation. How does this impression arise? They have a relationship only to the space between the hands where they have arisen, and the relationship to the space outside is missing. Actually the hands still belong to them, forming a whole with them like nutshell and kernel.

This correspondence between a form that has arisen and the forming hand once led the students in a 9th class, when there was a special teaching situation, to make a surprising discovery. Due to an oversight they found a skeleton in the sculpture room. Stimulated by previous exercises of the kind described they began to feel the forms of the skeleton with their hands and quickly discovered a multiplicity of correspondences between bone forms and concave handforms. These discoveries made such a deep impression on them that they said that Man was formed as if by invisible hands.

The next step consists in shaping the forms that are now to be produced in such a way that they have a relationship to outer space. In trying to make the hand forms stand up, one is in a hopeless situation because they have arisen in a state of suspension; the easiest would be to hang them up. They must now be made to stand. They must be given a "foot". The changes should however not be limited to the lower part of the form, but must be directed also to the upper, to the whole. The main problem with this is not to lose the fundamental life in those forms. It is now a question of working to achieve the living movement in the surfaces that before was simply given to many when simple impressions were produced. With this, the actual creative process begins. The aim will be to try and awaken more and more a feeling for form and artistic creation by examples and contrasting examples. The goal of the effort is the harmonious balance of opposing forces.

Out of this assignment a new one arises. Expression is to be given to the downward concentrated gravity forces on one side and the forces of levity striving to escape on the other. The contrast of heaviness and lightness should be visible in the form. A simple diagram will make this clearer. A bowl with its open gesture can awaken the feeling for levity. If we turn the bowl over, the form which widens towards the base calls up a feeling for heaviness. What can already be experienced in the line sketch will come to full expression in a work of art that is all form.

The forces of levity and gravity lead into the direction of the plant world which develops between cosmos and earth. It cannot, however, be created by the sculptor. He can be inspired by the wealth of forms and metamorphoses - but he cannot copy the plant. Only by feeling his way into nature's creative ways can he arrive at forms that are in accord with nature.

Having created form in the vertical we turn to the other directions in space. They lead us to the horizontal direction of animal movement which is especially obvious in the front-back dimension. Archtypal animal nature expresses itself in forward movement. Forms which take this movement express more or less animal gestures. Slight changes to right or left, above or below, enhance the living instinctive animal gesture. One can feel the impulse to movement within the form, which is typical in contrast to the plant form.

As one tries to initiate the forms out of a gesture intuitively handled on the large scale, so to say out of the grasp of the hand, the forms are from the beginning given a certain unity in the way surfaces are created. A sculptural feeling for plastic style slowly develops which counteracts the inclination to imitate nature.

To be able to move from general animal nature to specific animal forms we must try first to grasp what is typical of each animal species. The ruminating cow held by her own weight shows itself typically in a resting position, the nature of the horse expresses itself more strongly in movement. The goose, a bird which belongs to the air, is fallen into the heaviness of a grazing animal.

The animal belongs firmly in the horizontal direction. Man overcomes this through his power of coming upright. Now the development of form which has reached the creature's gesture moves on to the creation of the human form which can move freely in space. This last step should be taken - or at least touched upon- because it is connected with an inner experience of freedom. The horizontally directed animal form is contrasted with the upright human form. As the form comes upright, gravity is overcome. A result of this coming upright is that arms and hands are free, whilst in the animal they primarily served locomotion. Such form development processes have imponderable effects on young people who find themselves in a phase of development in which they feel their own weight, wishing to overcome it. In such activity there is an echo of their own innermost striving to come to the freedom of their own personality.

BLACK AND WHITE DRAWING IN THE 9TH SCHOOL YEAR, BASED ON THE BLACK AND WHITE WORK OF DURER

The other element in the artistic instruction in the 9th Class is Black and White drawing. It was first taught in relation to discussing the phenomena of light and shade in the 6th class after form drawing. Starting with the reproduction of simple light and shadow phenomena, occupation with light and dark was in the following years related to perspective drawing and the representation of solid objects. Unconsciously it finally entered even into the paintings of the 13 and 14 year old. So preparation has been made for the time when the light and dark can become an independent art medium, freed from colour.

Grappling with the elements of light and shade is something very real to the young people, because it reflects their inner experience of polar opposites. In the creative process these opposites find their place in the order of creative laws. The students begin to note the beauty created by the light and shade in the objects around them and creative activity is stimulated. They enter into a new relationship to the forces of light and darkness.

Dürer's black and white work is an appropriate starting point for understanding and working out the laws pertaining to light/dark. Especially valuable for this are his copper engravings "Melancholia" and "Jerome". The magical power of expression of black and white in relation to the sphere of physical objects and images is here taken to its highest level. Their educational value lies in Dürer's healthy realism which encompasses the supersensible with the sense world. To him the light of thought which he places around the head of St. Jerome is just as real as the sunlight which shines through the window and illuminates him from outside. What he presents are two sides of reality. Rembrandt would have done this differently, he is not so related to the physical as Dürer. To make clearer the imponderable relationships between the art of Dürer and the situation of a young person we shall describe the "Melancholia" in more detail.

We find here a multiplicity of objects characteristic of the time set in moving interplay of light and dark. The light and shadow relationships are depicted naturally, on the individual objects - the sphere, the polyhedron, the garments and the head of the seated person; they determine the composition. As in the Jerome picture we discover two light sources, an outer and an inner one. The outer one illumates objects, the other like a shining star in a twilight sky brings to expression the inner light-nature of the reflective female form. Inner and outer light enter into active relationship. The darkness, too, shows two sides to its nature. The outer shadows cast by objects have their counter image in the bat-winged creature of the night which haunts the twilight and symbolizes the inner nature of darkness. From the whole compositional relationship it becomes clear that the cause of the inner light is to be sought in the reflective mood of the female form and this light causes the shadow-being "Melancholia" to flee. The inscription on the scroll may be translated "Melancholy, fly". The form has wings, attributes of an angelic being, and yet shows earthly gravity as the spheres and polyhedra do, recognizable in the same treatment of light and shade. What a contradiction! The whole picture is based on contrasts, in content and in quality. The significance, however, is to see how all contrasts and contradictions are ordered in an artistic whole through the medium of light and dark.

The engraving seems to mirror to us the situation of a young person in adolescence: duality and contrariness, but also all his striving to overcome this situation. Is he not also caught by that inner melancholy which lies in the whole mood of the picture? Thus he can identify himself with the form which has fallen out of the world indicated by the wings and is still not quite at home in the world from which it receives gravity. He has lost the paradise world of childish fantasy with his newly won thinking, yet the power lies in him slowly to make it come to life again. It is thinking which can cast light over the riddles of his own individual existence.

One sometimes sees students standing as if spellbound in front of an enlarged reproduction of the "Melancholia". One can then get the impression that their genius is holding a dialogue with the genius which speaks out of the picture.

## DRAWING EXERCISES

We shall now describe the progression of exercises that was followed with students in the 9th class based on Dürer's light/dark art.

The interest of young people in the artistic is not to be taken for granted. Their interest frequently is turned to quite other things, and a bridge must be built for them. This bridge is artistic technique. If you tell the students how a wood-cut or copper engraving is made, what tools are needed, when they were invented, they will immediately be with you. The technique of drawing interests them just as much. The previously mentioned enlarged copy of the "Melancholia" gives rise

to wonder and apprecieation which one can make use of for an introductory discussion. If one wishes to hold the student's attention further, however, one must pass on to the practical skill of drawing. One shows how charcoal is used to achieve a living silvery-bright grey area on the paper, and how one sets the areas exactly against one another. If one succeeds in awakening the right feeling for, and above all joy in, the beauty of light/dark areas, then further success is generally assured. Anyone who is able to complete an evenly shaded area in a light shade- the dark ones arise by themselves - and can keep the edges neat, really is capable of a great deal.

Drawing technique is first practised on simple solids, showing the relationship of light and shade, such as a sphere. That is hard enough . One does not start primarily with the object, but begins from the surroundings with the coloring of the background, carefully leaving the area of the actual form, and working towards it from outside, dealing with areas, until it has been completely outlined. Only now is the form itself with its Surface gradations created. The principle of leaving a space is especially important. In that way the object to be drawn is not isolated, but is placed within its context, so that it grows out of it, as it were.

From such simple assignments one goes on to harder ones. Effects of illumination and shadow forms are studied according to cause and effect and appropriately reproduced. The round form of the sphere with its gentle transition from light to dark is followed by the angles and planar surfaces of a cube, the plane surfaces of which join eachother without transition. The greater the number of surfaces of a solid the greater the wealth of light and dark, and so the more interesting it is to draw. Each of the ten surfaces of an icosahedron that can be seen at one time is different from the others in tone, for none stands in the same relation to the light which is shed on the icosahedron. Here the subtlest differences have to be perceived. With less straightforward assignments it will be necessary to make preliminary sketches, but this does not change the basic methods of light/dark drawing. No line must be allowed to disturb the life of the surfaces which form the light/dark spaces.

One can then according to the talent of the students, assign harder and less hard tasks, and this will provide greater variety of examples to look at. By free combination of solids depicted the individual can train his feeling for use of space and composition. If one intends in conclusion to have the students recreate one of the Dürer pictures in its essential relationships of light and dark, then one will include the objects which appear in it, like spheres and polyhedrons out of the Melancholia, or the skull in the Saint Jerome engraving as exercises in the preparatory studies. A good preparatory exercise to understand spatial relations in the St. Jerome is also an independent reproduction of Light and Shadow relationships in a simple interior space from one's imagination.

The recreation of a Dürer picture does not mean copying in the usual sense, as will no doubt be obvious from this presentation. Rather it is a question of transferring a work of art into another artistic medium, a copper print into a charcoal drawing, i.e. an independent creative process. The first pictorial orientations will be examined together (in a group) and indicated in faint strokes. Geometrical relationships will emerge that provide a key to the composition. On this basis follows the independent work on the picture in light and dark by each individual student.

It was always very impressive to see with what attention and persistence they immersed themselves in this work. If there was not enough time, then free time was used. The average results were amazing, and certain individual achievements were exceptional. The students never related to any other work

as they did to the independent Dürer composition. A deep inner relationship to the nature of black and white art has arisen which could not have been reached so easily by other means.

How far a single person succeeds in taking the students to the inner nature of the thing depends often on the grace of the moment. Imponderable effects interplay in light/dark drawing. We cannot completely grasp rationally the world of light and shadow. There are moments in which it is possible to experience something of the elemental quality of light and dark. An opportunity for such experience is offered when in the ark season the afternoon lesson takes place in twilight. One can make the students aware of the peculiar mood which pervades the space around us during this transition from day to night, lending things a rare enchantment. All objects, even the generally unnoticed, appear more sculptured, emerge significantly from the interweaving light and dark as if they were newly created out of it. The world is changed into something full of secrets. In such a mood Goethe has Faust say: "Why do you grin at me, hollow skull?" We think of the skull and the reflective mood in the Saint Jerome picture, in which all objects are alive and tell us something. That is the twilight mood which is so characteristic of Dürer's light/dark art. With the students it needs only a gentle nudge to lead them to an experience with which they are already basically familiar. This entering into the elemental world of light/dark can leave a permanent impression.

What can be learned in such a block is many-layered. The acquisition of drawing skill is linked with practice in careful observation which leads to living concepts. Ability is acquired to grasp and represent the world of physical objects in space. This physical-material element is however linked to a spiritual world that reveals itself in the glory of the Beautiful, in light and shade. Light, which comes from above, links, as it were, the lower world with the upper and in this way makes it beautiful. This beauty needs to be appreciated in everything that has reality in the sense world and realized in creative activity.

This present series of extracts will conclude next time with Black and White Drawing in the 11th Class.