DRAWING AND PAINTING IN RUDOLF STEINER SCHOOLS

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by Margrit Jünemann and Fritz Weitmann

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Contents

Children need art – both the fine arts and poetry and music. And there is a way of being actively engaged in both sorts that is suitable for children in their school years. If you are a teacher you should not talk too much about one or another art form being 'useful' for the training of certain human faculties. After all, art exists for its own sake. Teachers should love art so much that they do not want this experience to be lost to children. They will then see how the children grow through their experiences in art. It is art that awakens their intelligence to full life. A sense of duty develops if children can use their urge for action to gain control over matter in a free and artistic way. It is the teacher's artistic sensibility that brings soul into the school. They bring a happy mood into the children's seriousness and dignity into their joy. With our intellect we merely comprehend nature; it takes artistic feeling to experience it. If children are taught to comprehend things in a living way they become 'able' people, whereas children who engage in art learn to be 'creative' people. In the first case they are merely applying their abilities; in the second case they grow through this very application. However clumsily a child models or paints, this activity awakens inner soul forces. When children engage in music or poetry they feel their inner nature uplifted to the ideal plane. They acquire a second level of humanity alongside the first.

None of this is achieved if art is taken as a separate, unrelated subject and not as an organic part of the whole of education. For all the child's education and instruction should form a whole. Knowledge, culture and the training in practical skills should all lead to a need for art, just as artistic sensitivity should reach into the realms of learning, observation and the acquisition of skills.

Rudolf Steiner

From notes of a lecture given at the conference on art and education at the Waldorf School, March 1923, and published in *Der Goetheanum-Gedanke inmitten der Kulturkrise der Gegenwart* (what the Goetheanum stands for in today's cultural crisis) Dornach 1961 GA 36.

Foreword

This practical and comprehensive work book gives an overview of the Waldorf School Teaching plan and Art curriculum. Such a book has long been needed, not only by Waldorf teachers but also by artists and teachers in other educational systems. The book thoroughly investigates many aspects of art that Rudolf Steiner spoke of in many lectures, notes and demonstrations. Particular emphasis is placed upon his work on colour. His suggestions were intended as a foundation for the practice and teaching of art.

Art is about openness, about letting go of the old and discovering the new. It is also about play. Art encourages children into play through the magic of colours, through the nature of different substances in modelling, and into the drama of light and darkness, form drawing and elements of the crafts. Adults can also "become as little children" through art. It allows them to rediscover the instinct for play.

Friedrich Schiller, in his writings on aesthetics, described art as play which has no purpose nor result, only joy and love of the doing, the process. Although artistic work should not be influenced by a need for results or a uniform finished product, this in no way implies that art education is chaotic! The Waldorf syllabus involves study and understanding, and thorough practice and preparation by the teacher, leading through various specified exercises in a definite direction. Work in the classroom is carefully tuned to the development of the unfolding child at his or her different stages, based on a comprehensive view of the place of the individual within the world.

The Waldorf curriculum leads the child through the intricacies of his physical and spiritual development. Artistic and intellectual activities are fully integrated. In the lower classes the imaging and imagining of the fairy tales, myths and legends are a rich source for the arts but they also play a part in the more factual, historical and scientific subjects that stimulate more intellectual work, through developing observational skills. Intellectual thought is also needed in perspective drawing, and work with light and dark brings order to the stormy soul life of puberty. In the upper classes the students return to more artistic handling of nature, soul moods and portraits. All this builds a love for

man and nature.

The creative play instinct is stronger in some children than in others, and it needs strengthening and encouraging. The substance born of understanding the world is not yet there, but may be developed and educated by art - a field with its own discipline requiring both technique and inner growth. An individual expresses him or herself through the way he or she acts. In the same way as their character shows itself in the forming of their handwriting so an artistic style will evolve along with the integrated development of their essential being. Art does not just "happen", but needs to be learnt. Each individual begins as a blank piece of paper which is gradually covered as the real things or materials declare themselves.

Art, religion and science were once one discipline. Gradually they separated from each other and became three separate activities out of thinking, willing and feeling as mankind came to emphasize one aspect or another. A need is now recognized to bring these three areas together again so that people may develop in a more harmonious and balanced way. This is a great part of the task of art.

Art is both the recorder of, and influence in the changes of people's consciousness through history. As art gradually separated from religion and its spiritual roots, it grew more secular, exploring the more physical world and the growing sense of self. Art needs to regain its inspirational role.

Rudolf Steiner laid great importance on the role of art in education and life. Education itself can be seen as an artistic process. The practice of art is an essential way to increase our awareness of self and others. Steiner even said, "there will be as much deceit and criminality in the world as there is lack of art." Much violence in life comes from deep inner boredom. The exciting creative process which is art can instead fill the social environment with a positive spirit. Yehudi Menhuin, the great violinist, also worked for humanity believing that "music is a civilising force." Similarly all the Arts can be powers for developing morality and true feeling for social life. And even a force for peace and co-operation in the world. The children in school do not become aware of the value of such insights all at once, but as they grow older they become increasingly aware of the enormous value of what they were given in school.

Perhaps the most important treasure of all in this book concerns the question of quality. The quality of their work is crucial to the authors, Dr. Jünemann and Fritz Weitmann. For thirty years they worked in a group with Julius Hebing, an artist who was researching Goethe's colour theories. After Hebing's death they continued together and began to share their insights with others, most notably at lectures and workshops at the annual Whitsun conference at the Ulm Waldorf school. Everything discussed in their book has been studied in detail and worked through by the authors themselves.

One of the greatest gifts given by Steiner is the fusion of the many pieces of the puzzle, the bringing together of the riddle of mankind into a whole world picture. You may start to follow that thread through the next pages.

Anne Stockton

Preface

The authors and the Pedagogical Research Centre of the Association of Independent Waldorf Schools dedicate this volume to the memory of the painter Julius Hebing and our dear colleague Dr. Erich Schwebsch. In 1921 Erich Schwebsch, who had been involved in the teaching profession in Berlin at the secondary school level, was called by Rudolf Steiner to come to the independent Waldorf School in Stuttgart (founded in 1919). After extensive study of aesthetics, particularly in the musical realm, he had just come into the public eye with his book on Anton Bruckner. He was eagerly awaited at the Waldorf School: his task was to build up the aesthetic education for the classes coming into upper school.

In one of his conference meetings with the teachers at the time, Rudolf Steiner told them that at the age when young people are going through puberty and are becoming a part of nature themselves, when natural science is becoming a priority in their lessons, an element of a human-moral kind based on individual freedom ought to be encouraged to counterbalance the fact that they are coming more and more under the sway of natural laws both in their lessons and in themselves. This was to be the task of the new department of aesthetics as well as all the rest of the practical activities in the various arts from classes 9-12.

Schwebsch spent many years working on this task. The almost-finished work, as well as all the preparatory work, went up in flames in the Second World War. Schwebsch was highly qualified to present all the achievements in this field. They stemmed from the new impulse of the anthroposophical art of education, particularly in the Stuttgart school itself from 1919 to its political closure in 1938 and its newly-arisen sister schools in Germany and other countries. Caught up in the enthusiastic rebirth of the Waldorf School Movement in 1945 and its rapid growth, Schwebsch no longer had time to redo the work that had been destroyed; he was busy in building up the Stuttgart School and the Association of Waldorf Schools. He went as advisor to newly-founded schools, he organized bi-annual conferences for the teachers of all the Waldorf schools and the re-inception of public education conf[illegible]nces of the

Stuttgart Waldorf schools from 1951 onwards.

Throughout this tireless activity his main concern was his mission to cultivate the art element in Rudolf Steiner's art of education. During those years he found the painter Julius Hebing a congenial friend and helper. The authors, Margrit Jünemann and Fritz Weitmann give a report on Julius Hebing, for they regarded themselves as his pupils. He studied Goethe's approach to colour and Rudolf Steiner's amplification of this approach, he struggled to find new paths in painting and particularly in the teaching of art. He made every effort to preserve Rudolf Steiner's sketches in his literary series *Welt, Farbe und Mensch* (the universe, colour and the human being). He also followed his vocation of Waldorf teacher, he travelled far and wide to other schools, he gave seminar courses and he instituted regular painting conferences in Ulm.

The premature death of Erich Schwebsch in Whitsun 1953 greatly delayed the public work which had been planned; only two of his volumes of collected essays from the 'old' Waldorf School Movement could be published and these appeared under the titles *Erziehungskunst aus Gegenwart des Geistes* (an art of education arising from a spiritual impulse) and *Zur ästhetischen Erziehung* (about aesthetic education), as volumes 4 and 5 in the literary series *Menschenkunde und Erziehung* which was newly founded at that time.

Julius Hebing's life work was also left unfinished. He was always ready to tackle problems and to extend his studies into new areas. He was active right up to the last months of his life, and he died in 1973 aged 82.

So a younger generation has the job of presenting this particular aspect of a Waldorf School to the public. This book is part of a series which began in 1965 with the publication of Dr. Hildegard Gerbert's work on the nature and task of aesthetic education, *Menschenbildung aus Kunstverständnis. Beiträge zur ästhetischen Erziehung* (A humanitarian education arising out of a real understanding of art. Contributions to aesthetic education).

The German publishers anticipate following this present volume with monographs on other realms of art in Waldorf education. The whole well-being of the life of a school, especially in the upper classes, depends on the effective functioning of the artistic subjects.

I should like to thank these two authors on behalf of the whole Waldorf School Movement for the work they have put into this field for decades, and also convey the thanks of the Pedagogical Research Centre for their joint work on this book. Hearty thanks also to Dr Ruth Moering in Wanne-Eickel for her energetic support in editing it.

Stuttgart, Autumn 1976

Ernst Weissert

How this book arose

The present book has come out of our teaching activity and also from specialized conferences and discussions with colleagues of other Waldorf schools over approximately thirty years. It arose over a long period in connection with working out the curriculum of the various subjects. The results of these efforts are published by the Pedagogical Research Centre of the Association of Independent Waldorf Schools within the framework of the series *Menschenkunde und Erziehung*. As the various schools work autonomously on the foundations of Rudolf Steiner's pedagogy a presentation of this kind will be an individual form of the curriculum based on guiding principles arrived at in each group. This has to be particularly stressed in the case of art lessons which are determined by the particular gifts of the teacher.

From the start of school to the twelfth class lessons in creative art have a central place in Waldorf education. The cultivation of capacities for the benefit of the children's harmonious development and the unfolding of their innate potential take first place rather than the artistic outcome. This is the reason for the multiple viewpoints from which Rudolf Steiner dealt with the so-called fine arts. Comprehensive descriptions and shorter indications by Rudolf Steiner show the direction the work should take with pupils at every stage. Our presentation has been drawn from the work arising from this material and on the continuous exchange of experience.

The basic works for familiarizing oneself with Rudolf Steiner's study of man and teaching methods are the lectures and seminars he gave to prepare the teachers of the first Waldorf School in Stuttgart prior to its opening in September 1919*. In the course of 70 meetings as leader of the school in its first five years he also presented the college of teachers with the progressive steps from class to class, centred their experiences and gave suggestions and advice regarding individual problems. Although the spirit of these meetings was largely in response to the particular situation at the time, they are nevertheless a real guideline where basic principles are concerned.

In these same years, 1919-1924, Rudolf Steiner gave lectures in Switzerland, England and Holland where lively interest existed to found similar independent

schools. In Stuttgart he continued with the lectures on specialized subjects of education.

The themes were, of course, touched on in many other lectures, especially where he was speaking on the arts. These descriptions were collected together by Hedwig Hauck, a handwork teacher at the first Waldorf School in Stuttgart, in *The Handwork Book*, which appeared for the first time in 1937*.

A first review of the curriculum was published by class teacher Caroline von Heydebrand in 1925*. Her introductory but detailed description of both the principles and the situation is still unsurpassed today. E. A. Karl Stockmeyer, also a teacher at the first Stuttgart college, published an index of classified sources of all Rudolf Steiner's indications in 1955, according to subject and class*. This is an indispensable handbook for the work within colleges and for each individual teacher. In addition it contains a synopsis of the artistic lessons. He mentions a remark made in a teachers' meeting of November 1920 to the effect that Rudolf Steiner envisaged creating a "proper curriculum for the lower classes" but did not get round to it. The roughly sketched curriculi for other subjects were never intended as fixed formulae, but show only pedagogical teaching methods based on a knowledge of child development, and the subject matter corresponding to each age group. This means that a Waldorf teacher must be constantly preparing the work afresh in accordance with the changing times. This takes place in weekly meetings within the college, in specialized and annual working conferences and in publications in which individual subjects are worked on methodically.

The present book is conceived as this kind of publication. It is based on experiences as a class teacher and as an art and handicraft teacher. Since 1952 we have both taken part in painting conferences organized for Waldorf teachers by the Bund der Waldorfschulen, led by the painter Julius Hebing. He published an extensive but unfortunately incomplete literary series *Welt, Farbe und Mensch* (the Universe, Colour and the Human Being). This encompassed his life's work, a practical interpretation of Goethe's approach to colour (and the further stages to which Rudolf Steiner brought it) as a basis of a new way of painting*.

Over many years Hebing worked at colour experiments and painting exercises with teachers and students within the framework of the Stuttgart Waldorf School. This work was later taken over by the teachers themselves, and continues annually; we help to organize this conference and this branch of our work has extended our sphere of experience beyond teaching activity to include discussion with colleagues from every school in the Bund and neighbouring countries. We also lead artistic working groups in the Association of Waldorf Schools' summer schools for teachers from other schools and lecture

students, thus constantly meeting other art teachers and their problems. This work with adults resulted in a need for a theoretical foundation which challenged us to turn again and again to Rudolf Steiner's presentation and the work of Hebing.

This is the background behind this attempt to present the methods relating to teaching the fine arts in a Waldorf school from class 1 to class 12. We can speak of an actual curriculum only in the lower classes, for the later classes it is more a matter of discussing principles and giving various suggestions. This book is based directly on the indications given by Rudolf Steiner.

We want to give our heartfelt thanks to the Bund der Waldorfschulen and all the colleagues who helped us, for their support in our work, without which it would in fact not have arisen.

Ulm, Autumn 1976

M. Jünemann
F. Weitmann

Water colour as a painting medium

A first time visitor to an exhibition of the work of Waldorf pupils is usually particularly struck by the paintings. They make an unusual impression.

The first perception is of strong, shining primary or mixed colours that are fundamentally translucent. These pictures have various different colour moods. The colours appear to be hovering, they are not dense like colours that are attached to physical objects. The surfaces of colour are not confined within contours, there are no outlines. The colours can move about unhindered and blend or become consolidated at will. They do not seem to be fixed to the surface, but seem to come to meet us or draw away from us.

Yet the pictures are not in any way formless. The various colour contrasts express tension, consolidation or boundaries that give rise to form. These forms come from the colours themselves, not from a different element such as the line. A sensitive viewer may feel quite swept away. Of course it must be borne in mind that whenever a number of similar images are viewed together, as in an exhibition, their special characteristics are considerably increased. The first Impressionist exhibitions in the 1870s gave many people the feeling of losing the ground from under their feet. Nevertheless impressionism gained recognition.

The element of form as such is cultivated separately in a Waldorf school. The separation of painting and drawing belongs to the principle of applying techniques that are formative in themselves.

The description of the colour impression of an exhibition of this kind to a large extent covers the chief characteristics of the water colour medium. No other medium provides all the qualities of clarity, transparency and radiance.

The living nature of colour expresses a soul quality, belonging both to the world outside us and to the world within our own selves. We always experience colours as having a soul quality whether consciously or not; we connect a soul experience with them, whether we experience them outside or picture them to ourselves. A bright, colourful day puts us in a different mood from a dull one. Moods of nature are soul moods. Human soul life can also be expressed through the medium of colour. We all experience this with regard to joy, sadness, anger

or boredom. Children usually experience the colours of their environment far more intensely and directly than adults do. They gain enormous joy if they run about in a bright meadow or chase after a colourful butterfly!

The translucent medium of water colour is a very strong medium for expressing this soul element. In Waldorf schools water colour is used for pedagogical as well as for artistic reasons. It is an ideal medium for the mobile, growing being of a child. Children bring a creative imagination with them into life, and they want to make use of it in the process of coming to terms with the world. The task of education is, after all, to provide ever-new ways of bringing alive this connection between the creative inner world and the formed outer world, so that even in a later life the adult experiences things as having arisen out of creative activity. This is why it is important for children to experience over and over again that liquid colour takes a while to become fixed as it dries.

Children's paintings in an exhibition are the finished product, but the process by which they came into being is even more important and must be taken into account. The children become involved in their work to such a degree that it seems as if their whole happiness depends on their ability to wield their paint brushes skilfully enough to be satisfied with the way the colours commune on the paper. They become intensely involved in experiencing the life of the colours, both active and passive, and their glorious victories or humble resignation. This regular work with colour develops a child's senses.

The children are given small pots of primary colours dissolved in water and flat brushes. Water colour painting uses paper, which replaced parchment in the later Middle Ages. White paper reflects light for the transparent water colours. The colours are mixed with an easily soluble medium such as gum arabic, dextrine, tragant or fish glue. They are available in sticks, tubes, glasses or tins. Gouache also uses opaque colours but cannot be called water colour in the strictest sense. Traditionally the colour was applied with a soft, round, pointed brush, implying that water colour originated as a drawing technique. Nowadays a flat brush is more suitable in view of the surface character of painting out of pure colour. Before beginning to paint, the paper must be wetted and stretched on a firm board. For a flowing technique the paint is applied to the paper while it is wet; to work with veils the paper must be dry before applying each fresh layer.

The question often arises whether other painting media should be used apart from water colour. For actual painting lessons the pedagogical effectiveness of water colour has proved unique. But when it comes to the accompanying and deepening of subject lessons, for example in connection with stories, religion lessons or natural history, both painting and drawing are used. Where painting has a more supportive role wax crayons are suitable. Beeswax blocks are

particularly good for drawing surfaces and have proved very successful. Scenery-making for school plays provides opportunities to work with opaque colours – distemper, emulsion and poster paints. An exhaustive list of various painting media, with practical examples, is described in J. Hebing's series *Welt, Farbe und Mensch* (the Universe, Colour and the Human Being).

There are many aspects to the question of painting material. The pedagogical and artistic point of view cannot really be separated. A painter is free to choose whatever painting medium he prefers, according to his artistic intentions, but the quality of the painting medium is closely bound up with the essential nature of the colours.

Colour appears at its purest in the familiar phenomena of the rainbow, a sparkling dewdrop, the rising and setting sun and the blue sky. The archetypal phenomena of colour can be experienced in nature processes, but can also be produced through experiments with prisms. In both instances we see they are seen as pure colours of light, without any materiality. They reveal themselves to the senses and yet they are immaterial. They arise through the interaction of light and darkness. It follows that the less density a painting medium has, the most closely it will correspond to the essential nature of colour. The purest painting would be a kind of painting in light, such as nature continually conjures up before our senses. The breaking away from tradition of the Impressionists was an attempt in this direction. The neo-Impressionists consciously started from colours of light, and used careful colour combinations in their pictures to recreate certain coloured light effects in the viewer's eye. The kinetic arrangements of the play of coloured light and shadow that are played off programmatically on opaque panes of glass imitate this kind of painting in light. Of course it is possible neither to paint with light nor air. Water, the next densest element, is the most suitable medium for transforming atmospheric colours into colours for painting. Its living quality, transparency and lack of colour make it an ideal colour carrier. It constantly accepts colour without affecting it. Thinned down to the conditions of the atmosphere it forms the basis for the dramatic colouring of the morning and evening sky and the phenomenon of the rainbow. A calm surface of water mirrors in a lower plane of experience what is taking place above. Development of painting media and techniques go hand in hand with the development of painting. In previous cultures some monumental murals were painted in water colour. The paintings in Egyptian burial chambers were done largely with earthy colours of stone or whitewash. Pompeiian frescoes existed alongside the art of Greek sculpture. Frescoes of early Christian times, of the Middle Ages and the time of the Renaissance provide a very wide picture of this original water colour painting. The artists painted on damp plaster, just as water colour is applied to damp

paper. In both instances we have a transition from liquid to fixed colour – in the case of frescoes it was to a crystallized colour that gives them their characteristic magical glow.

Other pictures were painted on wood with tempera or casein colours, which are a thicker medium; the last coats were done in lasure. The heavier media that appeared later were initially used as a lasure to give depth and lustre to the pictures that were painted first in tempera colours. As times changed, painters eventually came to the point of applying oil paint to the canvas directly from the tubes, sometimes very thickly, or even with a palette knife. The thick application of paint came in some cases to resemble sculpture. Nowadays there are sculptures made of every conceivable material created from waste products of our industrialized world.

In the realm of artistic media a process of materialization can be seen; from liquid, crystallizing, glistening colours right through to picture making from the hardest possible materials. This has potentially impoverished the scope for the expression of soul experiences. A point has been reached from where further development must lead to ever-increasing examples of rigidity.

A new orientation is therefore necessary, a return to impulse in painting. This lies in colour itself. People have lost touch with the art of painting to the extent that they have lost touch with colour. The history of painting shows that it became possible to present the nature of colour in ever new ways. These creative sources are not exhausted, they can be found where colour appears at the frontier between the sense realm and the super-sensible realm, as the messenger of a realm of soul and spirit. Goethe perceived the 'sense perceptible-ethical' nature of colour. Rudolf Steiner was the first to make Goethe's theory of colour accessible and to develop it further. The necessity for a further development in painting media seems to be clearly indicated. If historical progression of art is not seen as a continuous line but as a pendulum swing, then a swing in the opposite direction can be expected. This must mean a path leading away from denser and denser painting materials and colour, away from rigidity and back to flowing movement and the creative life of colour.

An interesting phenomenon can be observed here. Alongside the evolution of painting in general the independent branch of water colour painting has grown, almost unnoticed. Its roots can be found on the one hand in woodcuts that were decorated with water colours and on the other hand in the coloured pen-and-ink illustrations from the later Middle Ages. Paper was crucial here, replacing parchment and the body colour painting used with it. The beginnings of water colour coincide with the starting of the graphic art or black and white at the beginning of the modern age. Both types of art were represented in Dürer.

His accomplished water colours are free of preconceived ideas, and are also the beginning of landscape painting. Dürer was a solitary figure with scarcely any successors for many years. His use and understanding of water colour was several hundred years ahead of its time.

In the 16th and 17th century pen-and-ink drawing with water colour was in fashion, used particularly in the service of science and research. Painters were taken along on expeditions and sea voyages to portray the new impressions. Water colour proved an ideal art medium for this. In the 18th century it became popular with the scores of English tourists who went South. In this way a broad basis for the great art of English water colour painting was prepared, appearing later in artists such as Cozens, Girtin, Cotman, Constable, Bonington and, surpassing all, Turner. Leading up to this stage were the so-called monochrome water colours of the French painters Claude and Poussin. Their landscapes already had the typical transparency and light-filled quality of a water colour. The Dutchman van Dyck, through his stay in London, became an important link to the English art of water colour. Bonington was the first of the English painters to exercise a strong influence on the continent. Although Turner was recognized as master of his art, neither his main work nor his late work were understood – he was so far ahead of his time. Only now, along with an understanding for Impressionism and Expressionism, is his work entering the consciousness of the times.

In Germany it was the Romantics, primarily Blechen, who found water colour a suitable medium for expressing their ensouled sense of nature. The Tyrolean Koch and the Austrian von Alt also stand out, their whole life work consisting exclusively of water colours.

Friendship between Bonington and Delacroix had a crucial effect on the artists of the 19th century and encouraged the spread of water colour painting in France. The painters of the Barbizon school painted out of an experience of light that was completely untraditional. They used it as effectively as the geniuses of Impressionism – Pissarro, Manet, Monet, Renoir and others. Van Gogh and even Gauguin painted with water colour from time to time. This painting technique was particularly suited to the impulsiveness of the Fauves (Wild Things), the French Expressionists. Their pictures are a veritable feast of colour; the early works of Matisse, and those of Derain, Vlaminck and Manguin are sometimes known as 'colour aggressions'.

Cézanne wanted to make a 'lasting art' of the floating world of appearances of Impressionism. This was expressed most purely in the water colours of his late work. The surface crystalline light effects are particularly charming in the layered colour technique he developed. Cézanne's water colours signify a turning-point in artistic conception. The illustrative quality that had persisted

Goetheanum.

Today, after the lapse of time, we can estimate the significance arising from the meeting of this impulse with the general progress of water colour painting at this time. From out of his spiritual world view Rudolf Steiner was able to give painting new aims. If, as Werner Haftmann says:

> . . . the history of modern water colour painting, which still has to be written, will discover many more indications that will go even further still*.

It will be principally Rudolf Steiner's indications that will belong here. He is already known as the founder of anthroposophy and its practical applications in many fields, but his own artistic activity and his numerous indications in the realm of art have still to be discovered in wider circles.

The dome paintings in the first Goetheanum introduced a further step. It was the first time that a piece of painting had deliberately been executed entirely with plant colours. They were produced especially for this purpose according to Rudolf Steiner's instructions.

The plant world is in fact so rich in colour and its blossoms so beautiful that a naive person might well wish to paint with them directly. Children sometimes try to do just that. But the problem of successfully obtaining pigments is as difficult as Nature's colours are beautiful and colour chemists have feared it an impossible task to make usable lasting paints with them. Nonetheless their attempts have succeeded. The successful results of new ways of extracting colour were first tried out in grand style in the painting of the two domes of the Goetheanum. The effect was impressive and convincing. The light-filled quality of the colours made the walls seem transparent, giving the viewer the experience of a moving sea of colour. As the building was destroyed* it is not known whether the colours would have lasted until our day. The manufacture and development of plant colours became impossible in the difficult times that followed, but work was resumed in 1960, and painters again have a small range of permanent plant colours to choose from. Work is going on to extend the choice of colours*.

Recent reports suggest that plant colours are less sophisticated than ordinary colours and have none of the obtrusive brilliance of synthetic ones. As well as being milder and more restrained they have a unique quality that adapts to the particular conditions of light. They have an inner radiance particularly when it is dark. Rudolf Steiner said in 1921:

> In our Goetheanum our way of obtaining this radiance was by using plant colours which are the easiest paints with which to obtain this inner radiance*.

Another positive attribute of plant colours is their ability to harmonize one with another. The reason for this is that each colour contains minute quantities of several other colours. In a modern book on plant pigments it speaks of the masterly mixture of pigments which nature produces in a single plant colour*. There is a striking reference to this in an older book on textiles:

> despite every effort of will and of science we cannot manufacture the particular colours produced with simple means and no knowledge of chemistry by the housewives of India, China and Kurdistan; colours whose depth and splendour both delight and embarrass us. The reason why we cannot do so is that these colours are really natural shades, and they have no place in our abstract range of colours . . . And beware of distilling abstract pigments from natural products and taking away all the individuality of colour*.

What is said here about working with dyes is also characteristic of plant paints. It is clear that their use has an enlivening effect on the human senses in the same way as colours in nature have. They nourish our eyes in a different way from synthetic colours. Thus we should assume the existence of a therapeutic effect in addition to an aesthetic one.

Experience has shown that when a person first begins to paint with plant colours it requires a thorough change of attitude. This is due on the one hand to the totally different colour quality and on the other hand to the fact that there is a slightly limited colour range. This does not need to be a disadvantage – medieval fresco painters had only a small assortment of colours, and yet their pictures possess the full spectrum. A rich variety of colours can be obtained by putting one layer of colour over another.

It is important that a painter also knows that, unlike most water colours, plant colours are not without pigment but have a transparent colloid-crystalline pigment that holds the colour. This aspect can be compared in a certain way with mineral fresco colours which, even though they have an opaque colour carrier, crystallize on the plaster as they dry out and have a glistening radiance*.

Experiments with plant colours in education, including curative education – have been positive*. Many younger children were afterwards unwilling to use any others. Older children also took to them quickly. They were also fascinated with the wonderful scent of the etheric oils and resins in the medium. Before use the powdered colours have to be mixed with the medium by means of a

since time of Dürer was replaced by 'a human counter-image'* that is contrasted with the natural picture. This characterizes the main feature of modern water colour and modern art altogether. Water colour acquires a new function. Cézanne became the great inspirer not only of the Cubists who followed but also of representatives of other directions.

The Expressionists and Fauves profit from him just as much as the painters of the Blaue Reiter group and the Bauhaus or the surrealistic painters. Whether thinking of the balanced Cubist colour compositions of Delaunay or the abstract pictures of Kandinsky as the final result of Cézanne's new way of seeing, or the more poetic colour poems of Klee or Chagall – they are hardly conceivable without the influence of Cézanne. Anyone who has seen the beautiful water colours which Macke painted on his journey to Tunisia with Klee will find them unforgettable. This journey was a magic hour for painting and for water colour; during this time Klee himself became a painter in this very art. On April 16 1914 he wrote in his diary:

> Colour has got hold of me . . . This is the meaning of happiness. I have become one with colour. I am a painter*.

Kandinsky's first picture without a theme was a water colour. It gave him an experience of the greatest artistic freedom, which he called access to the realm of art. Water colour also played a significant role with Marc, Feininger, Rohlfs and Schlemmer. The "Brücke" painters, Kirchner, Heckel, Schmidt-Rottluff among others, also created some masterly work. The great water colour artists Kokoschka and Nolde must be granted leading roles. There is an incomparable elemental force of colour in Nolde's landscapes, flowers, animals and people in the pictures in which water colour played a leading part. Many more names could be cited – there is a vast field of achievement in this realm right into our time, although it is now thinning out.

This cursory survey of water colour painting since Dürer shows the way water colour has grown from modest beginnings, holiday pictures and sketches to an independent branch of painting, and how it has become more and more the field in which the actual development of painting is taking place. The driving force is in the living water colour itself. This is the only way we can understand how water colour was able to encroach on all the other artistic directions and become a superior art element in its own right. The general interest in this development ensures its continuation. In 1972 the first exhibition of the evolution of water colour since 1400 was staged in Munich. In one-man exhibitions of Nolde and the "Brücke' painters the water colours were especially admired. Beautiful modern publications also point in this direction*.

In the years 1914-1919 Rudolf Steiner introduced a new phase of this art when, together with a small group of painters, he painted the two domes of the first Goetheanum in Dornach*. He invented a kind of 'liquid paper' as a base for painting a paste-like white casein/wax/balsam emulsion containing paper cellulose. A number of coats of this emulsion were applied to the insulating layer of sheets of cork. This was followed by a final coat of a clear transparent emulsion. Onto this base came the water colour. This made the painting appear to be hovering over the white background. In this way the conditions for putting water colour onto a wall were fulfilled in the strictest sense. Water colour can therefore be compared with the earlier fresco work. Frescoes can still be painted in the old manner but the more up-to-date quality of a monumental water colour lies in its greater adaptability compared to frescoes. Colours can be applied lasure-style onto a dried painting surface in various layers according to the inspiration of the moment, just as in a small-scale painting.

Frescoes do not allow this spontaneity. They have to be strictly pre-planned. A large mural or ceiling painting is divided up into what can be managed in a day, and each piece can be painted onto the damp plaster in the course of a day and then assembled. It is not possible to change anything afterwards, because the colours would no longer fuse into the plaster. Painting colours cannot be supplemented once the work has begun, because they change in the course of drying. Therefore they have to be prepared in sufficient quantities beforehand to last for the whole work. These are just some of the conditions attaching to fresco painting. At any rate success depends on following strictly the rules of the trade, which was emphasized by Michelangelo when he said:

> Let me tell you, oil painting is woman's work but fresco painting is man's work*.

The large-scale use of water colour for mural painting, as seen in the work of Rudolf Steiner in the first Goetheanum, seems to have deep significance for the further development of painting. The purity of water colour, enabling the essential nature of the colours to come across directly, can be experienced by people in many different public places in this free modern technique. Nowadays there are all sorts of attempts to spread experience of this kind of direct colour effect in colourful interior decoration and experiments with the sick, with children and so on. This sort of impulse of the time has to find its own artistic expression and seems connected with monumental water colour technique. The first Goetheanum was tragically destroyed but something of the principle of Rudolf Steiner's ceiling painting is preserved in the large water colours he painted for the programmes for eurythmy performances in the

pestle and mortar. Pupils enjoy doing this – the rhythm of pounding, the close concentration and the smell of resin get them into a harmonious mood which is a good preparation for painting.

Thanks to the progress taking place in plant colour extraction the chance exists to introduce painting with plant colours into education on a wider scale, and this will extend their function in the aesthetic-therapeutic direction.

To return once more to the description given at the beginning, of water colour pictures painted by pupils of a Waldorf School, we hope we have adequately shown that it is by no means a matter of dogmatic or idealistic bias. Encountering the essential nature of colour at its purest and liveliest throughout school life signifies such an important enrichment of a child's sense perception that grown-ups need to reflect on it to understand it. City children are losing out more and more on the direct experience of nature with its multitude of sense impressions. When children see radiant blue, yellow and green shining back at them from the white paper, and they have actually put it there with their own hands and determined how far each colour should spread, they have a quite specific soul experience. They experience a soul spiritual impression as well as a sense impression. This kind of experience can work even more immediately than nature impressions. This is therefore a way of bringing a sense perceptible/supersensible field of experience to children to counterbalance the impoverished natural sense perceptions brought about by the civilization of our time. Anyone who has been able to observe over years the effect of experiences of this kind will happily paint over and over again with pupils in this pure medium of water colour.

PART ONE

THE BASIC PRINCIPLES OF PAINTING FROM THE FIRST TO THE EIGHTH CLASS

Margrit Jünemann

How the teacher prepares

In Waldorf education it is the class teacher* who introduces the children during their first school year to the basic elements of the various artistic disciplines. Elementary exercises in painting and drawing, speech and music include the task of preparing the children for their introduction to the conventional primary school subjects of reading, writing and arithmetic. The exceptions are eurythmy, which right from class 1 is given by a eurythmist, music and handwork which are also taught by specialist teachers.

Simple painting and drawing exercises help lay the first foundations for the various artistic subjects, which are then continued throughout the twelve classes on the basis of a curriculum arranged according to the children's ages.

During the first eight years the class teacher teaches the basic subjects in the main lesson, in the form of a consecutive period of several weeks of the same subject. The main lesson, however, should include one painting day every week. This reflects the mood of the current main lesson period or a particular part of it, such as a fairytale that has been told.

This painting day provides the teacher with an additional opportunity to get to know the children. Different temperaments react very differently to colours. It also provides the chance to work directly in the sphere of artistic therapy.

Goethe's approach to colour

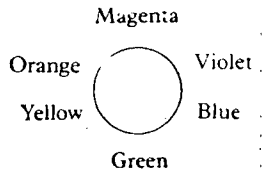
Before starting painting lessons, teachers must prepare themselves by doing artistic exercises. Goethe's approach to colour, upon which Rudolf Steiner's indications for painting lessons are based, offers a starting point. Goethean optics, which form the foundations of this, are important later, for physics lessons. A brief sketch follows of the way the Goethean colour circle arises out of the prismatic bands of colour.

Goethe calls yellow and blue archetypal colour phenomena. Yellow is the nearest colour to light. It arises when light shines through an opaque medium

and puts up a resistance to the oncoming darkness. If the darkness get denser orange and red arise. The light battles its way through the different gradations of opaqueness. We can observe this in sunrise and sunset. Blue is closest to darkness. If light shines through an opaque medium and lightens it up then violet and blue shades arise. If we observe the distant hills in a landcape they appear blue through the illuminated haze lying in front of the dark background of wooded hillside. The Goethean colour circle is based on these opposites in accordance with the principle of polarity and intensification.

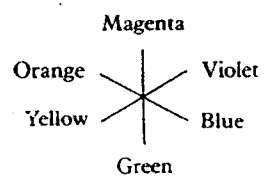
On looking through a *prism** a yellow-red band can be seen when darkness encroaches on light. A violet-blue band appears where light rays edge into darkness. This can be demonstrated by means of a simple experiment*: if a white panel is placed onto a black background and observed through a prism on one side yellow will be seen passing over to red where the white borders on the black, and on the other side blue passing over to violet. If the prism is drawn far enough away so that the two coloured edges overlap, then green arises in the middle. If a black panel is placed onto a white background, on the side where the black borders on the white the opposite phenomena of red will be seen passing over to yellow and on the other side violet passing over to blue. If the prism is again drawn away as before magenta appears. From even further back the coloured edges will overlap even more, and the magenta will lighten up to 'peach blossom'. Rudolf Steiner connects this colour phenomenon with the colour of the human skin – this becomes important when painting portraits in class 12*.

This phenomenon can be studied with wedge-shaped panels when all the transitions can simultaneously be viewed whilst standing in the same place. In order to see at a glance all these colours in their totality and in their mutual relationships Goethe arranged the coloured bands in a circle.



With this sixfold colour circle he developed his theory of harmony: when the human eye is surrounded by a colour it becomes active and instinctively produces the opposite colour – the *complementary* colour. Red produces green, yellow violet, blue orange, and vice versa. The coloured after-image together with the given colour always produces the totality of the whole colour circle. This is the law of all harmony, and this is why the corresponding colour pairs in

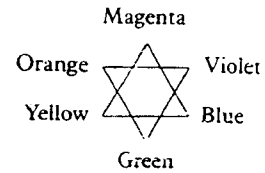
the colour circle, i.e. the pairs that stand opposite one another, are called harmonious. This is their order:



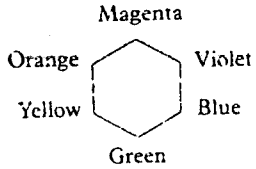
The second principle of classification is when colours are *characteristic*. This is what Goethe calls the colour pairs red-yellow, yellow-blue, blue-red. You arrive at these if you leave out a colour and jump to the next.

> We call these combinations characteristic because they all have something significant which makes a special impression; it does not, however, satisfy us, because what is characteristic only arises when a part separates itself from the whole, still having a relation to it, but without resolving itself into it*.

The characteristic combinations in the colour circle all give a different impression. Yellow and blue contain the contrast between radiance and shadow, yellow and red express gaiety and splendour. With red and blue the polarity of active and passive is seen at its purest. All these colour combinations lack the third colour. The need is felt to mix them together and arrive at a balance. This produces three further pairs of colours: orange-green, green-violet, violet-orange.



Philipp Otto Runge* describes this group as *harmonious contrasts*. Goethe puts orange-violet with the *characteristic* colour pairs. A final grouping results from taking the colour pairs that are beside one another in the colour circle: yellow-orange, orange-red, red-violet, and so on.

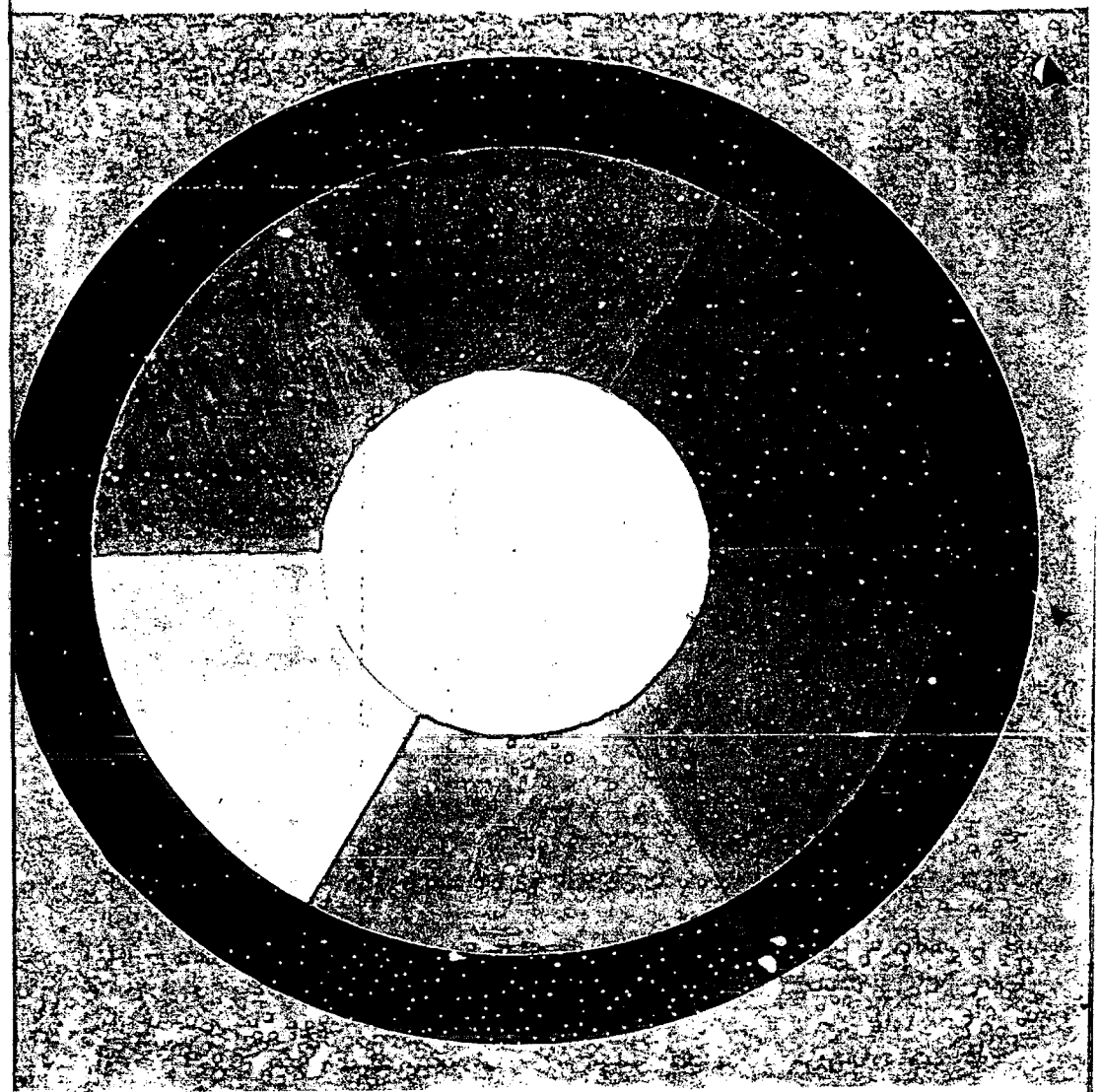


One may well call these combinations *non-characteristic*, for they are too close to each other to produce a noticeable effect.

He adds that the adjacent pairs yellow-orange, orange-magenta, magenta-violet are still to a certain extent justified because they indicate progression, although this is scarcely appreciable, whilst he calls yellow-green 'vulgarly cheerful' and blue-green 'vulgarly objectionable'. Runge called them monotonous. We should bear in mind, however, that in Goethe's time 'vulgar' meant something general, everyday or trivial, and 'objectionable' meant reluctant. You have to keep looking at these colour combinations, moving your eye back and forth between one colour and its partner, in order to get at its specific quality and its minute progession.

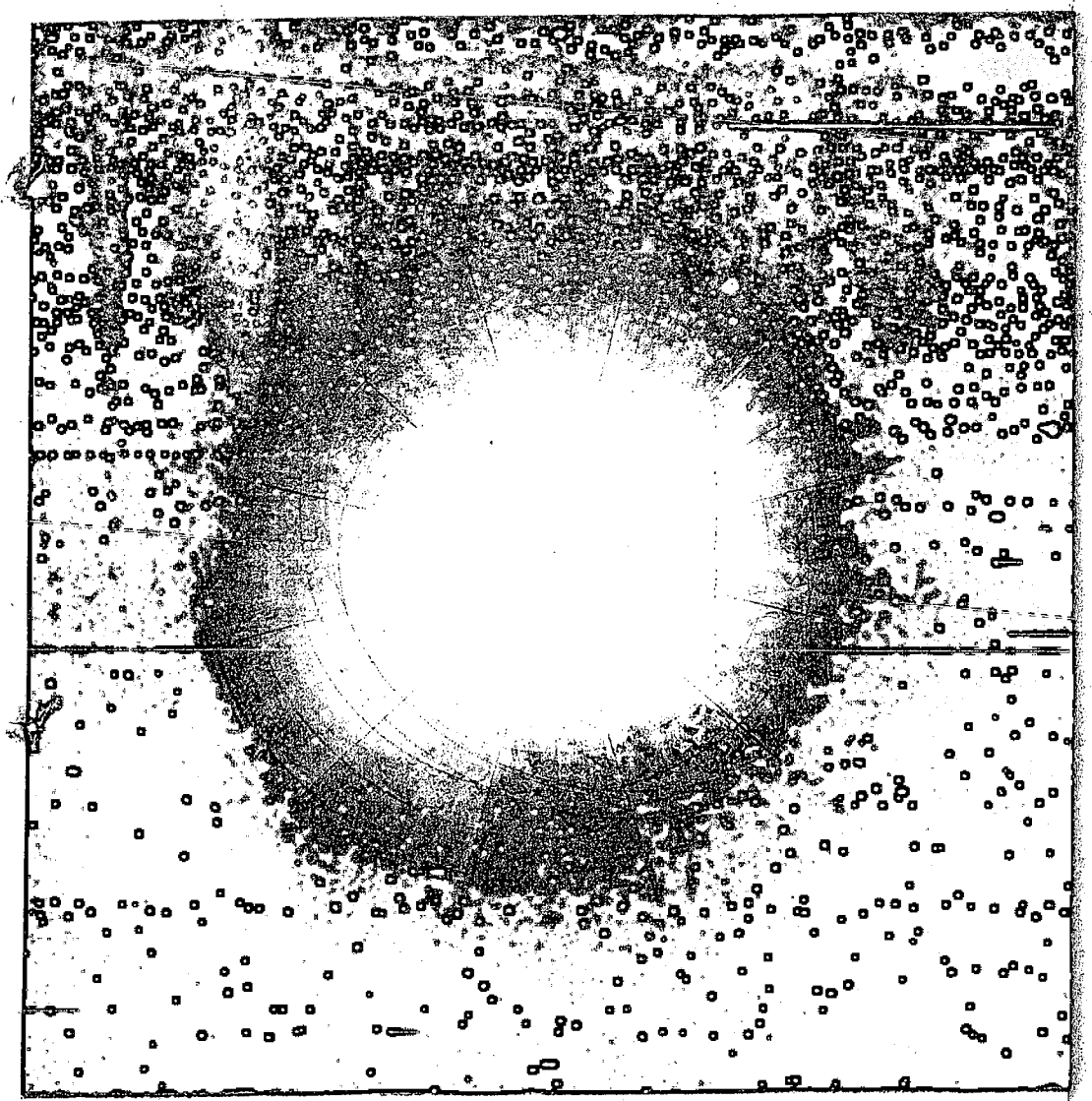
In order to paint the colour interval yellow-green you discover that you can vary it all according to whether you take the green more in a blue or a yellow direction, and the yellow more in a red or a green direction. Nature offers us ample opportunity to study the widest range of different yellow-greens. In spring flowers among the green range from the most delicate yellow to the strongest gold, such as primroses, cowslips, forsythia, daffodils, dandelions, marsh marigolds and crocuses. Sunlight makes the radiant character of yellow even stronger. In comparison, green has a shadowy effect, even when the light is shining on it. Little attention is paid to the juxtaposition of these colour

1. The sixfold Goethean Colour Circle
Plates 1—4: Four colour circles by Julius Hebing.
From "Lebenskreise – Farbenkreise", (circles of life, circles of colour)
Stuttgart 1969
2. The diffused twelvefold Colour Circle of both Goethe and Runge with transitions to black and white.
3. The reversal of the twelvefold diffused Colour Circle no. 2.
4. The twelvefold diffused Colour Circle on mid grey.

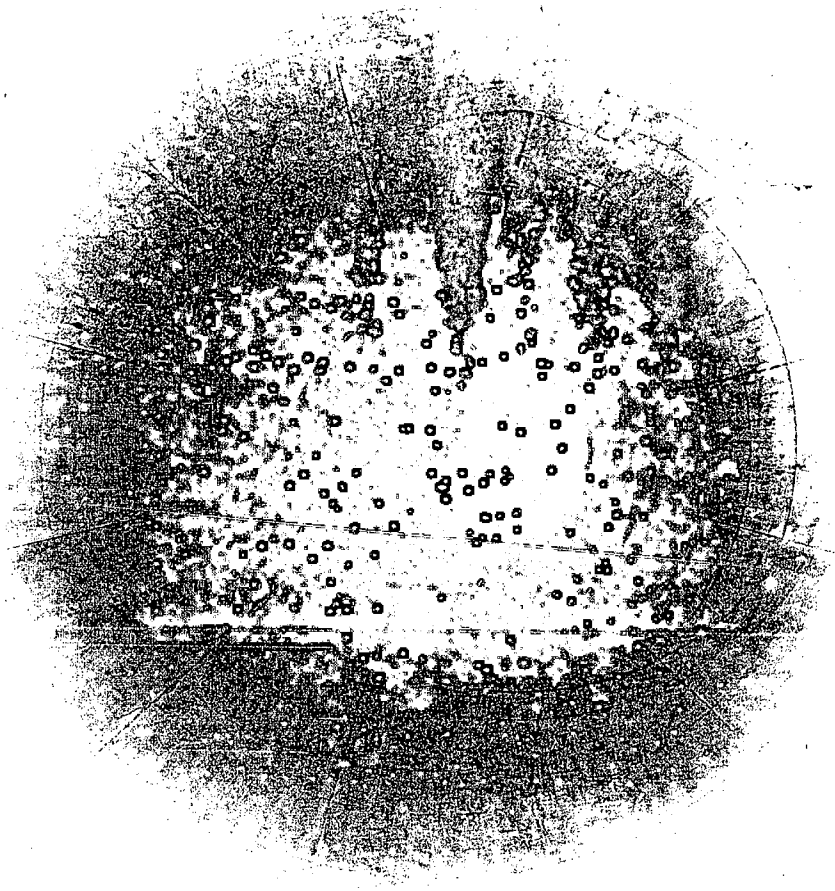


1. Der sechsteilige Goethesche Farbenkreis

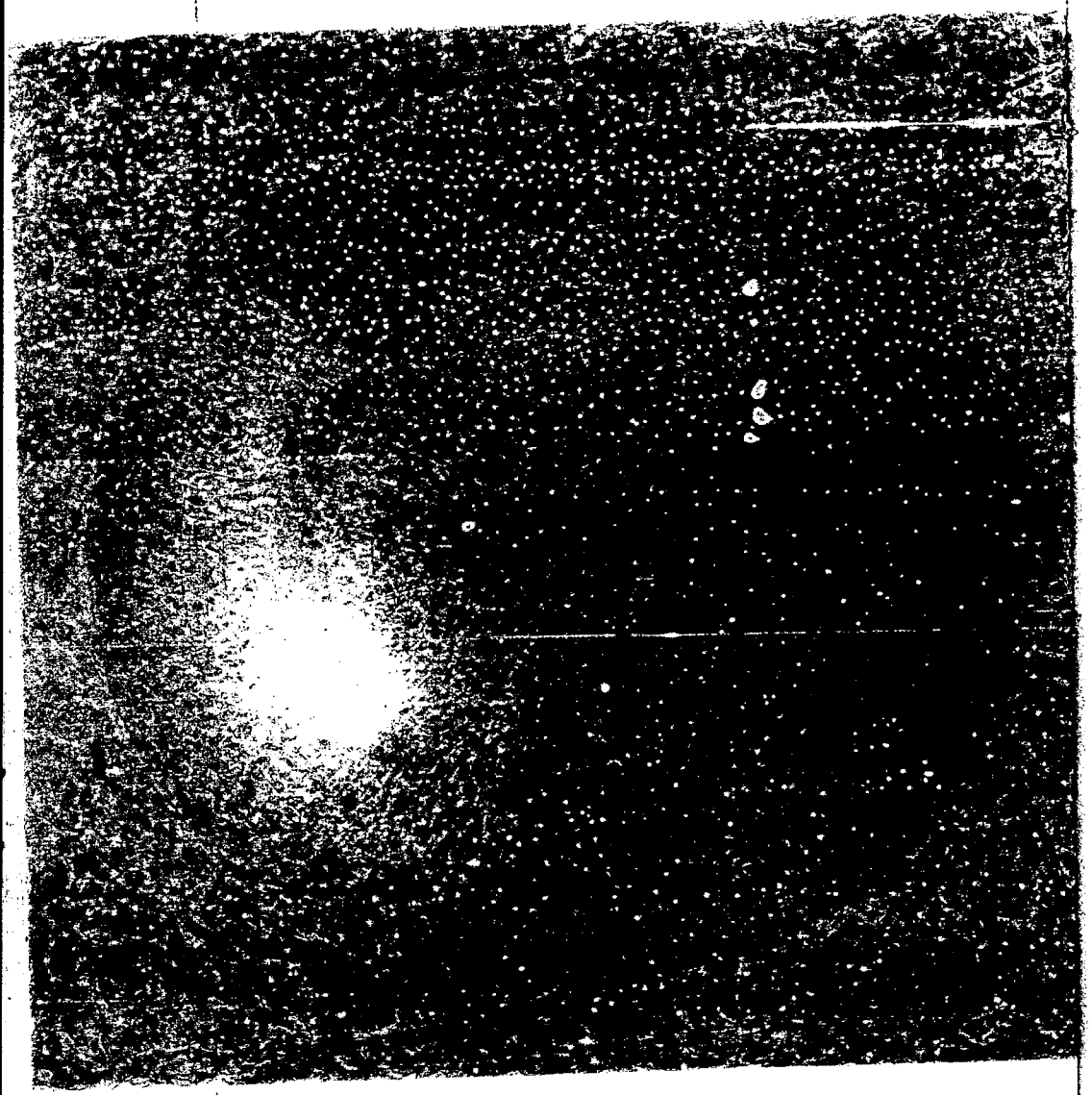
Tafeln 1—4:
Vier Farbenkreise von Julius Hebing.
Aus «Lebenskreise — Farbenkreise», Stuttgart 1969



2. *Der aufgelöste Goethesche (auch Rungesche) zwölfteilige Farbenkreis mit Übergängen zu Schwarz und Weiß*



3. *Der zwölfteilige aufgelöste Farbenkreis in der Umkehrung von 2*



4. *Der zwölfteilige aufgelöste Farbenkreis auf mittlerem Grau*

impressions in nature. The blue of the sky, or perhaps a house or a wall in the background, add to these yellow-green combinations and soften the effect. When the combination yellow-green is painted, the lack of tension in the relationship between them, which Goethe calls 'vulgarly cheerful', is more predominant and awakens the need to complete the combination.

In summer the colours blue and green are most apparent. If the sky were not blue but yellow or red, as the sky is for a short while in the morning or the evening, our feeling of well-being would be totally different. Yellow and red are more stimulating colours, whereas the combination of green-blue is relaxing while restoring and refreshing us. Green painted next to blue can have an unattractive look. In Nature, however, its lack of tension has a beneficial effect on the eye.

In the prismatic experiment mentioned above, with the white panel on black, the mixture of the polarity yellow and blue appeared at the lowest level as green. With the black panel on white the yellow-blue polarity increased and passed through the combinations of orange-red and violet-blue leading to the process that generates magenta. Goethe maintains that the combination of yellow and blue to green gives real satisfaction to the eye, whereas the combination of orange and violet to magenta gives the eye ideal satisfaction.*

A painter cannot really reproduce these prismatic colours with chemical ones, but can only make something approximate. Magenta remains an ideal colour, and a mixture of yellow-red and blue-red is nothing like it.

Living with Colour

Every time that children form a picture it should arise out of living with the colour, and this applies equally well to the teacher's painting activities prior to the lessons given to the children.* A teacher has the very special opportunity, by means of constant practice and the acquiring of new faculties, to be able to exercise education as an art, for every lesson should be steeped in the element of art. Teachers must have personal experience of every task they set the children. They must know in which direction the children could have difficulties, and where they may need help.

If teachers make these observations they will know what to draw the children's attention to when they look at all the pictures afterwards. Teachers can acquire criteria for judgment only through painting themselves. They must be conscious of the fact that it is only through their own efforts at being creative that they can arouse the children's creative activity. They will have fruitful

ideas only if they themselves paint. This painting practice must also be regarded as objective training in the study of colour, and they will therefore have to give up a number of personal and aesthetic inclinations. This can be more difficult if they are talented than if they think they are not. But it will be very rewarding, permitting access to the virgin territory of the sense perceptible-ethical working of colour, which will have a beneficial effect on their whole personality.

Goethe's colour circle starts from yellow and blue. The important thing is that the blue and yellow should harmonize. A beautiful lemon yellow goes well with a subdued ultramarine blue. A combination of dark prussian blue and too light a yellow produces an unpleasant effect, because the greenness of the blue approaches the 'vulgarly cheerful'. Too dark a blue combined with too light a yellow is also unsatisfactory because the strong light/dark contrast lessens the effect of the actual colours. These colour relationships must be well tried out during preparation. Colours can be mixed. If some prussian blue is stirred into ultramarine a more balanced blue is created. A few drops of vermilion in ultramarine takes away its sharpness, and a drop of carmine takes away the greenness in prussian blue.

Another colour interval is red-blue. This exercise leads beyond the study of the interval itself into colour space*. Blue appears to retreat, red to come forwards. The effect depends on whether the colour is put on gently or energetically. Variations of this sort affect the dynamics of the colour tension, making them weaker or stronger. The effect also depends on the tone of the colours. If paired with vermilion, too strong an ultramarine will come towards you, if they are used with equal strength. This makes the colour dynamic feel wrong. If the ultramarine is applied with a lasure technique, i.e. transparently, it will put this right. The dynamic of the contrast will prove to be stronger if the colour interval is made with prussian blue and carmine red to which a little vermilion has been added. Once aware of this colour phenomenon of space, it becomes natural. Then all the colours of the colour circle can be used freely: yellow, orange, red, violet, blue and green. These lend themselves to the following series of exercises.

First take the whole colour circle except yellow – which is used only for mixing orange and green – and paint with these. Make a series of pictures, leaving out a further colour each time, first orange, and then red, green and violet. Begin with the lightest colour and finish up with the darkest.

If another series is painted, leaving out blue and finishing up with light yellow, a different dynamic is created. To end up with red by itself, it is possible to begin on the light side and approach red via the dark side, or vice versa. A similar exercise can end up with one of the complementary colours

– green, orange or violet.

A series of studies such as this provides experience of the wealth of variety in the colour intervals of Goethe's theory of harmony, beginning with all six colours and ending with each colour on its own. It also shows that there is an increase in the strength and power of each individual colour as the colours become fewer and more monotonous.

It is advisable to do these exercises wet on dampened paper. Use the same brush and equipment which the children use. Start by putting each colour on evenly over a small surface area. From the beginning it is obvious that the relative sizes of the areas have to vary. This is a question of balance. Green requires a greater expanse to be able to hold its own against, for instance, a small patch of red. Observing such relationships of balance will lead in itself to colour compositions, but all colours must meet one another without gaps, otherwise they will not really relate to each other. Runny edges can be easily avoided by not painting too wet and removing the superfluous colour with the brush.

At the end of each of the series of exercises described above one colour remained. The best way to get to know these individual colours is to paint with them on their own in varying strengths, depending on using more or less water to lighten or strengthen the colour. These exercises are even more effective when done with the technique of layering.

Colour training is not restricted to practical painting exercises. It is important to experience the sense perceptible-ethical nature of colour, which Goethe describes so impressively, by observing the colours in the environment and actively trying to become involved with them.

The first three years

Requirements

A wide range of impressions is gained from observing class 1 children painting for the first time. For instance there may be a small, rather thick-set boy applying his whole attention to strengthening a patch of red he has painted beside a blue surface. He works very carefully, lifting his brush up again and again and looking at the red against the blue as though he can taste it. Some distance away is a dark-haired girl who puts dabs of yellow, red and blue onto her paper speedily, one after the other. Here and there she enlarges the yellow patches. She is full of an inner joy and she points, beaming, at the meadow full of flowers on her paper!

Every adult will know that after they have been painting they experience their surroundings more intensely – seeing afresh the colours in the sky or discovering a wealth of green shades in the trees and bushes where they only saw grey before. Children experience this much more strongly. Working with colours awakens their interest in the impressions in nature. This applies even to playing with remnants of coloured materials and the colours of their clothing.

The simple painting exercises done in the first three years are the beginning of a training of the senses* that nourishes the child's soul and enriches its impoverished natural environment. As well as the sense impression of the colour the supersensible nature of the colour is also active, taking it beyond its own limitations into an objective world in which spiritual qualities are revealed.

A painting day

The weekly painting day should always be on the same day of the week. A rhythm of this kind may continue for years, and has a deep effect on children. Everything of a rhythmic nature educates the will.* The children experience

the painting day as a special day, and after very few weeks it will become something they look forward to.

Right from the beginning, it is important to introduce definite arrangements regarding organization of paint pots and paper, and always stick to them. Rhythmic regularity of this kind carries children and creates a warm and strengthening atmosphere. This is what helps create respect for the implements they use*.

The main lesson begins, as always, with the morning verse, followed by a song or poem. Then the rest of the painting materials are given out. In class 1 it is best to put a painting board and a sponge on each desk and also a jar of water. Painting is done wet on wet right up to the end of class 5. So the paper is soaked beforehand in the class wash basin. Then the children are called out, row by row, with their board, and a piece of paper laid on each one. When one row is sitting down in front of their papers the next is called out. It is essential that the paper is absolutely smooth and has no creases. Some types of paper can be used without being stuck down, otherwise the sheets must be secured with sticky tape all round. Before painting, surplus moisture is dabbed off with the sponge or carefully smoothed off from the centre to the edges, to avoid creases. The pictures must not be spoilt by creases or bumps. Then the brushes are given out row by row. Flat bristle brushes are used, 2 – 2½ centimetres wide. They are stood in a jar, handle downwards. Finally the pots with the colours mixed in water are given out, one between each two children. A new mood of expectancy arises as the colours arrive.

When everything has been shared out, the class is gathered together once more with a little verse or a short story of introduction. Then the teacher describes to the children what the painting exercise is going to be. It is necessary to show the children many times how to wield the brush*. The best way is to tell them to stroke the dry brush over their other hand so that they experience how it feels for the brush. Eventually they will all learn how to move the brush to produce beautiful even surfaces. They must not rub, nor must the whole picture dissolve in water. If a child paints too dry he must be encouraged to dip the brush into the colour more often. If they paint too wet, they must be shown how to squeeze the brush against the edge of the pot and use up all the paint before each dipping.

Compared to the time taken over the preparation the children in classes 1 and 2 finish the painting exercise very quickly. The sheets are then pushed singly into the painting stacker to dry. In the afternoon the teacher looks at them and puts them up on the wall, to discuss them with the class next day.

This discussion must not become monotonous. Sometimes all the paintings can be put up, one beside another, another time groups can be put up, either

the successful ones or some unsuccessful ones to compare them with. The pictures should not be on the wall too long. Especially beautiful ones can once in a while be put up with passepartout. One or another of the pictures can be used the following painting day to show certain technical aspects, or to lead onto the next painting exercise. Children gain new ideas for their own pictures by looking at the work of their classmates. It is important to allow space for this social experience of looking at each other's pictures. Apart from other benefits, expressing their impressions is a natural living way of practising speaking, which will have an effect on everything else.

At the end of a painting lesson the painting materials are left on the desks and a few of the children are given the job of clearing up. Little surprises usually accompany the washing out of the paint pots and the water jars – the contents of the pots are mixed together, and sometimes an even more beautiful colour arises than they had while they were painting, but then it all turns to grey! Living colour experiences like this contribute to children's artistic education. As the children move up from class to class, the organizing can be left more and more to the children themselves. They must gradually be allowed to grow more and more independent and self-assured.

Coloured intervals, exercises in interchanging and colour stories

Before actual painting lessons start class 1 should be familiarized with the two colours yellow and blue*.

On a large sheet of paper, stuck onto the blackboard, a small patch of yellow should be painted by the teacher near the top. Then all the children each paint a yellow patch, in rows. A blue patch is then painted by the teacher beside a yellow one, and about half the class put blue patches beside the top rows of yellow ones. After a short pause the teacher dips the brush into green paint – which in this case is premixed – and a green patch is painted beside one of the yellow patches on the lower part of the sheet. Then the children who have not yet had a turn put green patches beside the remaining yellow ones. The paper is then covered with a few rows of yellow and blue patches and the same number of yellow and green patches.

All this has to take place quietly and slowly so that it can really make an impression on the children. Then the class look at the paper and observe the yellow and blue together and the yellow and green. The teacher makes the children aware that yellow and blue looks more radiant, therefore more beautiful, than yellow and green. Yellow is actually contained in green,

therefore the combination has less tension. It is important to return often to this phenomenon. The children become involved in it, and learn from such examples gradually to acquire a feeling for the distinction between 'beautiful' and 'less beautiful'*.

A repetition of this exercise can be combined with the next painting lesson. Each child should paint on white painting paper only with yellow and blue. They are first reminded of the exercise carried out on the blackboard. Each child is free to form his picture in his own way, but instructed to paint the colours beside and not on top of one another. It may take a few lessons to learn this. When the finished paintings are put up the next day and discussed, the children are surprised how different all the pictures are. One painting may have a lot of yellow, another may have only one patch; in one painting it is delicate and in another strong. The shades of blue are also different. A teacher should guide the conversation so that the children will point out the particular pictures in which the yellow and the blue have met one another so beautifully that neither of them has spoilt the other. The second painting exercise takes place in the following lesson using yellow beside green.

The children can be given a green that is already premixed when looking at yellow and green from the point of view of experiencing the colour interval. After observing and discussing this new series, examples should finally be chosen from both colour intervals and hung up beside one another, pointing out that yellow beside blue is more beautiful than yellow beside green. This is a return to the starting point.

In the course of the first school year there will be various opportunities to come back to this in different ways. In spring children can paint the interval in gentle colours and in autumn in bold colours, varying the exercise to suit the seasons.

The so-called primary colours yellow, red and blue are used on their own for a while. The appropriate colours to use with yellow are carmine red and ultramarine blue. The children can be left to find their own form, experiencing their way into colour freely. In an exercise of this kind experience will show that all sorts of form elements will appear, such as yellow, red and blue circles, small and large dabs of colour, even a painting of bars and suchlike. One or another child will also paint with one single colour or a pair of colours. Such a colour pair can provide a good point for discussion. The relationship of two colours one to another can be pointed out, and an exercise for all the pupils could be based on this. If there is a picture with yellow in the middle surrounded by red and blue this triad could be imitated in the following lesson. To avoid set forms children can be instructed to paint larger, less divided surfaces. This amounts to the first lesson to be learnt.

After a few weeks children should be given prussian blue as well and, following on from the yellow-blue experience, they can make green. At first the two colours should be brought towards one another and carefully guided into one another. The kind of green that arises depends on whether the yellow is brought into the blue or the blue into the yellow. *Violet* can be created in a similar way with ultramarine and carmine. The third mixed colour, *orange*, arises out of carmine and yellow; the orange has more fire in it if vermilion and yellow are used, but vermilion easily becomes glaring and should not be used too soon.

Because of the great purity and transparency of water colour, colour compounds arise particularly clearly, and in the most subtle variations. A teacher must be alert to the fact that painting a number of colours one on top of the other while they are wet weakens the force of the colour. Greys and browns may arise. In order to achieve light, delicate shades the liquid colours must be repeatedly thinned down with water. It is always a considerable experience for children to see a colour arising on their paper that was not there in the painting pot. They are part of the process of colour creation, and they experience something of the balancing of forces when light and dark meet, as in painting green.

*Painting on coloured paper**

The experience of colour creation is intensified when children paint on coloured paper. Each colour goes through an immediate transformation. If yellow is painted on a red base the yellow loses its lustre and becomes orange-red. With blue paint on red paper the blue grows warmer, becoming violet. The element of form as such rears its head easily among the little ones, but must be curbed so that their whole attention can be focused on the colour process.

With these exercises there is the technical problem that a suitable type of paper is not available. The kind of tinted paper that is available in a number of colours is alright for painting with poster paints but not for water colours. You can get round this by letting the children paint their white paper with a single colour. It takes only a few minutes for the paper to absorb this, and then they can paint on it.

Following on from the yellow-blue interval the red-blue intervals can be painted. Both of these are characteristic colour intervals; the first has more cheerfulness and splendour, the second is quieter and more dignified. If these are taken further they lead to yellow-orange or blue-violet, the non-

characteristic combinations.

A new exercise can be set to return from the colour pairs to the triad of basic colours. The teacher will always have a stretched paper prepared which might be used to encourage an unimaginative child through imitation. In this particular case a large sheet can be put up on the blackboard and an area of it painted red. The teacher then asks what is going to happen with yellow and blue? Individual children can add yellow or blue, or both. If a teacher paints two or three more similar red areas children can complete them, so that three different pictures arise from the same triad of colours, all beginning from the same starting-point. When the interest of the class is aroused they can all paint a similar triad on their own papers. Although they will all put red in the middle, the yellow and blue will be differently arranged, or there will only be one of them. Certain children will show special likes and dislikes of particular colours, or a dreamy obsession with one colour so that the other one is forgotten. This supplies many things to make the children conscious of in the subsequent discussion, and it also tells the teacher things about the individual children.

The next time the triad exercise is used yellow can be put in the middle on one occasion and blue on another*. The effect on the picture will be different each time, and the nature of the colours appears more and more clearly.

Proceeding with the triad exercise violet can be exchanged for blue, providing yellow, red and violet. Red will then be in the middle, with yellow and violet round the sides. Yellow and red is a colour interval that has character, whereas red beside violet is too similar. As this is a triad, the yellow-violet will also relate and will be harmonious. The triad should then be altered and yellow placed in the middle. Violet beside it produces a harmonious interval, and red on its other side, i.e. yellow-red, has character. If the two triads are compared, an increase in harmony is experienced. With violet in the middle the harmonious yellow-violet interval remains on one side and on the other side is the monotonous red-violet again. When all these variations have been tried out and discussed with the children, they will have learnt that it all depends on which colours are put beside which.

The range of colours can then be extended to include the *three compound colours* and used in our further exercises in colour intervals.

Three compound colours

The teacher again paints red on the blackboard and gets the children to feel how well green goes with it. Then green is put in the middle and the children

are encouraged to add red to it. When painting with colour intervals of this sort, regardless of whether two or three colours are used, the teacher will have to take care to see that rich, beautiful shades are prepared; in comparison with the green the red should not be too light, and in comparison with the red the green should not be too dark. A red-green interval can be as festive as a peony in the garden or a red rose among the green of summer. Other colour intervals that produce a particularly harmonious relationship are yellow-violet and orange-blue.

When the experiencing of these colour intervals has awakened in the children a feeling for beauty, it is certainly good for them to encounter harmony. This was why Rudolf Steiner saw these exercises as being particularly important for children towards the eighth year*.

A series of exercises beginning with a neighbouring colour interval such as green-blue conveys an even more intense experience. This should be followed with green-violet, and finally with green-red. Starting with the other extreme, exercises go from green-yellow to green-orange and then to green-red again.

In all these exercises various movement tendencies make themselves felt in particular colours, and these can be followed up. For instance yellow can be painted in a form that radiates from the centre. If it is surrounded with blue or violet it resembles a starlike blossom. If, however, blue or violet are put in the middle and yellow round it, the blossom changes into a rounder form more like a pansy.

Alongside the painting exercises described up to now there have been three methodical stages:

Firstly the children paint out of their instinctive feeling for colour.
Secondly the children look at the way the colours in their pictures relate to one another.
Finally the central colours are interchanged and the colours around them altered.

The class teacher introduces children to colour on the basis of the Goethean colour theory, and the children play with the colours. People often make the objection that this methodical guidance restricts the children's own creativity. This overlooks how much activity and individual decision it takes just to put surfaces of colour on the paper with the brush. When a class has been painting with yellow and blue only, all the pictures look different, even if the exercise has to be done with large surfaces. If they get too alike, the class teacher has to stimulate the children's experience of colour more strongly, and then they will form their pictures with greater freedom.

Before their seventh year children live in the world of colour in a dreamy and instinctive way. After this age it is important that they should be made aware of qualitative differences.

Painting in connection with stories

Towards the ninth year the children enter more strongly into the element of form. Motifs should be avoided that include objects or any kind of drawing. The colours themselves offer a wealth of opportunities for finding motifs if you describe them individually with soul qualities and let them play with one another*. A teacher can point to a conceited lilac, a cheeky red or a humble blue when painting a colour story with the class. The teacher must first have a clear idea of the individual shades. It is not always very easy to picture what lilac looks like. Goethe gives the name of redblue to the first step in the transition from the blue to purple in his colour circle. Blue keeps the upper hand; if thinned down it makes lilac. In nature it appears in the spring colours of the classic lilac flowers, lilac-coloured tulips and the paler crocuses. A 'cheeky red' immediately suggests vermilion. It is the most vivid of all colours. The blue in this exercise – the 'humble blue' – must be neither too dark nor too light, neither icy nor greenish, if it is to suggest the mood of humility. It must contain warmth and be on the way to red. To achieve this ultramarine blue is softened with a few drops of vermilion. The relative sizes of these three colours on the page are indicated by the very formulation. The conceited lilac wants to show off so it expands, and it is agitated and would like to drift away. The teacher must have already inspired in the children a feeling for the airy nature of this colour. The cheeky red is energetic, fiery and lively, but small. Even a small dab of pure vermilion will shine. In contrast to this the lilac, like a girl adorning herself, takes first a dash of blue and then a dash of red – carmine must be included here. Blue is the calmest of the three colours and it encloses the other two, condensing below to support the whole thing.

This kind of exercise is just what is needed to bring movement into the children's soul life. If the colour is to become the motif, then the children have to enter right into the colours as they paint, feeling and forming them from out of their own feeling life. This activity changes from colour to colour, and their experience of them gets more discriminating. As well as being outwardly active the children become inwardly alive and mobile as the colours make their feelings visible.

Artistic exercises such as this one can help to counteract right from childhood

the alarming onslaughts our present age makes on people's feeling life. It is a good thing to let an example like this bring home the full dimension of the situation, for tremendous consequences arise from small beginnings.

When the teacher passes on from the initial painting of simple colour intervals to imaginative motifs, he must know whether there has been sufficient preparation in the required technicalities. The example we have given must have been preceded at some time by an exercise with the two colours red and blue. Every child must be capable of making lilac by thinning down a particular shade of colour with water.

Almost all children take a spontaneous liking to the cheeky red. The teacher can use this interest, this curiosity, to add a further episode to the colour story. It is best to repeat what the children have already done, adding a small change. Perhaps a story could tell how a second red, no less cheeky, suddenly turned up and seized and captured the conceited lilac who was about to float away.

In a following painting lesson the story might continue like this: 'As you can easily guess, the two cheeky red fellows did not remain friends for long. They began to squabble. Finally all you saw was one single patch of red splashing fire in all directions. The fragile lilac could not bear it, so she fled so as not to have her beauty spoilt. The humble blue retreated in horror to the furthest edge of the paper.'

If the story is varied over a number of painting lessons, without adding any other colours, the children will become more skilful in painting with these shades. In further variations yellow can be added which can be changed into green when it combines with blue and into orange when it combines with red.

Here is a final example of a colour story: using the first story, leave the conceited lilac standing on the white page with the cheeky red on her shoulder. The humble blue remains below. The red looks round for a playmate and sees something flashing in the distance. A radiant yellow approaches and spreads light over the whole surface. A sequel arises from this for the next lesson. The teacher asks how the lilac felt about the arrival of the yellow? She could not bear its brightness and floated off. The cheeky red, however, flew into yellow's arms and became friends with him, thereby losing his cheekiness and turning into friendly orange.

The teacher has to be careful not to get fanciful with the colour stories. In Goethe's chapter on the sense perceptible-ethical working of colour every colour is given a wealth of masterly adjectival descriptions. These descriptions should be continually referred to. A colour must not perpetually be described with the same word. Yellow can be cheerful, happy, radiant but also magnificent; blue shy, yearning, repellent and reserved; green peaceful, calm, joyful and fresh; orange friendly, brave, vigorous; magenta royal, festive, majestic.

Goethe also describes how a colour can turn unpleasant. Yellow is particularly sensitive and can easily look dirty*. This should not be overlooked.

Painting connected with story material

As well as this kind of colour story there is another lovely source of inspiration for pictures of colours. Painting links up with the stories the children are being told. This will change from class to class. In class 1 it is fairytales, in class 2 fables and legends, in class 3 stories from the Old Testament.

In a genuine fairytale there is neither space nor time 'perspective*. Everything is interwoven on the one plane. However, there are climaxes of a pictorial kind that stimulate the children's imagination and can arouse especially strong feelings. A good example arises from the story of Rapunzel.

The children have heard about a king who goes hunting in the forest and who, when he hears Rapunzel singing, finds his way to the tower and watches her letting her golden braids down from the window so that the witch can climb up them. This picture will remain in the children's imagination. When painting day comes the teacher can make use of it by reminding them once again of the episode. The dark tower in the forest has to be painted in blue and embedded in blue surroundings that become the green of the forest when painted over with yellow. Then the children paint a yellow as radiant as Rapunzel's hair that hangs down into the darkness. Some space must be left on one side of the tower for this. Then a red as shining as the prince's cloak is painted onto the yellow, and this spreads out step by step over the blue of the tower turning it to violet.

In such an exercise the fairytale is described as a 'colour happening' without referring to the characters of the story, as the children will otherwise begin to draw them. It is essential to talk of a red that shines like a prince's cloak, that is, always accompany a colour with its quality.

Every event in a story has its special dynamic, either tension or resolution. The most characteristic for these are bewitchment and deliverance. Bewitchment always changes the atmosphere. The fairytale of *Jorinde and Joringel** is a good example of this. The couple are in their courting days, and they go into the forest to be quite alone together. It is May time, the evening sun is shining brightly in the dark wood, and they are surrounded by its green-gold radiance. Now a subtle change of mood occurs. The turtle-dove on the old beech tree begins to coo sadly, Jorinde begins to lament and Joringel, too, becomes mournful. They are both in a state of alarm without knowing why. The sun has nearly set when Joringel sees through the bushes the old walls of a

castle in which a witch lives. If a maiden comes within a hundred steps of the castle the witch changes her into a bird and claps her into a cage. Before Joringel kn[illegible] what has happened Jorinde begins to sing, for she has turned into a nightingale. A screech-owl wheels round them three times, calling 'Tuwhit tu w[illegible]oo!' Joringel is turned to rigid stone and is fixed to the spot. The sun sets, the owl flies into a thicket whereupon out comes an old woman, yellow and scraggy, with great dark eyes, a red nose and nutcracker chin. She catches the nightingale and carries it off.

The children enter with their whole hearts into this picture world. First they experience the warm golden mood, then everything growing darker as a threat approaches. They are tense, and feel both fear and sadness because the world of light is disappearing. When they paint this, first of all comes a surface of golden orange colours. This is followed by a dark blue which bewitches the yellow, takes away its radiance and turns it to green. A similar change of mood occurs in the story of *The Frog King*. The radiance is lost the moment the princess's golden ball falls into the well.

In order to link on to the motif of redemption the children do it the other way round and make the colours lighter. The yellow must first be darkened by painting over it with blue in order to arrive at green, but the yellow will be released again by putting pure yellow beside the green, so that it comes out of the green like a blossom from the bud.

In the fairytale of *Sleeping Beauty* the yellow that is as bright and shining as the prince's sword parts the dark hedge that was painted first of all with prussian blue. This provides shades of green in which red roses light up.

Feelings such as joy and sadness, hope and disappointment, are aroused in the children's souls and take on free forms when they paint the scene*. Nothing should be forced or dramatized, for the way the story was told will be mirrored in the colour competitions.

Stories from the Old Testament form the story material of class 3, and lead the way to a kind of drama which is beyond the personal. Humanity succumbing to evil is a fundamental theme whereby humanity becomes the victim of divine wrath and punishment. Moses appears as the messenger of divine providence. He also is seized with anger when he descends the mountain with the decalogue and sees the Israelites dancing round the golden calf. The wrath of God and Moses' anger awaken fear in the people. Anger and fear give rise to exercises of red and blue.

There is a wonderful contrast of moods in the story of David and Saul. King Saul has grown melancholy because he has transgressed God's command. David sings and plays the harp to him in order to amuse him. Dark blue, violet and green are contrasted with yellow-orange and red in that the light side

expands towards the dark and lightens it.

In the middle school painting in comparison with the [illegible] is no longer so easy. The focal point in class 4 is [illegible]

Alongside the sacred scenes of the [illegible] the superhuman world of the gods with its [illegible] experience this as a vast sp[illegible] mighty figures of Odin, Tho[illegible]aldur, [illegible]ya and Frigg[illegible]. Then there is Heimdall, the guardian of the Gyaller Bridge, and the giants of Thursenheim. Midgard, the dwelling-place of human beings, is halfway betwee[illegible]. Should the world of images be included in the painting of class 4? Or would it be preferable to enter into the mighty world of the gods through reciting texts from the Edda, thus bringing to the children the element of alliteration that is new to them? There will always be children who live with the stories to such an extent that they draw pictures of them in their books out of their own initiative. Yet the size of the pages are often not adequate for what they want to express. It all becomes large, which often has a bad effect on colour work.

As the children pass from the ninth to the tenth year their youthful forces of imagination fade, they acquire a more conscious perception of their environment. If a teacher nevertheless wants to do a few exercises in conjunction with Norse mythology it is best to take the colour qualities of the forces of nature. There is the realm of the fire forces Muspelheim, or the world of cold, misty and damp Nifelheim. The first stage begins with the contrast red-blue. However, soul processes such as the fear and anger of the Old Testament are now transformed into an expression of the elemental worlds. This often brings into the paintings of the ten-year olds their first experience of the contrast between light and dark. This becomes even more apparent when the darkness of the kingdom of Hel in the depths of the earth pervades the divine world that had been filled with the light of Baldur, the god of light.

There are teachers who, by the way they tell the stories, draw from the children of this age group artistic work that is remarkable for its expressiveness. But it raises a serious question as to whether the children's imaginative forces are not being exploited too much, especially if it means one is giving the narrative element too much free rein. These childhood gifts are called upon today as a matter of course for competitions, advertising and other adult institutions. But this is not to the children's benefit. In order to prepare the ground and train faculties that can be drawn upon later for really creative achievements, children should be introduced slowly and methodically to the elements of art.

If the children are asked to express all their emotions it may seem to be stimulating their creativity, but will in fact be using the real creative forces of

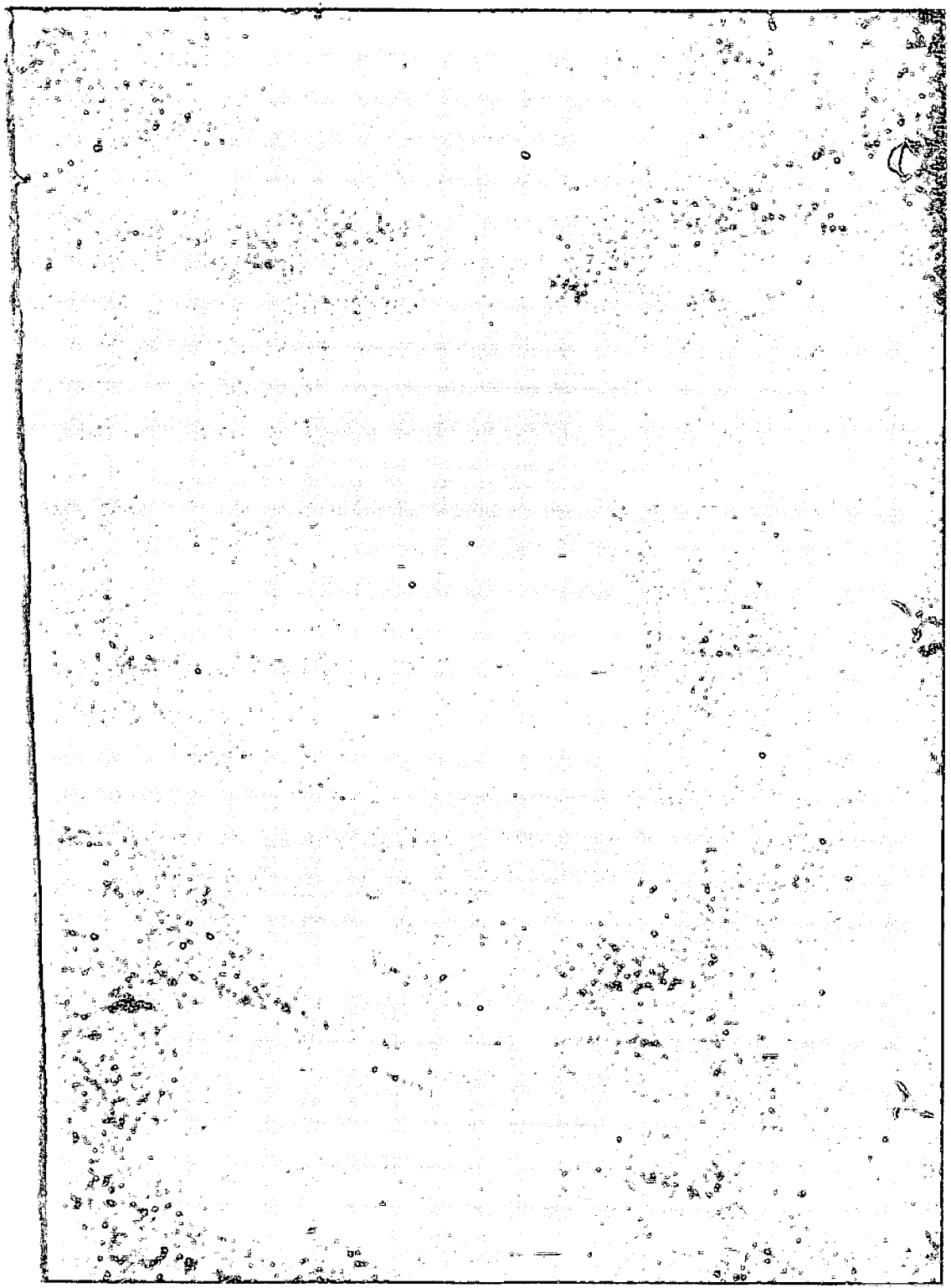
youth which are not capable of unfolding until after puberty*. The promotion of guidance of youthful creativity is a matter of top priority when the teaching of art is under discussion today. The above descriptions have tried to show how, by varying the exercises and looking at the results together, the children's sense perception becomes activated, and this then stimulates their soul processes. This does not, however, cut out the desire to express their own creative ideas, which can be done on other occasions.

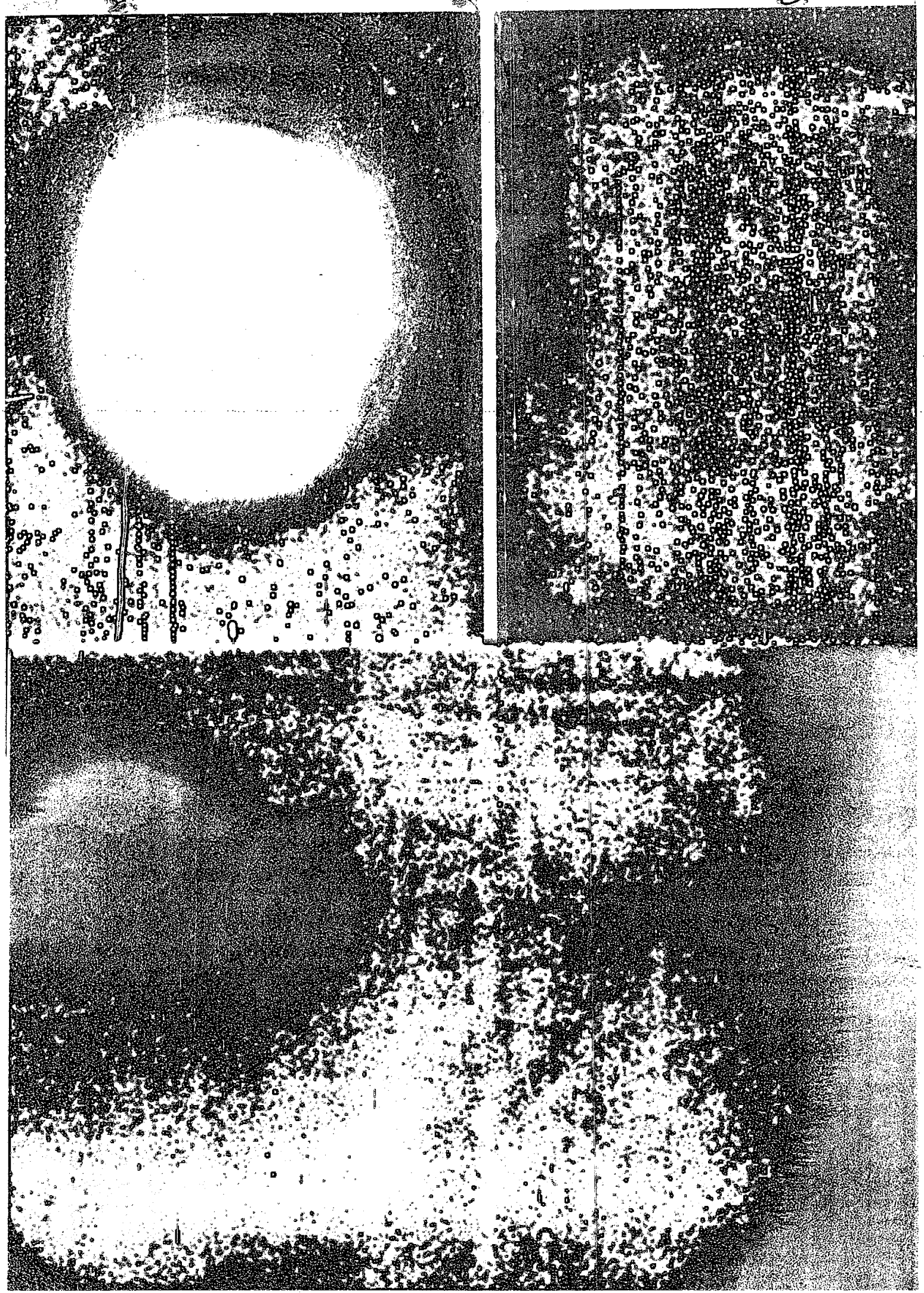
The exercise books of Waldorf pupils are usually surprisingly rich in the colourful results of the use of wax crayons. These vary according to the age and the particular lesson. The teacher sometimes supplements the text of a main lesson book with a picture, and often sets the children going by drawing one first on the blackboard. Experiences gained in the lesson are often captured in colour, but in a totally individual way.

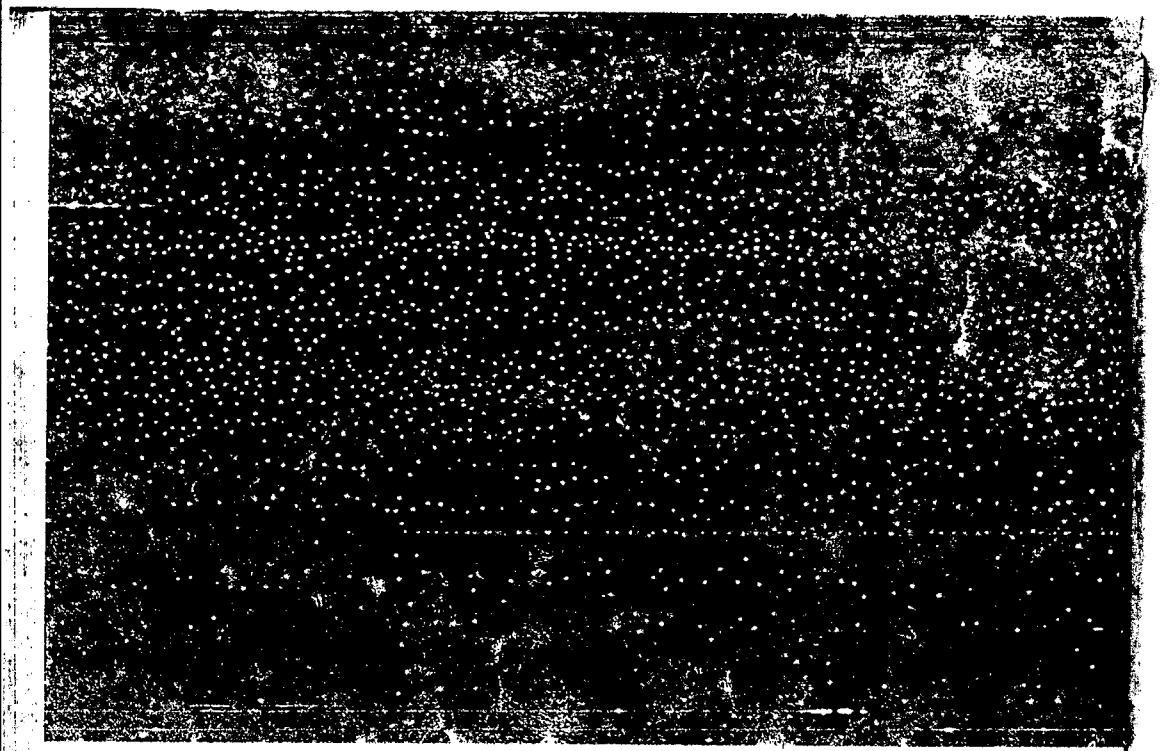
Assume class 1 have been told the fairytale of *Mother Holle*. The children want to draw the story. At a suitable moment they get out their books and crayons. Each child draws his own particular impression of the story. There are golden gates and black ones, Mother Holle's house, whirling snowflakes, or apple trees and an oven. The children's will forces are active in doing these drawings and they are as it were digesting the story. The same thing is happening as when they act out a story.

When they have finished drawing the children very quickly lose interest in the product of their activity. For the time being this can be left. However, the slow and gradual way in which a Waldorf school leads up to the introduction of writing enables the teacher to link this up with the process of learning a letter*. The morning after the Mother Holle tale the children repeat what was told them. First of all each child shows the class what he or she has drawn. One of them is a baker's son, a small round-headed phlegmatic, who points silently to his carefully drawn loaf of bread. The teacher can give the lead to the children to talk about bread. In course of conversation their attention can be directed to the initial letter B. The teacher introduces other words beginning with B: bun, brezel (a B-shaped bun) basket, baby, bud. With a little speech exercise, a short

5. *red-blue exercise, class 1*
6. *above: blue-yellow exercise, class 1*
   below: red-blue exercise, class 2
7. *colour exercise, class 3*
8. *goats and squirrel, zoology, class 4*







verse, the B words can all be put together, to enable the class to experience the sound of B. Through imitating the form of the baked brezel they are also going to arrive at the form of the letter B. A drawing on the blackboard shows them how to do it. The children draw a brezel and a large B beside it in their books, taking a whole page for it. Now that they have arrived at B they begin to practise it; they write a lot of B's in their books, and gradually they are led to achieve a certain ordered lay-out.

A class 3 exercise book gives an account of farming. The texts the children have written in their books in script are still very short and simple. These are illustrated with coloured drawings. The following verse is spoken by the whole class as they move round in a circle carrying out the gesture of scattering seeds:

One for the rook
One for the crow
One to rot
And one to grow.

Beside the verse there is a picture of a man striding forward purposefully and sowing the seed. The sun is rising and birds are on the wing. The sowing gesture is more characteristic than naturalistic, and seems to come from the child's own inner feeling. Even if they have never even seen a farmer sowing, they enter directly into the experience of the movement as described by the teacher.

People often put forward the biased idea that children should learn only about the things they will meet with later in real life*. It is, however, more in keeping with the growing child to introduce them only very gradually to today's level of technology. They should, of course, be encouraged to take a wholehearted interest in the kind of work people do nowadays, and let them report on their observations. But alongside this they have a farming main lesson in which they carry out the movements of all the processes, from ploughing to breadbaking. They prepare a bed in the school garden or, circumstances permitting, a piece of farmland. They sow the various grains, wheat, rye, barley and oats, having previously heard how farmers did it in bygone days. Most children feel a direct need to imitate the rhythm of striding accompanied by the gesture of scattering the seed. If this need is met with a movement game, they enter intensely into the gesture. An illustration of this then goes into their main lesson book.

To deepen this even more, drawings on the blackboard by the teacher can further inspire the children's pictures. Rudolf Steiner illustrated his lectures with little sketches he always did himself. When on one such occasion he was

asked why he did not prefer to make use of a film, he said that he drew a picture in front of his audience so that they could follow his intentions in their own thinking. In this connection he came to speak of teaching children:

> make as little use as possible of drawings that are already finished and as much use as possible of what arises out of the moment. The children then become inwardly active and their inner life is awakened, which will lead to their becoming more familiar with the spiritual aspect of things, and to their beginning again once more to understand the spirit . . . *

There is a simple colour exercise to make visible for the children the hidden process of germination. Light brown seed-shaped formations are embedded in a dark brown that includes shades of violet and blue. One by one yellow forms emerge from the seeds and grow green, not naturalistically but purely out of colour. By doing such exercises the children are also practising and learning how to use crayons and make beautiful transitions from one colour to another.

A special impetus for pictures that tell a story can come through religion lessons. Feelings like reverence and compassion come to expression in colourful drawings. If for instance the religion teacher has been telling stories from the Old Testament, then ready made pictures appear before the inner eye; the rainbow, Noah, the ark with the animals, Moses and the burning bush and David and Goliath.

Therapeutic aspects

Art lessons give a class teacher a special opportunity to work pedagogically and therapeutically on imbalances in the children often caused by the child's temperament.

There are melancholics whose thoughts and feelings once aroused in the course of the lesson remain stuck at that point. They have a tendency to compulsive ideas. An inclination to harden can also be seen in their paintings, which often leads to their colours being hard and isolated. Particular exercises with harmonious colour compositions can counteract this tendency to being cramped. This type of child should be asked for example to paint an oval surface of yellow on one side of the paper and surround its lower side with a blue surface that expands towards the other side of the paper. Red approaches the yellow from above; where it covers it it turns to orange. The red streams further down still and covers a part of the blue, turning it to lilac. Just where

the yellow and blue meet one another they can penetrate one another and make green. The transitions have to be painted so carefully that this actually enhances the harmonious combinations of the colours. A variation of this exercise can begin with red and surround it with yellow which is covered by blue on one side producing a green that borders directly on the red. Lilac and orange will arise at the edges where the other colours meet. A final exercise begins with blue which is surrounded with yellow into which red enters, turning it to orange. In this case orange directly touches blue to form a harmonious colour combination, and where the other colours meet around the outside lilac and green will be created.

Other children have opposite tendencies, particularly the phlegmatics who are influenced very strongly by the process of their metabolism. They are slow to involve themselves in new ideas and their memories are very short. Those who are good at technique often do their paintings very carefully, yet the colours do not show much strength of expression. A number of phlegmatics do pictures in which everything looks watery and indistinct. They must be given exercises more in the drawing direction. Forming loops may be helpful. It is best to start with yellow. With a wide brush they should paint a large 8, open at the top. Leaving a bit of a space, blue follows the same form. In the middle, where the yellow and blue overlap, green arises. It spreads very delicately inside the loop, and at the border between yellow and blue it expands upwards. Then comes red. This also must start at the top and go through the crossing point. Where it overlaps the blue, lilac arises and creates another delicate loop inside which expands into the open expanse round about.

Whereas the first exercise was an exercise purely in colour, the second is an exercise in colour forms. It is important that the teacher takes care that the paper is not too wet and that there is not too much colour on the brush, otherwise all the colours may run into one another at the crossing point.

This exercise gets more difficult each time a new colour is taken through the crossing, because even if the bands of colour are narrow the area of colour gets wider and wider. Children usually begin correctly but they soon leave out the crossing point and take the brush round the outside. This shows the purpose of the exercise. A child who tends to be forgetful and glum has to make an effort in order to master the exercise.

This exercise needs to be repeated. Variations can go in two directions. On one occasion the course of the colours can be changed so that the head of the loop is not at the bottom but at the top, on the right or on the left. On another occasion the colours are reduced in number, but painted repeatedly side by side. If red and blue are used, several red loops will alternate with blue ones.

If the teacher succeeds in gaining experience with these exercises and under-

standing the point of them, they can be very useful. For instance if a class 7 have had a geography period and are going to paint a landscape, the melancholics can be asked to concentrate more on the harmonious quality of the colour compositions, perhaps they could paint the sky with delicate colour transitions such as can be seen in the morning or evening sky. Forgetful children can be helped to keep their colours clearly separate so that the character of the landscape also comes to expression in the form of the picture.

There are lots of ways of being pedagogical and therapeutic in painting lessons. But in order to get the right flashes of inspiration it is essential that teachers constantly work at widening their objective approach to the world of colour and form, and at maintaining good inner contact with the children.

If a whole class shows signs of being out of balance, such as being noticeably uncontrolled, or painfully lazy, or timid, the teacher can make use of colour exercises to work on the whole group. On one occasion the group may, for example, do an exercise with only one colour. If they have been told the story of *The Blue Light* this can be linked onto, and on painting day all the children paint with blue only. It will be seen that, while they are painting, it becomes so quiet in the classroom that eventually even the children themselves notice it.

In order to make a class more active, an exercise can be done which uses a lot of vermilion. Sometimes the children will then rush out at break time as though the red had got into their very legs. It certainly makes a difference if the colour is mixed to a delicate shade on one occasion and a strong one on another. If a class easily goes over the top, they should be calmed with soft colours. Stronger colours enliven and activate the children and strengthen their inner being.

Obviously all these things need to be done a number of times in particular. The teachers of the first two classes should work with this and school themselves to observe the different effects. These pedagogical-therapeutic exercises cannot be used in the abstract.

Painting and drawing in the kindergarten

The following scene is characteristic of the basic theme running through the early years of a child's life. A mother is sitting at her desk in the sitting-room. Her small son crouches on the floor watching his mother, then he goes over to her. He stretches his hand out to have his piece of paper so that he too can write. When his mother has given it to him he draws with a pencil backwards and forwards over the paper as carefully as he can. He begins again several times, then suddenly puts the sheet aside. A few days later the whole thing happens over again. The scribbling age has begun.

The special character of the first period of childhood, the first seven years, can be understood only if we notice that the child's forces of imitation are far more intense than they will ever be again. It is by means of imitating that it lives its way into earth conditions. We cannot speak of lessons at this age. Any kind of creative activity in a Waldorf Kindergarten that engages the children's direct need to be in movement appeals solely to their imitative faculty. Painting, to start with, is therefore an occupation similar to the other communal activities of baking, washing, clearing up and all the other things that have their set place in the rhythm of the week. A considerable time is spent in preparation, with the putting on of aprons, and the giving out of painting boards, paper, brushes and paint pots. The children must be encouraged to do as much as possible for themselves. The kindergarten teacher endeavours to put the experiencing of colour in the very centre, therefore she spins out as long as she can the time spent on preparing and pouring out the paints and watching the play of colours. What the children then do with their brush, paper and flowing colours is left to themselves. However, the kindergarten teacher also sits in front of her own painting board and carefully and joyfully lays on beautiful surfaces of red and yellow. The children will watch the way she holds her brush, and observe that when she has dipped it into the paint she squeezes it on the edge of the pot, and cleans it in water before dipping it into another colour. On the damp painting papers the colours spread out and either run into one another or ray out in the other direction. Chance patterns and figures will arise.

The children paint with great enthusiasm, and experience the colour with no

inhibitions whatsoever. If possible, do not correct anything they do at this age, for they learn best if they do not have their conscious attention drawn to what they are doing. However simple this sounds, the fundamental importance of this attitude to a child's education cannot be sufficiently expounded. The younger the child the greater it will be affected by the self-education of the adult.

> In the first seven years the guidance you can give a child is neither by scolding him nor by laying down rules but purely through what you yourself do*.

Rudolf Steiner gave no particular exercises in painting and drawing for the kindergarten. He wanted the children's artistic work to be based on imitation.

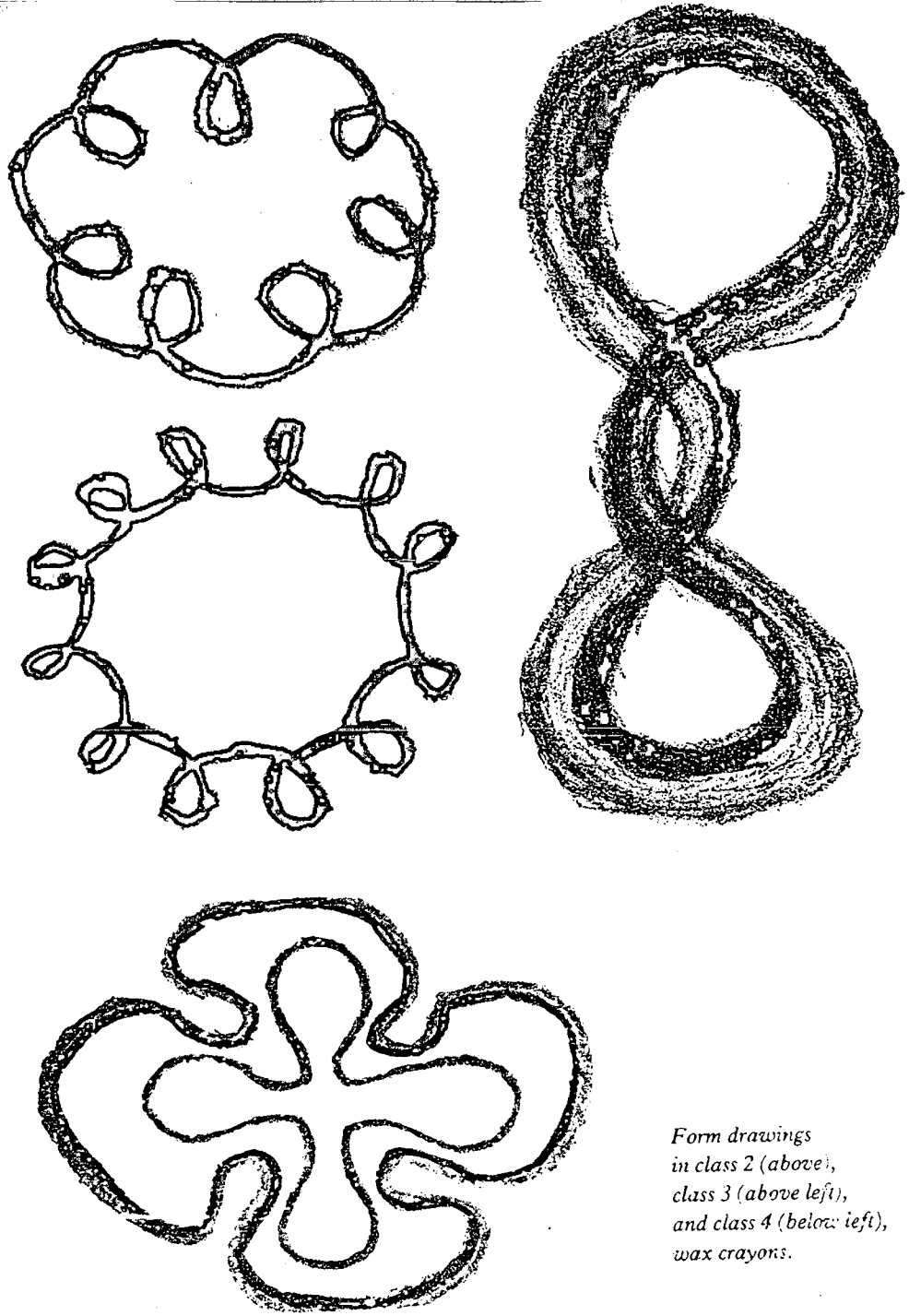
Apart from the kindergarten, children scribble, draw and paint spontaneously from the age of two onwards, whenever they get the chance, at home or the playground, on the pavement or on the walls, on stones or in the sand. The kindergarten merely integrates into its living activities what is there as a matter of course, if there is sufficient scope of it. The book by Michaela Strauss* gives a wide insight into the revealing consistencies to be seen in small children's drawings.

Working with lines

When children enter school proper their need for movement is something that has previously been unrestricted. Children now have to learn to accommodate to the new pattern of life. The teacher of class 1 will do circle games and the running of particular forms with them to ease the time of transition. When they do a spiral form from outside inwards reference can be made to the fact that they have to go on a path when they want to go into their own little 'house'. Movement with the legs is followed by movement with the arms, and the children trace the spiral in the air with their hand. Then they get down to drawing it.

Using large wax crayons they retrace the movement of the forms they have made on the floor and in the air as a line on paper. They must be constantly reminded to follow the movement with their eyes and feel the curves.

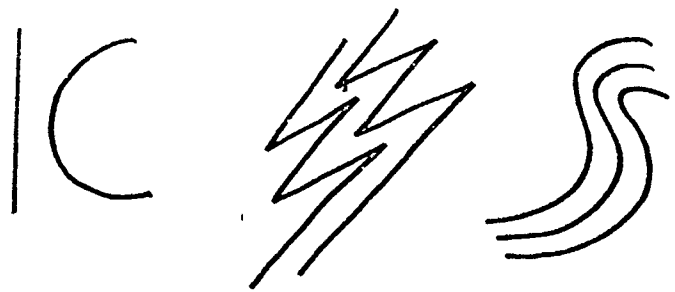
Exercises of this nature harmonize the children's will, feelings and mental imagery. Their instinctive urge to move is calmed down and they acquire a mental image of what they have already experienced with their will and their feeling.



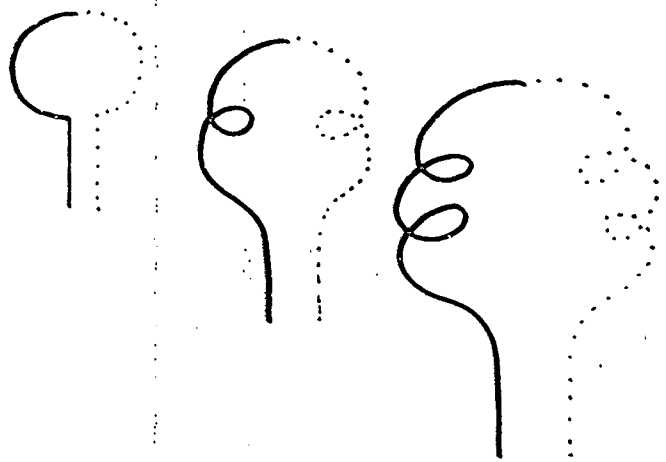
Form drawings in class 2 (above), class 3 (above left), and class 4 (below left), wax crayons.

Form drawing

This is introduced into the lower school through similar exercises. It was put into the curriculum by Rudolf Steiner as a new way of working with lines. It should be done parallel with painting, as it also serves to prepare the children in the first weeks of school for writing. In the first class the children learn by means of straight and curved lines to use the elements of form they will encounter in Roman lettering. Once they have been introduced to straight and curved lines they can have constant practice in drawing forms with sharp and obtuse angles, half circles, triangles, squares, stars, circles and ellipses. This trains the children's feeling for form. In form drawing, as in painting, there are no set themes. In painting, the children's feeling for colour is being trained, in drawing it is their feeling for form.



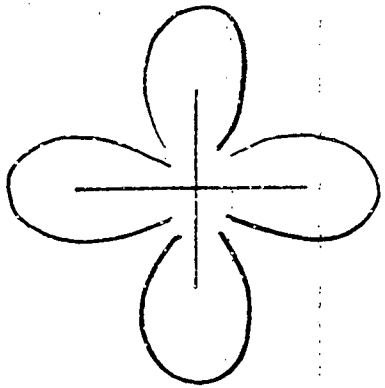
Between the eighth and ninth year these basic exercises change to exercises in symmetry. The teacher draws a half moon with a straight line attached. This is half a form, and the children are asked to complete it. They must discover for themselves how to supplement it symmetrically. The purpose of such an exercise is to awaken in the children the inner urge to complete what is unfinished. The beginning of the drawing calls up something similar in their memory, something that is complete. They supplement the figure with a drawing of their own, one, however, that is not imaginary but real. This is a significant step forward in coming to grips with their surroundings.



These exercises, that can be as inventive as possible, should be based to begin with on left-right halves. Later on the class will pass from the perpendicular axis of symmetry to the horizontal, to reflections in water. In this case the lower figure has to be drawn as a mirror image of the upper one. The children find this difficult. They have to develop what Rudolf Steiner calls the power to 'think what they see, perceive what they think'*.

In the course of the third and fourth school year this sort of exercise is taken further, and others can be added with a double symmetry of left-right, up-down, as well as asymmetrical balance exercises. These can be taken up again in botany lessons in classes 4 and 5, where symmetrical forms such as some leaf formations and blossom forms will be encountered.

New types of forms arise out of the story material of these classes, Norse and Greek mythology. Their characteristic ornamental borders grew out of picture signs: the various forms of the meander, the plait, and the decorative forms on weapons, buckles and utensils.



In class 5, form drawing helps introduce the children in a living way to geometry*.

At first they can once more draw, freehand, the basic forms of the circle, triangle and square. After that, the circle, with symmetry at its centre, then the great variety of ways in which the circle divides up, give the children a wealth of figures which enrich their experience of beauty.

In class 6, now using a compass and ruler, the division of the circle is again discussed, before new exercises which appeal more to the children's thinking.

Approaching science by way of artistic work* builds a bridge between the perceptive experience of beauty and the clarity of mathematical thinking.

Handwork

At the same time as the class 1 children are running forms on the floor they are starting to knit in handwork lessons. First of all they are shown how to make loops, which they copy. Eventually, however, they have to know for themselves the way the yarn has to go for simple patterns. This places them in the same element as in form drawing. This is apparent from class to class in crochet work and embroidery. In the upper school it comes to expression freely in the patterns of batik work and clothes decorations, whether these are embroidered or sewn on.

Painting lessons from classes 3 to 5

Between the ninth and twelfth years children acquire a new relationship to the environment. They begin to observe consciously, and this is seen in the way they increasingly separate themselves from their surroundings, and also in the way they now marvel at things that they took for granted before. The teacher needs to be fully interested in this change, to help the new forces to flourish and not fade away. This marvelling is a sign, of course, that the child, who has been living in a soul world of his own, is now beginning to acquire a more conscious grasp of the various phenomena in the world about him. The art of education now consists in making use of these forces of wonder to lead the children step by step into the world of nature and the life of humanity. They should never be given just the dead form but should be made aware of the forces which created it. The children will have drawn round and angular forms with their own hands in the lower classes. They now discover similar forms in their environment which show them again and again that through this world of form they are experiencing the creative forces of nature. This challenges the teacher to look at the world of phenomena in a Goethean way*.

Birds, creatures of air, have hard or horny pointed beaks; fishes, creatures of the water, round mouths with soft gills. Feather plumage contains no moisture whatever, and it is weightless and hollow. A bird's form goes through constant change and moves freely in the air in every direction. The form of a fish, on the contrary, has just one shape for life in the water, and is completely confined to the horizontal. Fishes can move only up and down, the way the waves do. Even those that jump out of the water are only carrying out a larger wave movement. It is the forming power of the environmental forces that gives the animals their special beauty*. The children should learn to feel this. By means of this inner creative perception of the kingdoms of nature the teacher can gradually overcome dead naturalism and be stimulated to present a subject such as zoology artistically, thus creating a bridge for the children from the image of the earthly phenomenon to the realm of the workings of the spirit.

Zoology

In their water colour painting the children have up till their fourth school year been freely expressing colour harmonies and colour stories. When they begin zoology the exercises must lead them into getting the colours to take on form and to express the characteristic nature of the various animals.

When children want to paint animals they usually begin with the outline. This usually results in their correcting this and that part and forgetting colour*. To avoid this right from the start it is important to carry on from the preceding colour exercises. Form can be reached without slipping into drawing. The children start by covering the paper with one basic colour. The teacher then shows them how to arrive at an animal by painting another colour over the base colour, leaving a space for the form of the animal. This can also be directly linked with the two-colour exercises of their early school years. One colour is chosen for the animal and another for the environment. In their first animal period they learn about the cuttlefish. It is peculiar because it shows a wonderful display of colours when a fish approaches. Its eyeballs begin to glisten with a silvery pink-blue-green gleam, vivid clouds of colour float about in front of its stomach, shining metallic humps of a reddish copper colour form on its back, and a green light shines from its tentacles. Once these colours of the cuttlefish are described to the children, they will have the spontaneous desire to paint it.

If they are going to use the method of leaving a space, they cover the paper with light carmine. When the colour has soaked in, starting at the top they paint in horizontal wavy brush strokes with prussian blue. The fish will now emerge out of the water. The children must stop the brush where they want the fish to be. They have to leave a space for it. Various shades and accents are then put in with other colours, yellow, vermilion, carmine, whatever each child wishes. The fish must be finally painted over with a little blue, not too dark, so it does not look as though it has been cut out. It is swimming in water.

A variation of this theme is the moment when the animal tries to escape from danger, and squirts out ink enveloping itself in a cloud of dark violet-blue. Other water creatures can be painted in this way. As the body of a jelly-fish is transparent a basic colour must be pale, either a pale carmine again or pale blue. This is painted over with a gentle yellow, leaving a space for the jelly-fish. The water then has to be darkened in places, and acquires a greenish hue. Small red spots can be painted on the light, almost flowerlike creature to make the

jelly-fish a stinging jelly-fish.

Goldfish are another good theme. The base must not be too strong a yellow. With wavy brush strokes the children can paint over the whole page evenly with prussian blue, so that the waves keep on overlapping. These produce fish forms which, by using vermilion, can be turned into orange. A pair of fish fins can be added, and a final brush over with pale blue puts them back into the water. To create silver fish, the same process is followed but without putting another colour on as a base.

Animals that swim on top of the water, such as swans and ducks, are also suitable for painting with this method of 'leaving a space'. In this case the background can stay white. The water is painted blue and the air with a paler blue or a reddish or yellowish colour, according to the desired mood. The white creature is left out but a little of the surrounding colours must be brought into the white, so that the forms come alive and do not look like empty white animal shapes on the blue water.

When starting from a two-colour combination, the form of the animal is not omitted but coaxed out of one of the colours. If the teacher has been telling the class about the cow, describing how it lies in the meadow digesting and chewing the cud, spreading a peaceful, warm and sleepy atmosphere around it, the class can link onto this picture without initial mention of the animal. On the blackboard or a large sheet of paper the teacher should paint various patches of colour, of yellow, red, green and blue. Teacher and children can then consider together which colours belong to which animals which correspond more to movement and which could express stillness. This will bring back memories of the colour stories in previous classes, and unanimous agreement will quickly be obtained. Lively animals are painted with yellow, orange and red and quiet ones with violet and blue. The teacher can then describe a sleepy blue that spreads out across the page and, using the paper lengthwise, the children put on a not too large area of blue. This blue hardly stirs, raising itself just a little on the one side and then sinking again. When one of the children quickly calls out, 'We are painting a cow!' all the others will agree and on every paper the colour will take on different shapes, as the animal is worked out in a simple way with characteristic strokes of the brush, and then surrounded with green. If the 'cow' is over painted with a dash of carmine, it will give the impression of warmth.

In another lesson the lion should be painted. Because it is an animal of the wide, open spaces, in the act of chasing its prey it is appropriate to begin with yellow and intensify this towards the front part, where the mane is to be, by painting it over more strongly with orange and vermilion. If a blue environment is added, the lion really leaps forward. This is a wonderful example of the

movement of colour.

Now and again the children will need some help from the teacher. This help can be very simply given. The teacher must take as wide a paint brush as possible and dip it in water only, then paint the shape of the lion on the blackboard. This will be visible for a short while on the dry surface and then disappear. Children who have difficulty in making forms can be allowed to practise doing this themselves on the blackboard. Some teachers may prefer to put up a drawing they have prepared beforehand. It is more stimulating and helpful for the children, however, if they see something actually coming into being. They participate actively. One of Rudolf Steiner's pedagogical aims was to encourage people to be inwardly active, and to spur them on to feel their way into creative spiritual processes.

In these examples of animal painting the impression may have arisen that in setting the colour scheme for each painting the teacher is having too much say in the exercise. Nevertheless the pictures all turn out very different. Each child has his own individual way with the colours, with forming the animal, and with bringing the whole thing together. The reason for the choice of a particular colour combination belongs to what the children learnt before in the main lesson. Painting day provides the children with an opportunity of summing up in picture form the experiences they had in the lessons. They have already been inwardly prepared for the colour combinations they are presented with. Once all the exercises have provided them with a certain technical skill in the painting of animals, then of course they can have more freedom. They will reach the required stages, however, only after constant practice of the various exercises.

Botany

The constantly changing colour processes in nature manifest processes at work in the plant: sun forces and earth forces, light and darkness. The first painting exercise is with these polar opposite activities.

Yellow, the colour which represents the light, rays down from the top edge of the paper into blue, the darkness, which comes up to meet it from the lower edge. The mixing of yellow and blue gives rise to green plant forms, but not yet definable ones. A further exercise begins in the same way, but then part of the upper yellow surface is painted over with not too strong a vermilion. Nearer the green a fragment of the pure yellow is allowed to remain. In this area the plants are beginning to blossom, but not in any detail as yet. The yellow no longer shines down in a straight surface from the gold of the upper part, for now

living, flowing transitions must arise. If a little vermilion is painted on the lower blue, brownish shades will appear.

After these preliminary exercises something like a dandelion can be painted. The children will know it from their lessons, and will get on with forming the leaves and the golden yellow blossoms, normally showing particular interest in painting the long tap root. In a following lesson they can paint, in a delicate blue, the round heads of seeds into the yellowish red of the top leaf.

Through colour exercises that lead in this way to flowers the interplay of the elements comes more alive than through mere description. There is the dark realm of earth in whose depths the plant takes root and germinates. Out of the watery blue arises green that lights up into yellow as it spreads out and unfolds into the element of air that is warmed by red. In the summer green interlaced with reddish tints can often be seen in bushes, cornfields and meadows. In spring there are many flowers where green actually comes forth out of red. The teacher can talk to the children about this in the painting lesson. This leads to an exercise in green, starting from having covered the whole page with a basis of pale carmine. When, after a few minutes, it has soaked in, and the children paint over it with yellow and blue, they will be surprised that quite a new green appears. This leads to a number of lessons devoted to roses in various moods. On one occasion the areas of the blossoms should be kept very pale, a delicate yellow appearing here and there around the pale carmine base, and the butterfly-light blossoms of wild roses will appear. On another occasion the red base is strengthened with more red in one particular place, and a beautiful cultivated rose appears. With this theme it is better not to use vermilion, not even for the roots, but to paint violet shades into the dark parts of the earth by using carmine. Carmine can also be mixed into the green in the area where the stalk and the thorns form and the leaves unfold. This portrays very well the woody, thornlike nature of the rose.

These pictures of roses are an enhancement of the very first yellow-blue exercise that led to green, for the contrast between light and dark now becomes more pronounced. In the upper part of the picture the yellow is made even stronger. Thus light arises around the blossom. In the lower part the contrast is strengthened by the violet-blue, the rose connects with the forces of the heights and the depths, thus creating magenta in green.

To paint a lily is quite a different task. First of all the colour combination must be found that will lead to the right mood. The plant's blossom is white. An image of cosmic-superearthly nature comes from imagining the star-formed blossoms against a background of a July sky of light-filled summer blue. The pupils start with pale ultramarine, omitting the blossoms but painting the stalk and the leaves a little darker. If they paint over the ultramarine with yellow they

will get a dull green. By taking a little yellow into the blossoms the white begins to shine.

A variation of this theme is a lily in moonlight. The painting procedure is the same, only everything has to be darker and in places the blossoms given a little pale lilac. The whole thing will be more shadowy and mysterious.

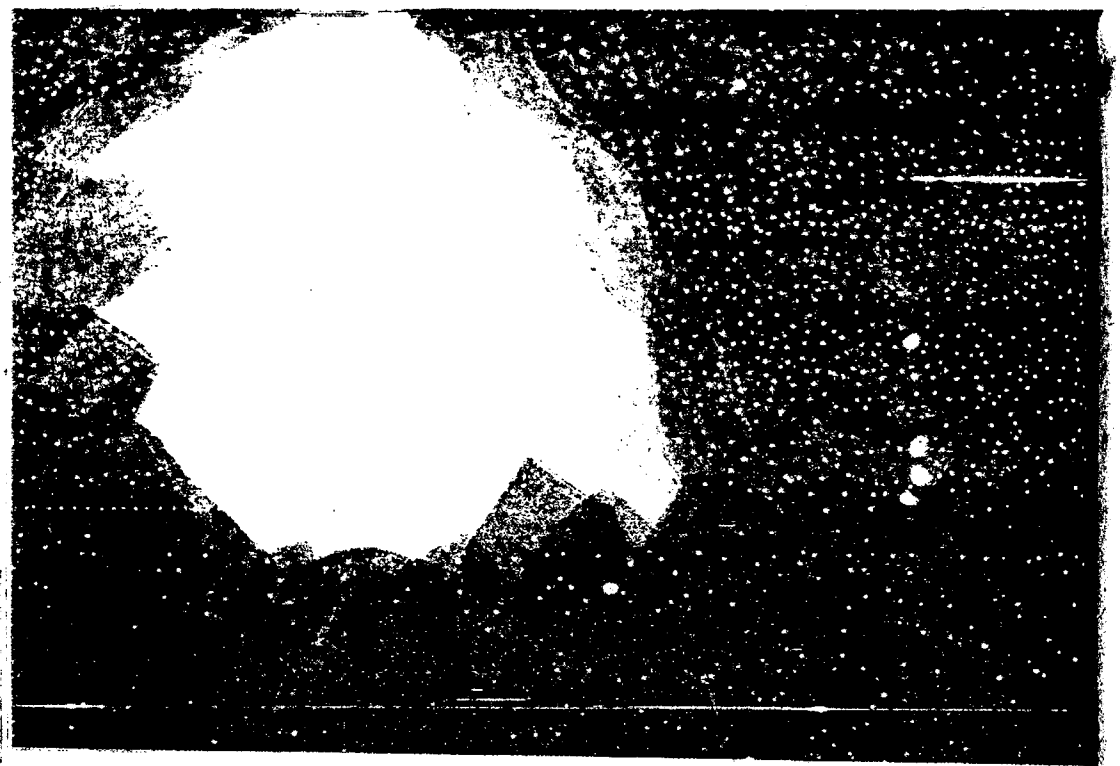
A related exercise is the water lily. On a sheet of paper used lengthways there arises on a blue surface a white blossom with a golden-yellow centre, surrounded by flat, dark green leaves. The water lily appears to be just opening under a night sky of blue-violet. Green plays a subordinate role in the painting of these flowers. White and blue predominate.

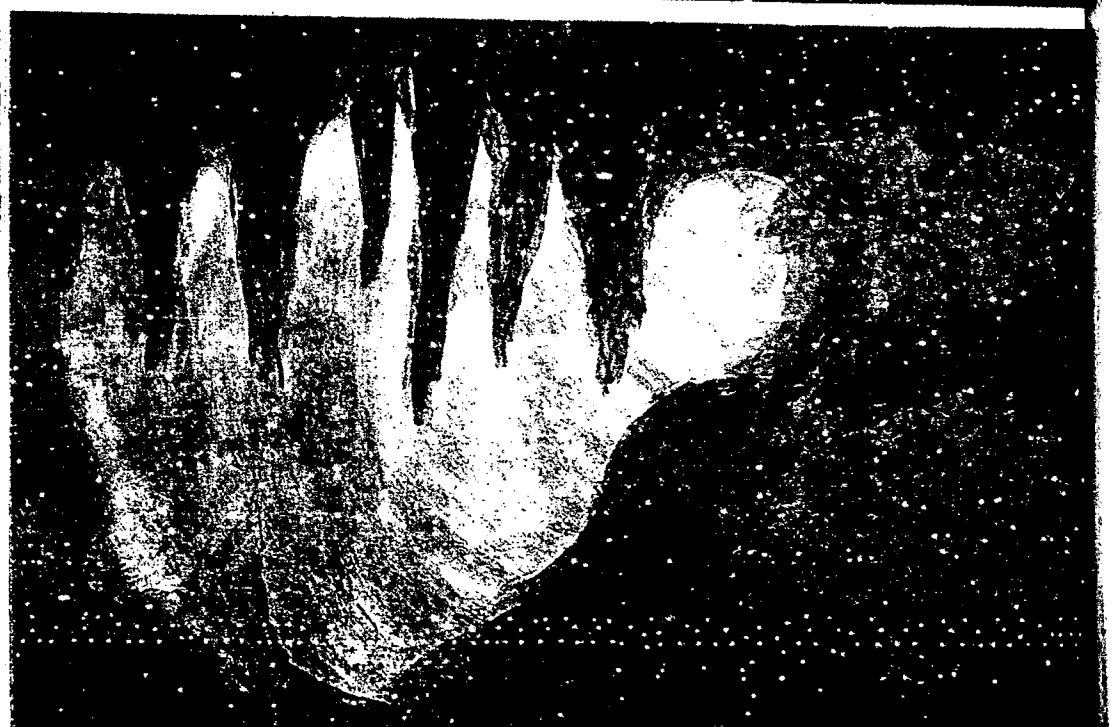
There are many ways in which the starting points of yellow and blue can lead to trees in various different greens. If small surfaces of pale yellow shine in from all sides over a white sheet, this light gradually condenses in the centre or a little to one side. When the colour is strengthened here and there in isolated places, a birch tree will arise. A space is left for the trunk in the lower half. Pale prussian blue is spread over the yellow form of the tree in small surfaces. The green of the birch will now appear as growing out of the light, and bluish violet may be painted on the white of the trunk in stronger or weaker patches. If a little shade is added round the top of the tree by adding pale red and pale ultramarine, the colours will condense further down.

A fir tree requires blue that is put on first. This time the tree will arise from below upwards. With this exercise it is useful to begin with pale blue and only gradually condense it, so that the fir tree becomes more and more distinct in one particular place. Then it is covered with a layer of yellow which makes it become dark green. To emphasize the solemn melancholy mood of the fir, bluish violet or grey-blue surroundings should be given to the tree. Grey is arrived at by painting red, blue and yellow one over the other.

Another example is an oak tree. For this tree study a reddish base is needed and the painting paper is covered with pale vermilion. The crown of the tree is painted in prussian blue and also the trunk that anchors itself with gnarled roots in the earthly realm in such a self-willed way. By painting it over with vermilion it becomes formed very clearly right into the individual branches.

9. Goldfish. Zoology, Class 4
10. Dandelion. Botany, class 5
11. Lily. Botany, class 5
12. above: Exercise in veiling, class 6
below: Mineralogy, class 6





Then the blue surfaces on the crown of the tree are painted over with a strong yellow to make green, but the play of light and dark must be allowed to remain. The red is strengthened around the tree and possibly painted over with yellow. This enlivens the green, and the whole tree acquires a dynamic character.

If a fourth exercise starts once again with red and the painting surface is covered with pale carmine, then, in a similar way as with the oak, the green of a powerfully spreading crown of a tree is the starting point. It spreads a long way down and acquires a slight point at the top. It is a lime tree. The trunk is short and is given a brownish tint as before. The tree is surrounded by warm shades of gold.

These different tree studies may lead the teacher to think of the groups of the temperaments you have in your class. The tree theme really belongs to the sixth school year. Light and shadow are first of all practised in black and white technique with charcoal, which then affords the possibility of transposing them into colour in painting when tree studies can be done more from the point of view of external technique*.

Black and white drawing from classes 6 to 8

The twelfth year brings a new stage of development. The class teacher will notice this sometimes in the scrutinizing look of a pupil who is unconsciously sizing him up. At break-time he will notice the disproportionately long legs of the boys and girls, and the way some of the boys actually totter as they walk. They have lost their old certainty and grace of movement. The bony system, the mechanical-dynamic element, is overpowering the forces of rhythmic movement. The young people are coming up against both material and psychological resistance, and are feeling exposed to pits of inner darkness. They are experiencing the beginning of the struggle between light and darkness.

The curriculum comes to meet this awakening in the sixth school year with new natural scientific subjects of physics, mineralogy, and astronomy.

In class 7 chemistry and nutrition are also introduced. In every subject a direct relationship is established with the human being. They begin observing nature and doing experiments, and the problem of cause and effect plays a central role. To balance these, gardening and craftwork are also introduced at this age. The young people's rampant will forces are curbed through working with wood and with earth, and these activities also involve their feelings.

The new branch of art comes in the form of a simple study of projections and shadows taken in connection with one of the natural scientific subjects, physics or astronomy (diagram 1). The pupils must get a clear idea of how shadows fall. All sorts of observations can be made. How different will the shadow be of a globe if it falls onto a flat surface or onto a cylindrical form? How will the same shadow look if it falls on a candle or a cone? The teacher will also embark on a voyage of discovery to discover the world of shadows. Autumn is particularly appropriate for this. If on a clear day the morning light shines through trees there will be especially beautiful shades of light and dark among the foliage. The light and dark shades appearing on the trunks and branches will vary according to the different type of tree. The illuminated side of a birch trunk will be white and the unilluminated side greyish-white, whereas the illuminated side of a laburnum trunk will be golden green and the unilluminated side black.

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The light and shadow will emphasize the shapes of all the trees (diagram 2, page 63). Autumn is the time when long shadows are cast. In the early afternoon they are as long as they are on a summer's evening. Along the lanes and paths that are edged with trees a tangle of broad and narrow shadows appear that are fascinating because of their very weightlessness.

Before beginning charcoal drawing with the class the teacher should take the children for a walk on which they become aware of what a great variety of shadows there are. If it is possible to walk along the bank of a river where there are old houses with pointed roofs and high chimneys, and bushes and trees between the houses, long shadows will be discovered in particular abundance. They fall across the smooth path, down the banks of the river and climb up the roofs. These shadows feel their way into their environment, making it visible, and showing whether an object is flat, steep, pointed or round.

Before actually starting to draw the pupils must become acquainted with charcoal or soft lead pencil*. They should do some very simple exercises to start with, as an introduction to the technique of black and white. It is important to work with the broadside of the piece of charcoal or lead pencil, not the point. The first thing the pupils will notice is that the light things appear larger and the dark things smaller. First attempts will show that there are always some pupils who do the exercise in scarcely differentiated shades of grey, still finding it difficult to make strong, decisive, dark strokes or to leave patches of light. This is another example of the varying stages of development within a class. Those who stick to grey are still at the painting stage. When they have been doing the introductory exercise for a while, the next step can be taken. Pupils should draw a globe, a cylinder and a cone. They should be given a large model of these things as a guide.

The teacher should demonstrate on the blackboard how to leave a space where the figure is to be. The pupils approach the form carefully with grey shading coming in from the periphery. When it is clearly visible they begin to sculpt it. There is the source of light to consider. The illuminated side stays white. They must darken it in subtle stages from this white towards the opposite side. When all the pupils have come as far as this, then finally the long shadow is drawn in. The important thing with these exercises is not to proceed too fast, and to vary the themes only slightly so that they get really confident. Satisfaction can only come through confidence. When their skills have increased more complicated things can be approached. If two cones are placed at a little distance from one another the shadow falls from one onto the other*. The fact that bodies throw shadows provides pupils with much food for thought at this age. During a drawing lesson a boy once asked the teacher apparently out of the blue whether skeletons throw shadows. The class had not

yet had skeletons in anthropology. A question of this kind makes it apparent how vague children's ideas of the world of matter and its laws are at this age. A human skeleton is hidden from view, yet at this age, between twelve and fourteen, young people begin to feel the static and mechanical forces in their own bodies, and the image of the bony system ranks among their mental images.

The same thing can be seen in their drawings. Not all of them grasp straight away that there can be a shadow only on the unilluminated side. Imaginative youngsters in particular like to put one where they choose.

In the seventh school year the light and shadow exercises are continued in the form of perspective drawing*. Children must first acquire a clear idea of the various perspectives, foreshortening in the distance, lengthening in the foreground, intersections, and so on. The most important thing is that the pupils make their observations in movement by walking towards an object and away from it, by looking up at a tall building and down from a height. If they are stimulated in the right way they will come with one experience after another for weeks on end, and the importance of learning the laws of this phenomenon just at this age will be quite apparent.

This happens at about the same time in geometry. The laws they learn there by doing constructions in perspective are used freehand in black and white. To make the pupils even more acquainted with solid bodies in space, teachers give them exercises such as drawing a cylinder with a round or four-sided stick passing through it; the way a stove pipe is pushed diagonally through a wall or vertically through a ceiling. They will have to take account of the various sections that arise.

If pupils have worked hard at these exercises and really understood the principle, then they will begin drawing all sorts of technical apparatus: tractors, flasks for chemical experiments, motor bikes. They endeavour to apply what they have learnt, and they are proud of themselves if they get it 'right'. So that this does not get too trifling, it is good to move on a step and observe Rudolf Steiner's indication to 'combine technology with beauty'*. This has to be acquired from direct observation. Windows can be beautifully proportioned or thoroughly stereotyped. Doors can be too narrow or too high, a roof can project attractively, a balcony can stick to the house in an alarming way. Pupils will notice for the first time how strange some huge buildings look standing on thin pillars. They will then try to improve on them by putting down one or another architectural impression in their own freehand.

What pupils do at this stage in the lower school in these perspective exercises in black and white will be taken up again later in the upper school, in the form of new, conscious artistic exercises in which the technique of drawing will be taken further and rounded off.

Painting lessons from classes 6 to 8

An introduction to the technique of veiling

At the beginning of class 6 the emphasis has been on black and white drawing, and the pupils have learnt to perceive the qualities inherent in light and dark. After that they can begin painting again. The introduction to the new technique of doing lasuring with colour replaces the wet-on-wet painting they did before. The best time to start this technique of veiling is at a time of year in which either the classrooms are warm or it is warm outside, in winter or in summer. In the times of transition, spring or autumn, it is difficult to dry the papers. For veiling, the paper is wetted gently with the sponge on the upper side only and then fixed to the board with sticky tape. This can be done the prevous day, as painting cannot start until the paper is quite dry and taut. As this new technique requires discipline and tenacity a whole week should be devoted to this so that daily practice can help pupils master it. The colours are put on very delicately with light brush strokes in smaller or larger whole surfaces. They have therefore to be mixed to a thinner consistency than for wet-on-wet painting, and the pupils use a small piece of paper as a palette. They can try out the colours on this to see whether they are pale enough. The less colour they take onto their brush and the better the colour is used up before redipping, the longer they can work on the one picture. They go from one patch of colour to another over the whole paper. By the time they have completely covered it the first corner is usually dry. On no account may they begin afresh on a layer that is still damp.

Whereas with the wet-on-wet technique a powerful impression of colour is immediate, with layering this is arrived at gradually, as the delicate layers of colour build up. But the colours remain transparent and do not fade when they dry. Lasure painting permits countless different shades of each colour. The theme is chosen according to the main lesson they are having. Experience has proved that geography provides particularly good possibilities. In connection with Asia, the teacher can discuss the way the Japanese and Chinese have a

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tremendously serene way of painting with very few brush strokes. They paint with six different shades ranging from palest silver grey to the deepest black. Let pupils practise using this scale. Each pupil is given a small pot of Indian ink and tries out the various shades with simple brush strokes. The black ink has to be thinned down each time with the right amount of water, and they do this on their palette papers. After this they take another sheet of paper and paint simple surfaces of the various shades which gradually form a kind of landscape. In previous drawing lessons light and shadow relationships will at some time have been applied to landscape. This is now done again in the new technique taking a theme, perhaps moonlight. By means of a particular reference to the main lesson an ethnological-geographical theme should be chosen. The pupils will have no difficulty in entering into the atmosphere of the Far East (diagram 3). They often create very poetic landscapes possessing something of the

hovering quality seen in Chinese and Japanese ink paintings, where mountains and water float in a kind of spacelessness.

When pupils have tried this sort of exercise in ink for a while they can try something similar in a single colour, perhaps blue to start with. The blue has to be darkened by means of evenly applied layers, but the different depths of colour must be kept visible. Then a moon landscape is painted in blue again, but this time yellow is used for the moon and its halo. The pupils, who have had quite a long break since experiencing the effects of colour, are really captivated by this, and notice that they can now be much more subtle in their expression. They also discover the greater wealth of colour. Over and over again it can be seen how an entirely new basis arises from doing exercises in light and shadow.

Some teachers do not begin with the veiling technique in the lower school at all, or not before class 8. In any case it should only be started if the teacher has the necessary practical skill and confidence, and only if the pupils are mature enough to cope with it. Even if it is approached, the teacher should ease off after a while and go back to wet-on-wet. Some themes are more suited to one technique than the other. Eventually the pupils can be left to decide which method they want to choose for a particular theme.

The painting and drawing of maps

Geography has a special place in the curriculum of a Waldorf School*. In association with nature study, history and geometry the pupils are introduced to the economic and cultural conditions of a country, to provide a clear picture of human life in its global implications. Art lessons are obviously included too. For the ten to fourteen year olds maps become a theme for painting and drawing lessons*.

In class 4 the children are given a graphic description of the rivers and hills of their own country and they start making elementary maps. In botany in class 5 they acquire, in connection with the various levels of vegetation, their first idea of the appearance of the earth. In the last third of the lower school, geography lessons concentrate primarily on the historical and cultural aspects of the various peoples. The differences between the peoples of the temperate and northern countries, between the peoples of Europe and the peoples of America and Asia are depicted.

The children begin working with coloured pencils in their main lesson books and do not use water colours at first. When the teacher begins to use water

colour for introducing map painting the children will need initial help in deciding whether they are to paint with the paper upright or lengthways.

The Greek peninsula would require the paper upright. The pupils start by putting on blue from the lower edge on the left and painting towards the peninsula, leaving a space for the land*. The most important things to watch are the diagonal lie of the land and the general proportions. The space left free is filled out with yellow, stronger in the middle and paler towards the edges. When the first sketch is finished, they work at developing the inlets and forms around the coast as the meeting place between sea and land. Prior to this, however, it is a good thing to remember once more the characteristic features of the country by painting them with a wet brush on the dry blackboard, or get a child to do it. When they have worked for a while at strengthening the yellow as it meets the blue, and the blue as it meets the yellow, the shape of the country in all its detail will gradually emerge. By applying delicate feeling to the way they form the dividing lines between the water and the land, the pupils remain in the element of two-dimensional painting. This method keeps observation alive, and prevents the pupils from losing themselves in details, which would undoubtedly happen if the contours were drawn. The addition of red will create patches of concentrated orange, the mountain ranges. The few low-lying parts of Greece can be made green by putting blue over the yellow. The light- and warmth-filled sea of this southern region must get a touch of red and yellow. This gives a unified mood to the whole page.

In direct contrast to this, Spain is like a gigantic lump of mainland, compared with the very detailed sculptured shape of Greece. The third peninsula, Italy, holds the centre between them with its clear bootlike form. These countries share the same latitude and similar conditions of light and warmth. But their colour profile will be different. Despite the red and green shades, the colour yellow must dominate in Greece, red in Spain and orange-vermilion in Italy. This choice of colour characterizes Greece's raying out form, Spain's unifying calmness, and Italy's dynamic mobility. Whatever discussions have preceded this with regard to climate, flora, fauna, and the customs and habits of the people, will lead each pupil to adapt the main shades to include his or her own experiences. It is best to begin with Greece, for the stories in class, drawn from Greek mythology and Greek history, will have built up a strong relationship to the Greek landscape.

The trinity of southern countries can then be contrasted in the North. Norway and Sweden form a large peninsula that divides in the south as though it had two heads. The 'Scandinavian Lion' appears to leap towards the neck of land that is Denmark, with its large islands in the Baltic Sea. The most structured part here is the region of Norwegian fiords on the West coast,

whereas in the Mediterranean the most structured part is in the east, in Greece. If the pupils' attention is drawn to differences of this kind, they will start looking more closely at maps and make their own discoveries.

In contrast to warm southern colours cool ones are used for the North. As before the first stage is to paint the sea blue and leave a space for the land. The West and South of Scandinavia will be given a yellow-green colour and the Baltic-Finnish coast blue-violet. Between the grey-green tones of the North Sea and the blue-violet of the Baltic Sea the country and islands of Denmark should be introduced in a balanced green.

A larger surface is necessary for the western islands of England, Scotland and Ireland. Southern England and Southern Ireland should be painted with red-yellow, the centre with yellow-green and the North, especially Scotland, with green-blue.

The pupils' final map project is to make a map of the whole of Europe on a large sheet of paper. This requires them to place the various countries into proper proportion and, using the paper lengthways, lay them out on the diagonal running invisibly from the upper right to the lower left. The right half of the page will be covered largely by land, namely Russia and Poland. The left half, the jagged coastline of Western and South-Western countries, will be surrounded by sea.

Pupils must always begin with the blue sea. From somewhere near the middle of the page yellow rays out towards the various countries, especially to the West and South. The details come in the various different colours, making Europe appear as a symphony of different coloured regions: Red-orange-yellow comes up from the South, lilac, blue and green from the North. In the West, red and blue meet on a yellow background, bringing about orange and green. In the East, the red from the South plays into the blue, creating an area of lilac. This picture of the whole of Europe usually awakens great surprise and enthusiasm. However, this effect is produced only if they have done thorough work on the single countries first. This will have given them appropriate skills to go on to paint the Western, Eastern and Southern continents which will come later.

As a young person approaches puberty they will develop by this means warmth and interest for the different countries and continents instead of remaining a neutral spectator. The dynamics or form processes of the earth, however, are not grasped until they draw them. Whereas the painting of maps is a further development of the children's work with the colours in the early classes, map drawing benefits from the exercises in form drawing. With these maps everything depends on showing the movement corresponding to the reality rather than using abstract outlines. A river must always be drawn the

way it flows, starting at the source and never at the estuary: the water will be drawn in blue, the mountains in brown.

In connection with the physics lessons in class 8, when hydraulics and the form language of water are being dealt with, the pupils are taught something about the laws according to which a river creates its river bed, and they learn how at its beginning the water flows in lots of little rills that come together or part in no set pattern, and then how the current wears the bank away on the inner side of the bigger curves (concave) and forms deposits on the other side (convex), pushing the curve further and further out. With these discussions as a background to their drawing, they feel their way into the perpetual movement of the watery element. The first exercise can be started with freely flowing lines that turn into the whirling movements of a waterway. After this the task of looking at the rivers of a particular country and discovering their character can be approached. A good example is the Loire, France's largest river. It rises in the heights of the Cévennes, flows south for a little while before turning north-west, when it then flows across the central plateau in ravines and tertiary basins. It becomes navigable at Vorey, leaves the mountains at Roanne, flows in the Paris basin in a wide curve past the town of Orléans, widens into a kind of bay below Nantes and flows into the Atlantic Ocean at St. Nazaire. The most striking observation about this river course is the tremendous curve with no short sharp bends, and this seems to indicate the presence of a light and gentle musical element. The upper course, however, has so many falls that conditions can change very rapidly. There are necessary tall dykes below Orléans to protect the low-lying districts from the high water level that can rise up to eight metres in only a few days. Pupils can also hear about the glorious castles between Orléans and Tours, all this together making a very impressive picture.

When pupils have drawn the flowing form of the Loire another river course such as the Seine should be described. The Seine's chief characteristics are its strong meanderings and the many branches of its estuary where it enters the Channel.

Exercises in map drawing always prove tremendously valuable. The pupils experience the earth as a living whole. Behind the colours and lines they themselves form they acquire a picture of reality. They will not get this from merely looking at maps. Many pupils will find that doing these exercises themselves makes the atlas into a kind of picture book they constantly want to study*.

Nature Moods

When pupils work at map drawing they set out from observation of external forms, but in the three upper classes of the middle school they also work with the play of colours in the atmosphere. For instance, following discussion of the rising and the setting of the sun, moon and stars in astronomy, the teacher can start to develop in painting the processes at work in the arising of day and night.

In short summer nights the battle between light and darkness begins very early, between three and four o'clock in the morning, and this can be observed even in dull weather. To illustrate this the teacher starts by painting a grey mood. In the middle, above the horizon, a silver brightness arises above the surging darkness. This begins to spread out, gaining the upper hand more and more, until the night departs. Grey is made by painting a delicate layer of yellow, red and blue over one another. On another day, the grey of a rainy morning might be broken by sunlight that penetrates through the blanket of cloud in tones of yellow-orange.

In class 6 pupils hear ethnological narratives about foreign people and countries. They can then paint the sunrise out of tales of travels. One beautiful account concerns a traveller in the Javan mountains:

> Far away in the East the all-enveloping cloud blanket is edged with a dazzling fringe of gold. It rivets the gaze, for it is here that the miracle is about to take place of the birth of a new day. Only a very favoured painter, or perhaps a musician, can reproduce tropical sunrises in the mountains. A poet would lack the words to give expression to this wealth of colour. From the East right up to the zenith the sky is radiant with the most wonderful hues. I have never seen a more vivid red, a more delicate green, a more blinding yellow. Far away in the East, directly in front of the powerful dark red ball of the sun, stands the black, twisted silhouette of Lawu, the highest volcano in the wide plain of central Java, its form resembling a human mask*.

Before painting the sunset the teacher must first discuss with the children the different colour qualities of sunrise and sunset. Many pupils will have had their

own experiences of sunsets. In describing what they have noticed they will all conclude that the landscape remains saturated with warmth as a sunny day draws to a close. A field shines with shades of golden brown, the declining ball of the sun is surrounded by violet, even grey-violet layers of haze. Pupils will also notice how sunsets vary. At the end of a winter's day with frost and a sharp east wind, the shining blue-red evening sky and the glowing orange ball of the sun are a vivid contrast to the cool whitish blue colours of the earth's covering of snow. This is very different from a southern sea over which a sky, ranging from the most delicate pink to the most glowing magenta, makes the water look like wine.

A study of dusk should finally be made. Then a last strip of brightness remains visible over the horizon while the night above announces itself in the heights in dark shades of sapphire.

Moon moods can easily be taken as a continuation of previously practised finely shaded pictures in Indian ink. The simple mood of blue and yellow worked with previously can be metamorphosed into new themes with very different colour effect. These can include the silver sickle of the moon in an early evening sky of aquamarine, the cold light of a half moon shining through a grey bank of cloud, an orange summer moon rising over a green, almost black wood; the moon in winter, high in the sky, glittering on a January night, or a moon surrounded by coloured rings in the moist and misty darkness of a February night. One way to stimulate the pupils to find moon moods is to tell them of the Japanese custom of making a special moon window in their houses. This means they can spend hours quietly watching the movements of Earth's silent companion. In connection with meteorology in classes 7 and 8 the children will do further work in atmospheric studies.

After their twelfth year children are more conscious and discerning in their approach to living things, and they increasingly feel the need to go beyond pure colour and to work with mixtures and refractions, thus obtaining further gradings in light and dark shades. The interweaving of light and dark, as seen in nature in a landscape or in an individual tree, now supplies the theme for painting.

At the end of the middle school the pupils should be practising the creating of nature mood pictures arising out of the play of colours in the atmosphere. Just as their soul moods now surge up and down, changing like the weather, they can objectify them by being set the task of painting the weather, e.g. storms, autumn gales, frost, thaw, heat. To paint gales and thunderstorms they must darken the colours to contract in themselves. When they come to the light element in the lightning that tears through the darkness striking perpendicularly into the earth, growing children experience the dramatic

element in this battle between light and darkness, a conflict which they are also experiencing within themselves at this age. On the other hand they are faced with the opposite situation when working on a theme such as the melting snows. They have to find the right colours for the transition from cold to warmth, and find their way from the blue tones to the yellows, instead of contraction a frozen element is beginning to loosen, to find the horizontal and dissolve.

To begin a storm landscape first cover the paper with yellow. This prevents the lightning looking merely like a yellow line. The radiating light zigzags down and cuts the grey wall of the storm to drive it apart.

A rainbow landscape with shining green meadows makes a good theme after a storm. Each study should be carried out with unpredictable variations. When the pupils discuss these pictures afterwards they mutually stimulate one another so much a teacher may scarcely be able to keep up with them.

The best way to approach this group of exercises is to return to the wet-on-wet technique. This gives a direct approach to atmospheric life where things are constantly changing, condensing and dissolving in the transitions from the watery to the airy element. When turning these processes directly into colour it is not necessary to wait after each application as with veiling. The pupils can convey an immediate impression of the weather processes.

Veiling is a suitable technique for themes from geology. The characteristic quality of a coloured crystal or jewel is expressed in its structure and transparency. The crystalline quality that shines from within is made visible most effectively through using various layers of paint. Pupils must use the brush evenly and must paint straight surfaces that overlap. It is not necessary to paint every part of the paper with the same number of layers. Two or three layers, or even one single layer, will produce a light effect as the painting proceeds, and this will be brighter or darker according to the way the surfaces are being applied. In order to arrive at the impression of different kinds of rock the main colour scheme is altered each time. Rubies have to be painted in carmine; sapphires with ultramarine; emeralds with a green composed of prussian blue and yellow and one or two layers of carmine; amethysts with a mauve composed of carmine and ultramarine; gold topaz with yellow and a touch of vermilion.

If volcanoes come into the lesson, eruption of Vesuvius makes a fine subject for painting, including unusual shades of colour. Starting with a yellow that glitters white, the fiery glow can then be painted in with vermilion; where the fiery lava pours down the slopes prussian blue is added over the yellow-red shades, and the shape of the mountain is silhouetted in tones of brown and black.

A glacier landscape requires light shades of blue made green in particular

places with the use of a little yellow. If the class has visited a cave of stalactites and stalagmites the pupils will spontaneously paint cave entrances and dark shafts with light apertures in blue and other colours.

The very fact of painting landscapes makes pupils realize both the contrasting formative element of limestone and granite and also their different colourings. For example in summer the limestone outcrops of the Cotswolds glisten with a yellow gleam that comes from the pale green of the beech woods. In an area of sandstone red patches will gleam against the dark green of pine trees. Steep chalk cliffs tower above the blue-violet Baltic Sea but a red wall of sandstone contrasts with the grey-green of the North Sea. The veiling technique can effectively show the different mineral character of the various landscapes.

The painting of distant continents requires more imagination. In Africa the dry sand-coloured shades of the desert contrast against its cold, sharp blue shadows. In tropical rain forests the heavy, glistening dark green hues may stand out against the reddish grey of the sultry sky. Over the Steppes the mood is more peaceful and after the rains the atmosphere gleams with a fresh light-filled green.

Before the pupils begin to paint they must become acquainted with the specific colour quality of the particular landscape. These exercises draw the young people out of the violently changing moods they often experience at this age into soul qualities of nature. In the eighth class, this theme can be developed even further. During the good weather the pupils can take their pencils and charcoal outside. They can sketch simple motifs such as a meadow with a tree, a few bushes, groups of trees, a glade or wooded slope. In the following painting lesson each pupil transposes his or her drawing into colour. This produces a whole series of variations of the same scene. A group of trees is painted first of all in summer colours, a harmony of green and blue, then it changes into an autumn picture of gold and blue hues, and eventually to a wintry black-violet-white. In spring it will be light green, or consist of flower shades among light blue. Colour transformations of this sort carried out with the same theme make the children active and creative. They encourage the development of colour imagination and the children become interested in colour phenomena in nature.

In classes 7 and 8 the teacher should take care to see that the thirteen to fourteen year olds work at their pictures as long as possible and are not too easily satisfied. The children must be encouraged and stimulated and carefully shown the ways to improve particular parts. The teacher will need patience and determination. Perseverance will be rewarded with real progress.

In class 8 difficulties may arise through colours becoming so heavy and rigid

that the form element predominates too much. This can easily happen at an age when children feel the need to paint one layer after the other until they obtain dark shades of grey, brown and black. This shows that the children's will forces are longing to be released and take form.

13. Map. Geography, class 7
14. Map, class 7

PART TWO

LESSONS IN MAKING THINGS THAT ARE BOTH PRACTICAL AND ARTISTIC IN CLASSES NINE TO TWELVE

Fritz Weitmann

Applying artistic techniques in specialized subjects

It has already been stated, in the first chapter on "Water Colour as a painting Medium", that people visiting an exhibition of the work of Waldorf School pupils will be struck first of all by the paintings*. Running parallel with the pictures done in colour there are linear form drawings. These are either developed into letters and writing or into form structures in their own right, both being typical for the first school years. In the middle school line drawing turns into two-dimensional light-dark technique. The pictures show contrasts between illuminated surfaces and shadow – the world is objective now, for only objects can throw shadows. At the first stage of the upper school exhibition drawings again show the effect of light and shade, but now they are at a more advanced level of artistic endeavour and ability. Through the upper classes the light-dark impression in the pictures changes considerably. The nature of the charcoal drawings, which resembles painting with clay, is now replaced by vivid contrasts produced by various drawing textures (Indian ink, black chalk or something similar), and the emphasis is now on the element of quality and expression. Contrasts in black and white also appear in line or wood-cut.

An exhibition will also show works of sculpture and handicrafts set up on tables and trestles between the picture-covered walls. There will be toys and simple articles for use, and also carvings made of wood, and sculptures of clay or stone made by older pupils. There will also be simple pieces of furniture such as a stool or a bookshelf. Fired clay bowls and coloured ceramics, metal work, hand-forged articles made of iron, handmade baskets, cardboard boxes or handbound books make a rich addition to the display. Handwork ranges from simplest knitting exercises done by class 1 to machine-sewn clothes and hand-woven articles made by the older pupils. All this variety is possible because lessons are methodically structured with carefully chosen material. Even in the upper school where the curriculum becomes much wider, the pedagogical factor and the restriction to certain materials are maintained. The pupils must know their material. They can picture how the wood grows, is prepared and brought to the workshop. In the case of synthetic material they cannot picture it; even if they visit a factory where such things are made they do

not have th knowledge of the formulae. Because of such considerations Waldorf sch l teachers are careful about impressions they bring to their pupils at the vario tages.

In any mo ern exhibition viewers are likely to encounter works of art that do not come u er any of the traditional categories. Think of kinetic art and the variety of ob cts and apparatus of 'Environments' and 'Happenings' and all the many kinds of street art, land art and 'art in action'. The design media used there can hardly be grasped any more. One of the characteristics of the situation of art in our time is that works of art are no longer fundamentally distinguishable from other objects, they have become commodities. The actual concept of art has been overcome along with traditional aesthetic ideals. This is why it is so difficult for art education to come to terms with present-day art. Theorists latch on to well-known representatives of modern art and get them to give them a leitmotiv. They insist that the main focus of art education should be an encounter with and an analysis of the present; that the pursuit of teaching must come to terms with the richness of ideas of the 'art' of our time*. This is why, at every age, even in primary school, they indulge in experiments in the teaching of art. Playing with prefabricated structural elements of a similar kind is very popular. The urge to play certainly can be active within the scope of the given unit, but people fail to see how restricting the prescribed material is, nor how it makes the work standardized and mechanical. If little children are allowed to splash colour on a car, it may seem fun to start with, but how is the child to acquire confidence in its environment if the adults urge it to use the articles they have made in a senseless way? An urge to be destructive could thus be aroused in a child at an early age. Grown-ups may well have something positive in mind, but they overlook the negative side effects. The essential thing is not the intention but the deed. Art teachers find themselves in a difficult situation today. Traditional education and traditional art has largely been replaced by scientific theory that not only lacks a conception both of the human being as a whole and of the nature of art, but actually rejects them. Things are as contradictory as possible*. In this situation the Waldorf School goes its own way. The expansion in the field of art production has extended the scope of artistic media beyond all limits. This development has inevitably found its way into art education. The reciprocal relationship existing between art and art education encourages teachers to take on board developments and materials without due discrimination. The decisive factor should be the question of what the child needs for its whole development, so artistic media must be chosen because of their quality. This may appear to be taking a step backwards to primitive and old-fashioned design media. However it could signify a step into the future, if media are taken up in a form suitable to the

consciousness of today.

There are four clear areas in art: lines, light-dark, sculptured surfaces and colour. A profound educational impact can rise from working with each of these. They express, both as an artistic process and as a finished product, universal qualities. A growing child is forming a concept of world forces which are also active in the world outside. The media being used are therefore unique and the same time mediators of a world of objective forces.

Lines arise out of movement. There are two possibilities: a straight or a curved line. When a child draws them it feels the characteristic difference between them. The unequivocal direction of a straight line requires concentration; the will has to be governed by thought. The indeterminate curved line leaves a space for the individual; the will is governed by feeling*.

Dynamic drawing is predominantly a will activity, whilst geometrical drawing is a presentation of thought forms. Language indicates that lines have their origin in thought. In fairytales the thought element is symbolized in the spinning of threads, and language refers to the thread of thought or line of thought. The creation of forms by means of lines invites us to stick to well defined thought images. In art lessons at the Waldorf School form drawing is therefore taken separately from the creating of forms out of colour.

If, in drawing, the lines are concentrated into a surface, the light-dark contrast arises. A single dimension has changed to the two dimensions of a place, the tension in the struggles between light and darkness. This world of opposites involves participants in a different way than when making forms with lines. Surfaces of purely black and white are an abstraction. The contrast between light and dark is so absolute that no life is possible, but life arises through the interplay of the two polar opposites. There are many permeations and transformations between black and white, and every shade of light and dark is possible as one stage of the balance. Two dimensional light-dark can be used to express both outer and inner experiences of light and darkness. An enormous variety of effects can be produced through different choices of materials and techniques. If the broad side of a small piece of charcoal is used, shading is created that is soft and clay-like and almost suggests colour. Firm strokes in Indian ink or coal black drawing chalk rouse the consciousness. Strong contrasts in black and white can sometimes look as though the page is covered in flashing lightning. The artistic process clearly expresses the element of polar opposition. It overcomes the surface nature of black and white and creates the appearance of space.

Another process of transformation is experienced through exploring the denser, three-dimensional material used by a sculptor. Here, this form of art has to bring to expression an invisible world of forces operating behind visible

space. Modern sculpture has come to grips with this problem in many ways. A sculptor wants to put life into the dead material. In nature this process can be studied in the plant world. In the course of their development plants pass from three-dimensional to two-dimensional space. Goethe observed this change of form in his research in the realm of organic life, which he described as the concept of metamorphosis. For sculptors to understand Goethe's insistence on "creating the way nature does", they must become immersed in this process of growth. They must feel their way into the forces that create planes in space and experience them as the forming principle which is brought to expression in the sculptures.

There are forces coming from inside, forces coming from outside, and forces of levity and gravity. Forces raying from inside outwards form a curvature while sucking forces form troughs, and the sculptor makes them into convex and concave surfaces. When a curved sculpted surface is twisted this imitates the spiral tendency in plants. Rudolf Steiner drew special attention to this principle of the plane with a double curve*.

Even through the modest forms a pupil makes in lesson time a connection is established with creative processes. This connection can provide a feeling understanding for the formative forces at work in nature. After the teacher has explored working with soft clay with the pupils, they should proceed to use harder materials such as wood, with its own living structure, and natural stone.

It has already been described how working with colour leads directly into the realm of soul life. The wealth of feelings experienced through colour is eloquently described by Kandinsky in his memories of his boyhood, when he took the tubes out of a 'paintbox bought with money saved up over a long time' and spread the colours on the palette.

> One squeeze of the tube – and the remarkable beings we call colours come out one after and other, triumphantly or solemnly, pensively or dreamily, engrossed in themselves or deeply serious, with effervescent mischievousness or with a sigh of relief, with a deep groan of sadness or with defiant strength and resistance, with yielding tenderness and devotion, with stubborn self-control or with a finely poised stability...*

Colour drama becomes soul drama – opposites of all sorts appear: contrasts that complement one another, warm-cold, active-passive, light-dark. Every colour has its own particular expression, each pair of colours has a different relationship. The way colours relate to one another is as varied as with people: deeds and sufferings, joy and sorrow, sympathy and antipathy are all there. In their painting lessons the children paint this life of the colour quite

unconsciously. This not only increases their feeling for colour but also enriches their soul qualities and makes them more subtle.

A picture made with modern materials, or a sculpture painted with loud, gaudy modern colours are completely inappropriate either to a sense of colour or soul qualities. Their effects are more likely to lead to coarsening both of the senses and of the soul. The technical and collage experiments required by some art teachers nowadays do not belong in art lessons. Children's interest in technical things can be satisfied in an appropriate way in technology and handicraft lessons, in the making of stage equipment and scenery and other decorative structures. Experimenting with materials must not be at the expense of using the pure media, for these have the power to make the quality of things accessible to the growing child. Playing with technical things may appeal to the intellect but does not reach the real needs of the soul.

It is not advisable to leave pupils a free choice of artistic media. The right material to choose will be indicated by insight into the objective nature of the exercise. This discipline gives the imagination a focus, and the very exercise itself will awaken creative forces.

The Various Artistic Craft Activities in Class 9

A new form of art instruction starts in class 9. It is given by specialist teachers in specialized workshops in the form of ongoing afternoon periods to ensure continuity in the work. This change of method is necessitated by the new situation the pupils are in now that they have fully reached puberty. They must now become capable of independent thinking and judgement. A class teacher should no longer exercise authority. The pupil wants to do what is asked of him out of his own insight. The teacher has to make the subject matter transparent for the pupils so they learn to face their own judgements. They must be led from "taking note of things to understanding them".

Young people are full of uncertainties at this age. Their natural imaginative forces, which they brought with them and could make use of up till puberty, are now over. New forces of heart and understanding come at this stage. Forces of imagination have to be newly developed because this newly awakening intellect is permeated with feeling. Art is an appropriate channel.

The problem of the young people's imaginative powers during this stage of their development immediately concerns the art teacher. Pictorial imagination disappears in favour of the awakening intellect. It may be tempting to regret the waning of the imaginative forces of childhood and try to prevent it. Yet this developmental process is necessary so that new forces can unfold*.

The harmonious and light-footed form of the child is transformed into the out-of-balance appearance of an adolescent. It has become more earthly; the mechanical and dynamic forces of the skeleton are becoming active. Those are laws that apply in the outside world. Mechanical death forces are beginning to take their place beside the rhythmic life forces. Forces of gravity are gaining the upper hand. Rudolf Steiner calls it the stage of earthly maturity. To come to grips with this developmental process on a soul level is not an easy task for the young people. Their experience of childhood was primarily in feelings and they now have to grasp the world in thought. Lack of experience of the world makes it appear alien and soulless. The young people are hardly conscious that this is behind the way they feel, yet it is the cause of inner tumult and many an act of rebellion. Young people face the necessity of forming a relationship to this

world. At the beginning of the third seven year period school can offer a great deal of help.

A key issue for education during puberty is to introduce pupils to practical life. Quite apart from their future vocation young people need to find their way into the man-made world. As well as all their other lessons a variety of practical activities are introduced which have a direct connection with today's civilization and can form a transition to the working world of the adult. Gaining practical insights into the complicated environmental conditions builds confidence.

At Waldorf schools the young people learn to practise the basic know-how of a number of vocations. However, the artistic aspect is never lost sight of. In order to come through these crisis years safely the greatest help a young person can have is to have, in addition to the cultivation of the religious-moral aspect, a training of their artistic sense. The young person should now understand the world through thought and the best preparation possible for this is that in his early school days the world should be experienced as beautiful. If a young person can have an aesthetic grasp of the world coupled with artistic activity, then they will also have an uninhibited relation to their own body as their personality freely unfolds. This will consequently not be overpowering.

In class 9 the specialist teacher has to reckon with a phenomenon brought about by the transition from class teacher to class sponsor, namely that the class spirit will start to become independent. The individual now likes to hide behind the group and to remain anonymous. The personality, not being fully developed as yet, feels stronger in the 'we'. The teacher must endeavour to feel the way to an understanding of the developing individuality by looking at its place in the group. This kind of understanding creates an imponderable bond between teacher and pupils that will withstand times of tension. In order to deal with this difficult age the teacher needs a large portion of understanding humour, which really ought to be developed as the most helpful asset of all*.

Practical Handicrafts

A series of handicraft subjects demanding strength, skill and foresight are entirely suitable for the age of puberty. The handwork and handicrafts of the lower school now tighten up both in the learning and the doing.

The emphasis is on working with wood. Wood is a living material which, according to the type of tree and place of origin, has a different grain, colour, smell and hardness. These variations make the lesson at the same time into a

study of nature and of living things. From class 5 or 6 pupils have used saws, chisels and rasps to make simple utensils and tools, animals and moving toys.

In class 9 they learn how to use a plane properly. This produces a lot of sawdust and sweat. Whatever the first assignment is, whether a chopping board or a simple toolbox, the pupils would never have dreamt what a lot of trouble such a thing would be to make. The young person will have learnt to make useful samples from the workaday world, and a bridge has been built to the whole area of wood manufacture, especially the furniture industry. The deep impressions acquired in doing these things, the resiny smell of the shavings, the hissing sound of the plane, will belong among their lifelong memories. When they visit the corresponding industry the pupils will recognize the same work process being done by machinery*.

Some Waldorf schools will also possess a forge and a locksmith's workshop. This microcosm of the world of machinery extends throughout the whole civilized world. Without it no branch of modern industry is conceivable. Young people find it very exciting to work with heavy forging tools, fire and iron. It is hard work, and it signifies a training of the will that enters deeply into the sphere of experience. The wrought iron articles they make under specialist instruction, such as chisels, hooks and pokers are all intended for practical use. A basic pedagogical principle is behind all these exercises, namely that everything made shall as far as possible serve a meaningful purpose. This elementary practice also establishes a connection of the will with the environment. Whether working in wood or iron, the smells, sounds and physical efforts leave lasting impressions.

In class 8 the pupils learnt how to use a sewing machine for making simple clothes for themselves or their smaller siblings. In class 9 knowledge of textiles and technology in the wider sense are included. This can be linked with exercises in spinning and weaving in class 10.

Another basis profession that the pupils get acquainted with at this age is pottery. The process of making containers out of clay has a direct reference to human beings. Even the names for the different parts of a vessel, such as the foot, the belly, the shoulder, the collar and the neck are clear signs. The form of a vessel is determined by its function. Some pupils find it a great achievement even to get a hold of the clay for the vessel so that it does not keep on collapsing. It can take a while to learn the feel for new materials. In getting the form to stand upright they strengthen their own forces of uprightness. Firing and glazing prepares the cups, plates, vases, jugs and bowls for practical use.

Basket-making requires learning a feeling for willow and cane. It also requires skilful, mobile fingers and a pre-planning of the working processes. Pupils make bread baskets, shopping baskets and waste paper baskets. The natural

product again brings something real into the world of manmade fibres.

Practical exercises in surveying take class 10 further afield into the countryside where they go to work with all the necessary equipment. All the workings are then put down in an exact map of the whole area. Learning to work as a group is an important part of these exercises*.

Bookbinding enters the curriculum in classes 11 and 12, from simple box-making to books with artistic covers. Rudolf Steiner believed that every pupil that left the school should actually be able to bind his own books. He was concerned that the acquiring of a skill in each branch of handwork and handicrafts should go hand in hand with an artistic approach. Even more important than the learning of a specialized skill is the principle that young people should be given opportunities through meaningful activity to acquire a foundation both for an understanding of the world and confidence in themselves.

A Study of Art (Aesthetics and the History of Art)

In class 9, the first class in the upper school, lessons begin on the new subject of the study of art.

> At the age when the child must realize that nature is ruled by abstract law to be grasped by the reason... we must promote an understanding of art as a necessary counterbalance. The child must realize how various art-forms have developed in the different epochs of human history, how this or that motif in art plays its part in a particular epoch. Only so will those elements which a human being needs for all-round unfolding of his being be truly stimulated.*

Having gained practical experience in art and craft work since class 1, the pupils should now become acquainted with great works of art and learn from them a concept of beauty and how this concept changes through the ages. Class 9 deals with the fine arts, from Egypt till about the time of Rembrandt. In class 10 the emphasis is on language and poetry. The elements of poetry are studied and the difference between literary genres in connection with recitation and declaration.

Class 11 looks at the aesthetics of music, with examples to show the contrasts of expression between North, South, West and East. Class 12, the final class, brings a survey of the development of architecture right up to the present day.

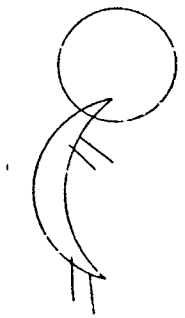
A conscious feeling for the spiritual historical laws inherent in the arts and their interrelationship should awaken in the young people a feeling for their share in the responsibility for the face of the earth.

Sculpture in Class 9

In the course of class 8 pupils' pictures show an increasingly strong overemphasis of form, or strong contrasts of light and dark. This is the time to turn to different media, to modelling and black and white drawing.

We have not yet spoken about modelling at all. Children feel the need to model things just as much as the need to paint and draw. We introduce modelling before the ninth year. Children do not have a feeling for space until later. At this stage you give them elementary spatial forms and solids to model as a supplement to form drawing. The class teacher, who accompanies the children from class 1 to class 8, ought to have it as an ideal that they live in sculptural forms. The making of sculptural forms at the right age and in the right way has an 'enormously enlivening effect on the child's physical sight'. Living in sculptural forms can be stimulated through anthropology which starts in an elementary way in class 4. Also zoology, botany and mineralogy lessons in class 5 and 6 are taken in connection with anthropology, which remains the subject of nature study right up to class 10. Dealing with the functions of the inner human organs in class 7 and those of the skeleton in class 8 provide a special stimulus for modelling.

The teacher needs to practise skills in this area just as before in the realm of colour, to put aside personal ideas of aesthetics and keep to whatever can be experienced directly. This is the human organism itself. It is sculptural forces that form it. It is his task to model the various organs such as the lungs, kidneys, liver and heart in their relative positions, to mould their asymmetries and to get to understand how these forms arise from their rhythmic interplay. It is a surprise to find that in modelling the human lungs these have to be placed upright in contrast to an animal's lungs which are horizontal. To quote Rudolf Steiner: "You yourself must have a kind of artistic perception of the human organism . . . You will see that however much you have learnt about the lungs or the liver . . . you will not know as much as you will if you make copies of them in wax or plasticine. You will suddenly begin to know them in quite a different light . . .". Rudolf Steiner considered this *sculptural anatomy* to be one of the basic elements of teacher training. The point is not to copy the external



forms but to feel the workings of the form-creating forces and to make them visible in sculpture. We notice a wonderful connection between the forces which create the organs and a person's own creative handling of these forces when modelling . . . "One becomes a sculptor when one learns to grasp the forms of the organism".

The teacher's own experience in modelling is a prerequisite for teaching in the lower school. The children's first attempts at modelling lead onto modelling in conjunction with anthropology in class 4. Our simple drawing indicates basic forces of the human organization that come to expression in a fundamental tendency for specific forms. You look at the difference between the spherical shape of the head, the trunk where the spherical shape is only partly seen, and the raying out form of the limbs. The hands of the teacher demonstrating sculptural forms stimulate the children to create the different forms themselves out of clay. Throughout the following years the nature study lessons – that are constantly connected with anthropology – give the teacher many possible ways to do justice to the children's inclination for modelling. Give special attention to the theme of metamorphosis as a creative principle of life. Rudolf Steiner recommended giving the children, in connection with anthropology lessons, a feeling for the metamorphosis of the vertebrae of the spine into the bones of the skull. Modelling lessons can begin in class 9 on the basis of the experience the young people acquired in working formatively in the lower school. During puberty a young person is conscious of feeling physically heavy and is sensitive to the process of physical change. This principle of change can be referred to in lessons. You can start with the contrast in form between the sphere and the pyramid that they modelled in the lower school in connection with form drawing, but which now, at their present level of consciousness, opens up quite

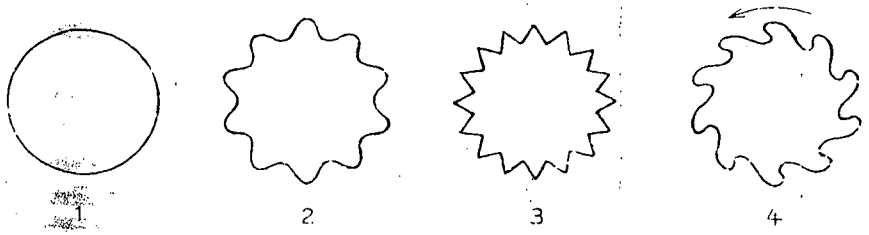
new insights and creative possibilities. A sensitive hand becomes a more and more suitable instrument with which to experience form in space.*

When someone forms a sphere, their hands are working as it were in the service of spherical forces streaming in from all sides to create the spherical form. The unformed lump of clay is moved around between cupped hands until a regular globe is achieved. The form arises as a result of the interplay between the formative process and the resistance, the counterpressure coming from within. The creating of forms depends on experiencing the forces at work. All the senses are engaged in modelling. After forming a sphere from outside, make it from inside by slowly hollowing out the clay shape. Using the thumbs in a process of pressure and counterpressure the form is eventually arrived at. These first exercises give a basic idea of convex and concave forms. A round form suggests its opposite, one with flat surfaces and edges. A good beginning is to choose a tetrahedric pyramid because its form can be made by the hands. Start with a sphere of clay whose surfaces can be totally covered by the cupped hands. Once angles are made with the palms of the hands the beginning of a pyramid with a triangular base takes shape.

This rises as a metamorphosis of the spherical form. The impression the hand makes as an organic structure is gently curved and resembles a sphere – the regular tetrahedric form can be made subsequently by developing the surfaces. At this point it is possible to see how the two solids are related. The polarity between the forms only becomes apparent through seeing the forms take shape. Afterwards, it is worth going through the processes again in memory: when the spherical form arose it seemed to be hovering in the balance between inner and outer forces, held by the movements of the cupped hands. When the hands are shaped to make an angle and press in on the form a will impulse comes into play. The pressure had the effect of changing the form, the sphere changed into a form with flat surfaces and edges. The forces from outside dominated the forces from inside.

All forms arise as the result of the activity of forces*. When an individual knows this actual experience, they can come to understand the origin of every form in the world. A crystal will indicate more about different formative forces than ripening fruit will. Formative forces work differently in the clear-cut forms of a landscape in the high mountains from in the gently rolling hills of the lowland. The different forms of leaves as they ascend from the root to blossom testify to the living interplay of polar opposite forces in the plant.

A diagram can clarify this principle. The rim of a circle can appear in all sorts of patterns. It can have waves or sharp points. The waves can tend in a certain direction and come into movement. Whilst the plain circle presents total harmony, the other circles show a confrontation with the environment. In the



circle with the wavy rim the waves appear to be bulges - the inner forces dominate (figure 2), in the circle with the sharp points, the outer forces appear to have radially penetrated from the outside and are stronger than the inner ones. The fourth figure is a metamorphosis of the second. The waves have tipped over in one direction and the circle seems to be revolving. A new will impulse from within has produced a movement. Pointed forms, or bulging or wavy ones, bring out different feelings in us. They may suggest 'conquest' or 'subjugation' or simply the feeling that 'something is happening.

After introductory exercises with spheres and pyramids the teacher and class have to pass on to actual modelling, to make an organic form. This can be done in quite a simple and natural manner. In making a pyramid the pupils have already felt the forming force of their hands. They should then be encouraged to make further forms that arise entirely out of the pressure of their hands on a spherical lump of clay. To begin with the sphere must be small enough to fit into the cupped hands. Through varying the position and the pressure of the hands pupils will invent new forms they could not have previously thought of. This opens up a whole new field of discovery. The pupils will very soon have created a wealth of forms which spark off their imagination. These structures are of course not really original creations, but they are important for looking at and learning from. Many of them are striking for their inner balance and for the liveliness of the surface structure.

Even in these simple forms the mysterious phenomenon of the surface with the double curve can be studied. A surface with only one curve does not have a real relationship to space but is dead. Only when it bends a second time does it acquire a life of its own. Then the form will begin to speak. Rudolf Steiner talked in this connection of the 'primal phenomenon of inner life'*.

All the pupils, whatever their inclination or ability, can be included in exercises such as these. To start with they are asked no more than to use both their hands in this way. Intellectual conception at this stage should be repressed as it disturbs the experience.

When looking together at the results the pupils will see similarities with

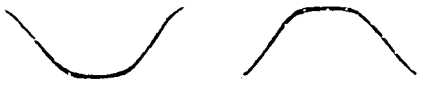
many forms in nature, such as seeds, buds, fruit, nests and the shapes of organs and bones. But the individual structures also have a kind of lost, unrelated feel about them. This impression is gained because the forms are all related to the space inside the hands, where they arose, but they lack a relationship to the space outside. It is as though hands were still an integral part of their structure just as a nut needs to sit in its shell.

This correspondence between the created structure and the hands that formed it once caused some pupils in the 9th class to make a surprising discovery. Through an oversight there was a skeleton in the modelling room. Stimulated by the kind of exercises they had just been doing the pupils started to look at the various forms of the skeleton and soon discovered a whole lot of convex bone forms that fitted concave hand formations. This discovery made such a deep impression on them that they came to the conclusion that the human being seemed to have been created by invisible hands.

Following the creation and discussion of forms, the pupils are led to alter the forms that are going to be made in order to bring them into a relationship with the space outside. The 'hand-made' forms will not stand up because they were created off the ground. The next task is to get them to stand, so they have to acquire 'feet'. However, the alterations must not be limited to the lower part of the form but must include the whole of it. The problem is not to lose the inherent liveliness of the forms in the process. The surfaces have to come into living movement, something that happened instinctively in some of the original forms.

This is where modelling proper begins. By showing them successful examples and failures the teacher tries to awaken more and more a feeling for the art of sculpture. The actual goal is a harmonious balance of opposite forces.

This task leads naturally to another. On the one hand forces of gravity pull downwards, and on the other hand forces of levity attempt to fly away. Those have to be brought to expression. The contrast of gravity and levity must be visible in the form. A bowl with a wide top can arouse a feeling of levity. If we turn it upside down the width of the bottom promotes a feeling of heaviness. This speaks for itself, but if it is worked into an artistic form it is far more expressive.



The forces of gravity and levity point in the direction of plant life that unfolds between heaven and earth. A sculptor can receive inspiration from the wealth of forms and the many variations of plants, but no sculptor can reproduce a plant. At best plant-like forms can be created when a sculptor experiences the creative forces at work in them.

In endeavouring to shape the forms by getting the hands to feel the all-embracing gesture, the various surfaces of the sculpture acquire a certain overall wholeness. Pupils will gradually develop a feeling for sculptural style that counteracts the tendency to imitate nature.

After looking at vertical forms, the class comes to the horizontal direction of the movement of animals. This can be seen clearly as a front and back dimension. Fundamental animal nature is expressed in a forward movement. Forms that are organized in this direction express animal gestures to a lesser or greater degree. Small variations to right or left, up or down, enhance the life of instinct in the gesture of an animal. The source of a movement appears inherent in the form, and this seems the typical difference between animals and plants.

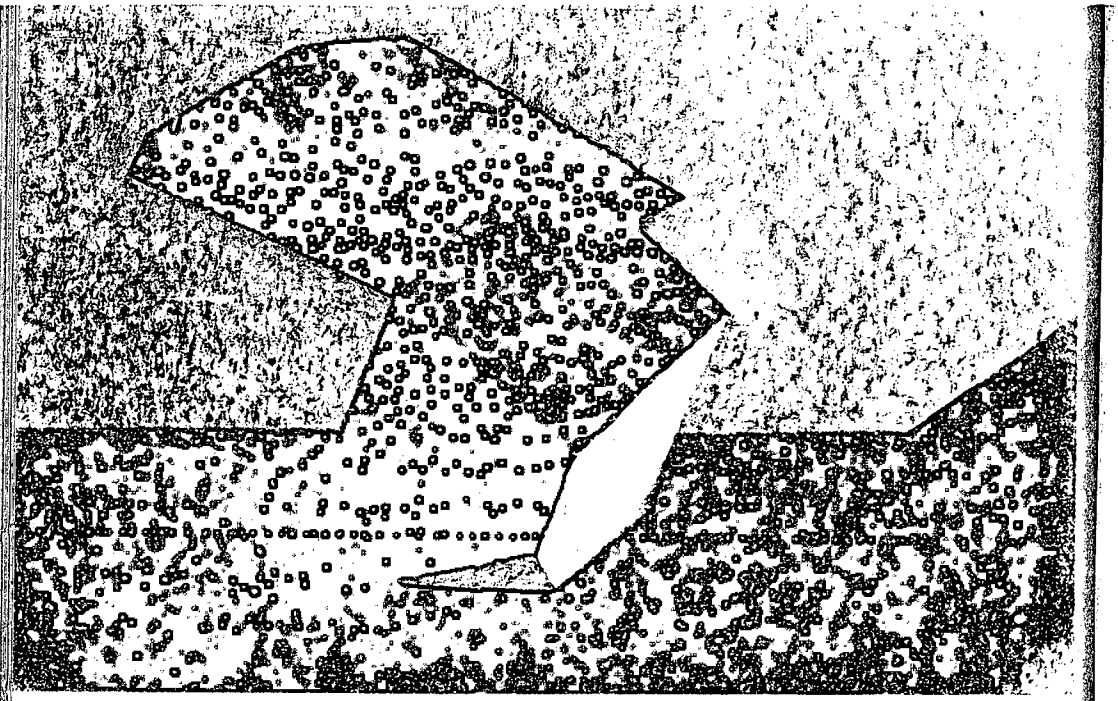
The typical quality of particular species must be understood when turning from animal nature in general to particular animal forms*. The ruminant cow, chained to its own weight, is typical when at rest, whereas a horse's nature is best expressed in movement. Geese, that as birds belong in the air, have fallen prey to the heaviness of grazing animals. The incorporation of animals in the horizontal direction of space is not relevant for human beings because of their ability to stand upright. After the type of form from which animal gesture was created comes the next step of the creation of the human form* which can move freely in space. Pupils must look at this stage – even if only in a rudimentary way – because it indicates an inner experience of freedom. The upright human form is compared with the horizontally placed animal form. Uprightness is a process of overcoming gravity. This results in the release of the arms and hands, which in animals serve primarily for carrying them along. This kind of developmental form process deeply affects young people - they themselves are going through a phase of development that makes them aware of their own heaviness, which they long to overcome. This sort of activity touches a chord within them in their innermost aspiration towards free individuality. Sculpture is continued in the further upper school classes in different ways and with a variety of materials.

Black and White Drawing in Class 9 on the Basis of Dürer's Art of Black and White

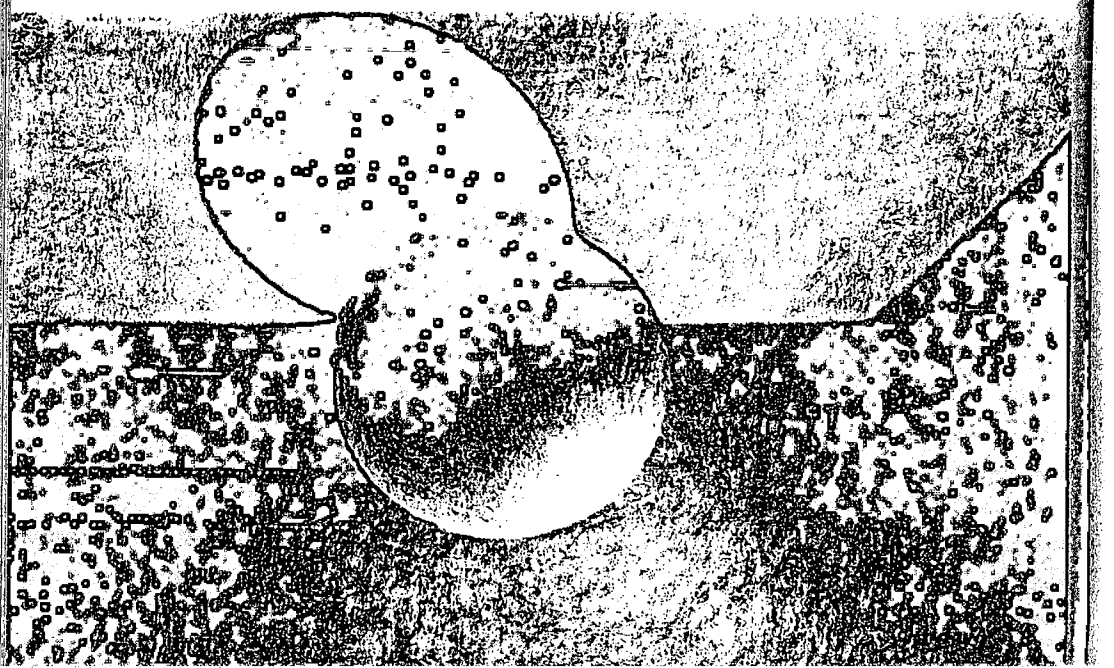
Class 9's art lessons also include black and white drawings*. Class 6 have already looked at this in connection with learning about light and shadows. Beginning with the simple phenomena of light and shadow, work in the subsequent years was linked with perspective drawing and the presentation of solids. Black and white work was automatically included in the paintings of the thirteen and fourteen year olds, so they are prepared for the time when black and white becomes a medium in its own right, independent of colour.

The elements of light and shadow mirror the contrasts inherent in young people. Through working with them these elements fall into place as creative laws. The pupils begin to be aware of the beauty of the patterns of light and shadow on the objects in their environment. This awareness arouses new creativity. They enter a new relationship to the forces of light and darkness.

Dürer's art of black and white makes a good starting point for understanding and working with the laws inherent in black and white. His copper engravings *"Melancholia"* and *"St. Jerome's Study"* are particularly valuable. The magical expressiveness of black and white is here at its most intense. Its educational value lies in Dürer's healthy realism that regards the supersensible aspect as an integral part of the whole. To him, the light of thinking he puts around the head of the saint in the picture of Jerome is just as real as the sunlight shining in through the window and illuminating him from outside. What he is presenting is two sides of reality. "Melancholia" depicts a number of objects characteristic of the age set in a weaving flow of light and dark. The light and shadows are presented in a naturalistic way around the various objects which determine the composition. Two sources of light can be discovered, an outer and an inner one. One source shines in from outside to illuminate the objects. The other source, like a star sending forth its rays in a twilight sky, expresses the inner nature of light in the meditating female figure. The inner and outer light have a balanced relationship. The darkness also shows two sides to its being. The external shadows of the objects find their counterimage in the night creature with bat wings that haunts the dark, symbolizing the inner character of



Light and shadow exercises with various solids. Charcoal, class 9.



darkness. The nature of the composition reveals the source of inner light as the reflective meditation of the female figure. This inner light is driving away the shadow being "Melancholia". 'Fly away, Melancholia' is inscribed on the scroll. The figure has wings, suggesting a being of the rank of an angel, but it also has earthly heaviness in the same way as other solid objects, for it is given a similar treatment of light and shadow. The whole picture is built up on opposites, in content as well as quality. All the contradictions and contrasts form an artistic whole through the formative medium of black and white.

This engraving seems to mirror the discord and conflict of young people in puberty and also reflects their striving to overcome these. They relate to the mood of melancholy and can identify themselves with the figure who has fallen out of the world (indicated by the wings), but who is not yet properly at home in the world in which it has acquired weight. Along with their newly acquired thinking they have lost the heavenly world of childlike imagination. However, thinking contains the power gradually to reopen that world.

Drawing Exercises

A series of exercises with pupils of class 9 can be based on Dürer's art of black and white. Young people will not necessarily all be interested in art. Their attention goes in many other directions. One way of bringing this attention to art comes from looking at artistic technique. An account of how a woodcut or a copper plate is made, what instruments are used, and when these were invented, brings the immediate attention of the pupils. They are interested in the technique of drawing in the same sort of way. An enlarged copy of "Melancholia" produces admiration and appreciation which can be utilized for a thorough discussion. However, to continue to hold their attention the teacher must instruct them in the practical aspects of drawing as a handicraft. They can be shown how to handle charcoal so as to obtain a living, silvery grey surface on the paper, and how to round off the edges with exactitude where the various surfaces meet. It is possible to awaken a real sensitivity for this, a joy in the beauty of surfaces of light and dark and the divisions and transitions.

The first stage in practising the technique of drawing looks at a simple solid such as a globe and the way the light and shadows play on it. Pupils begin outside the object by shading the background, carefully leaving a space for the form, and continue with the surface technique until the whole outline has appeared. Then they can start working on the form itself and its play of light and shadow. The principle of leaving a space is particularly important. This

means the object is not isolated but placed in its whole setting, so that it seems to grow out of it.

This will lead to more difficult exercises. The effects of illumination and of shadow forms are studied from the point of view of cause and effect and reproduced accordingly. After drawing the round form of a globe with its soft transitions from light to dark, pupils can try a cube where the edges and flat surfaces meet without transition. The more surfaces a solid has the greater wealth of light and dark there is, and the more fun it is to draw. Each of the ten surfaces of an icosahedron that are visible at one time has its own special shade, for no two of them have the same relation to the falling light. It is a matter of perceiving the subtlest differences. As the exercises get more difficult the young people will need to make a draft first, but this does not affect the basic principles. They must not allow any lines to disturb the life of the surfaces that go to create the space of the black and white.

Individual pupils may need to be given different exercises according to their range of ability, and this creates a greater variety to look at. By means of a free choice of a combination of solids each one can school his or her feeling for composition and for the parcelling out of space. It can be satisfying to conclude by making a reproduction of the chief elements of black and white in one of Dürer's pictures, including exercises on particular objects in them, such as the globe and the polyhedron in "Melancholia" or the skull in the "Jerome" engraving. A good exercise to prepare for coping with the spatial element in "Jerome" is to draw the play of light and shadow of a simple interior, independently, from memory.

This reproduction of a Dürer picture does not mean copying it in the normal sense. It is more a matter of transposing a work of art from one artistic medium to another, from a copper-plate print into a charcoal drawing, which is a creative process in its own right. The first attempts at pictorial orientation are done as a group and drawn in with delicate charcoal strokes. Geometrical relationships will be discovered that throw light on the structure of the picture. This is the basis upon which the pupils then create their own black and white pictures.

It is always immensely impressive to see the devotion and perseverance with which they do this work. The average achievements are amazing, quite apart from the particularly outstanding ones. The pupils do not get as attached to any other work as they do to their own pictures of a Dürer. There is hardly any other way in which they could so easily acquire such a profound relationship to the essential quality of the art of black and white.

The world of light and shade cannot be fully grasped in a rational way. Occasionally it is possible to experience a little of the elemental quality of black

and white. There is the chance of experiencing this when, in wintertime, it is already dusk during the afternoon lesson. Pupils' attention can be drawn to the particular atmosphere that pervades space at this time of transition from day to night and casts an unusual enchantment over everything. Each object, even the least important, appears less rigid and acquires fresh significance in the weaving of light and dark, as though they had been created anew. The world undergoes a mysterious change. In an atmosphere such as this Goethe's Faust says: 'Where is your grin coming from, you hollow skull'. This can be related to the skull in the picture of "Jerome", and the contemplative mood in which all the objects come to life and have something to tell us. This is Dürer's twilight mood, so characteristic of his art of black and white. The pupils need only a little nudge to have an experience that they are basically already familiar with. Entering into this elemental sphere of black and white can leave a lasting impression.

In a block of lessons of this kind pupils learn things on many levels. The acquisition of the ability to draw is connected with a training in exact observation which leads to vivid mental imagery. They acquire the capacity to grasp and to present the material world of space. This material realm has a spiritual counterpart that is revealed in the glow of beauty and in light and shade. The light coming from above joins as it were the lower world to the upper one, thereby giving it beauty. This beauty must be perceived in all sense reality and brought to realization in creative activity.

Black and White Drawing in Class 11

The drawing work that began in class 9 needs to continue in class 10 or 11. Class 10 may often return to painting as this proves particularly valuable at this age. It could not be possible to work at all the artistic subjects in one school year.

Practical work is connected with the development of the art of black and white since the fifteenth century. Through this, pupils become conscious of continuity. They are drawn into the evolving process, and they feel themselves a part of it because they live at a time when the seeds have to be sown for something new. Some feelings aroused through this work can become part of the meaning and goal of the pupils' own existence. Ideals of a will nature are born.

In class 9 the work (not only) focused on Dürer, but also on Rembrandt, another giant of the art of black and white. These two artists were completely different in approach and style. Dürer's objects have clear outlines and are formed in every detail; Rembrandt's figures seem to step directly out of a creative world of contrasting forces of light and dark. Their bounds are more ambiguous and they are diffuse, mobile and open. They often look as though they were quick sketches. They are not ideal forms but everyday phenomena. However, what gives a Rembrandt drawing its greatness is the whole background in which the picture is embedded, the dynamic force of light and dark that is at work not only where the actual figures are but between them, above them and around them. The objects in the picture are lit from outside but also reveal their being through the measure of light and darkness apportioned them. In Rembrandt's "The Three Crosses" the areas of light and shadow round the two thieves are not caused by the play of light and shade but are the expression of their soul-spiritual state. Rembrandt experiences these forces in himself and composes his pictures out of this experience.

Dürer arrives at his creations in a different way. He studies the laws of light and shadow in the objects of the outer world and builds his compositions out of the results of his studies. Dürer may also use symbols – for instance he symbolizes dusk by means of a batlike creature in "Melancholia". The

Drawing study of a Dürer woodcut from the "Apocalypse". Charcoal, class 11.

compositions of Rembrandt and Dürer are quite different, yet Rembrandt's art of black and white would be unthinkable without Dürer's work.

Differences are apparent even in the two artists' drawing strokes. Dürer's concern was to take hold of sense reality, so he tries to show space both through light and shade and also through careful attention to perspective and construction. He models as he draws, and follows the forms of the objects with suitable strokes. Consequently his drawings are very similar to those of contemporary sculptors – this structural character of his work can best be studied in his many woodcuts. In order to experience the whole force and life of these forms cut out of wood it is necessary to try and draw them. An interesting exercise is to get pupils to try and draw for a while like Dürer, and then like Rembrandt. Practical attempts to imitate their styles also provide pupils with a lasting impression of the artists' way of drawing. One early exercise consists of taking a section of a Dürer woodcut and reproducing its drawing structure on a larger scale. Pupils may find this difficult initially.

To be characteristic, drawing strokes have to be firm and sure. Anything arbitrary or accidental has to be avoided, and the subjective element suppressed. The pupils have to concentrate wholly on form, regardless of difficulties this might present. The more they succeed with this the more surprised and enchanted they will be by the effect the drawing has on them. The pupils feel something of the force and dynamic of the forms in the handling of the lines. Each stroke has an individual character and yet it is part of the movement of all the others. It is a flow of forces comparable to the flowing movements of a water course. It is interesting to note that drawing exercises of this sort are refreshing rather than tiring. As with every exercise, the teacher's own preliminary studies are an indispensable part of the success of these lessons.

When the pupils study Rembrandt's style they gain different experiences. Rembrandt's etchings form an extensive part of his work. The structures of his drawings cannot be imitated in the same way as a Dürer woodcut. Instead a general principle can be imitated. Pupils can clearly follow and reproduce the delicate layers of strokes in the lighter parts of Rembrandt's etchings, in the dark parts they are thickly covered by several layers. To start with it is better to study light-coloured etchings rather that those in which darkness predominates, although the darker ones are more expressive and characteristic. Compared to Dürer the sculptural element is less pronounced. The layers of strokes do not follow the form to the same extent but are more detached from it and tend more in the direction of surface construction. Space acquires a different quality: it is lifted into the realm of the imagination. The pictures' depths are created from overlaid shading in different directions. With practice,

Drawing study of a Rembrandt etching "The Prodigal Son". Pen and ink drawing, class 11.

pupils will find it easier to recreate the figures in Rembrandt's pictures than the dark spaces in between that consist of many modulated surfaces. In contrast to the lighter parts they form the setting for the soul-spiritual drama that is behind the subject matter of the picture.

In the lesson a number of different pictures can be used. Pupils' requests can be taken into account. Different groups of motifs will therefore be produced, some of which will be enlargements. Apart from hard pencils and modern drawing implements a pen and thinned down Indian ink should be used.

Although an etching cannot really be compared to a woodcut, both exercises in structure depend equally on the use of firm and definite strokes to give the drawings expression and character. It is always interesting to see that some of the pupils prefer Dürer whilst others prefer Rembrandt. They will put more time into one exercise than another, freely using their spare time in order to get it finished.

When the teacher looks with the pupils at the work and they compare the Dürer studies with those of Rembrandt, the pupils' experience through drawing will lead to questions about the further course of the work. The step from Dürer to Rembrandt is clear: Rembrandt shows a tendency gradually to break away from objective form in favour of a direct statement of light and dark. (P.108 Pen and ink drawing of Rembrandt's etching "Faust". Class 11). The final consequence of this development would be no objects at all, a development which has actually occurred in art. This leads to questions about the effect of the subject on artistic technique. The objective content of a picture will influence in some way the structure of the drawing. If there is no such content, there is no reason to alter the type of strokes that are used. Even if all the strokes are done in one direction it is not difficult to bring out the various depths of light and dark. There is no need to add layers of strokes in any other direction. The dissolution of objective form can lead therefore to a simplification of the structure of a drawing. The greatest simplification would seem to be to develop the whole configuration of light and dark by applying all the strokes in one direction – unless dots came to replace strokes.

Of all the possible directions that strokes could take, diagonal is considered the most natural. As a rule this is also the direction of writing. This clears the way for a new beginning. It is a matter of gently feeling the way into a world which initially has no model, no clear boundaries nor even objective forms, yet is not without content. The only implement is a skilled hand and the feeling for light-dark effects. Rudolf Steiner himself recommended that the pupils in the upper school should use diagonal strokes for drawing in black and white*.

There have been many developments in art leading to the various phenomena of realism on the one hand and abstraction on the other. Many people sought a

Pen and ink drawing of Rembrandt's etching "Faust". Cl

new level of art between the two extremes. Rudolf Steiner's impulse to re-spiritualize the art of black and white by bringing new life to a flat surface fulfilled this requirement.

He sought 'to produce impressions of spiritual light in artistic form'. He wanted to achieve the effect of 'intensiveness', i.e. the impression of 'shining from within' as distinct from extensiveness, where something is illuminated from without*. This kind of enlivening can be achieved by emphasizing surfaces rather than form in drawing. The application of strokes that follow the form strengthen the form and make it heavy (example 1), but if they go against the form it becomes lighter and begins to hover. Forms cease to be isolated and become part of their surroundings (example 2).

1

2

A simple reflection can help explain this. Objects in the environment are visible solely through the grace of light and shadow. This is why they appear to be one with them. Actually they are not – bodies, light and shadow are totally different things. Bodies have volume and are tangible, unlike shadows or light. A shadow is not attached to the body but is seen in connection with it. It is distinct from it, moves about, jumps over hindrances, climbs up rocks and houses, or hovers in the air. It can assume grotesque, even ghostly shapes that scarcely resemble the object that is throwing the shadow. This quality of life, of movement, of hovering, is part of the nature of shadows, and is part of the nature of black and white. This brings humans into relationship with the elemental world. Rudolf Steiner once remarked, when correcting an etching: 'You must look for what is around the things, in between them, for that something that leads into the realm of ethereal processes'.

The realm of black and white also has its laws. A white circle on a black background appears bigger than a black circle of the same size on a white background. What is considered as an optical illusion in this case actually expresses the essence of the matter. Light radiates and expands, so the light form appears larger. Darkness draws together and becomes condensed, so the

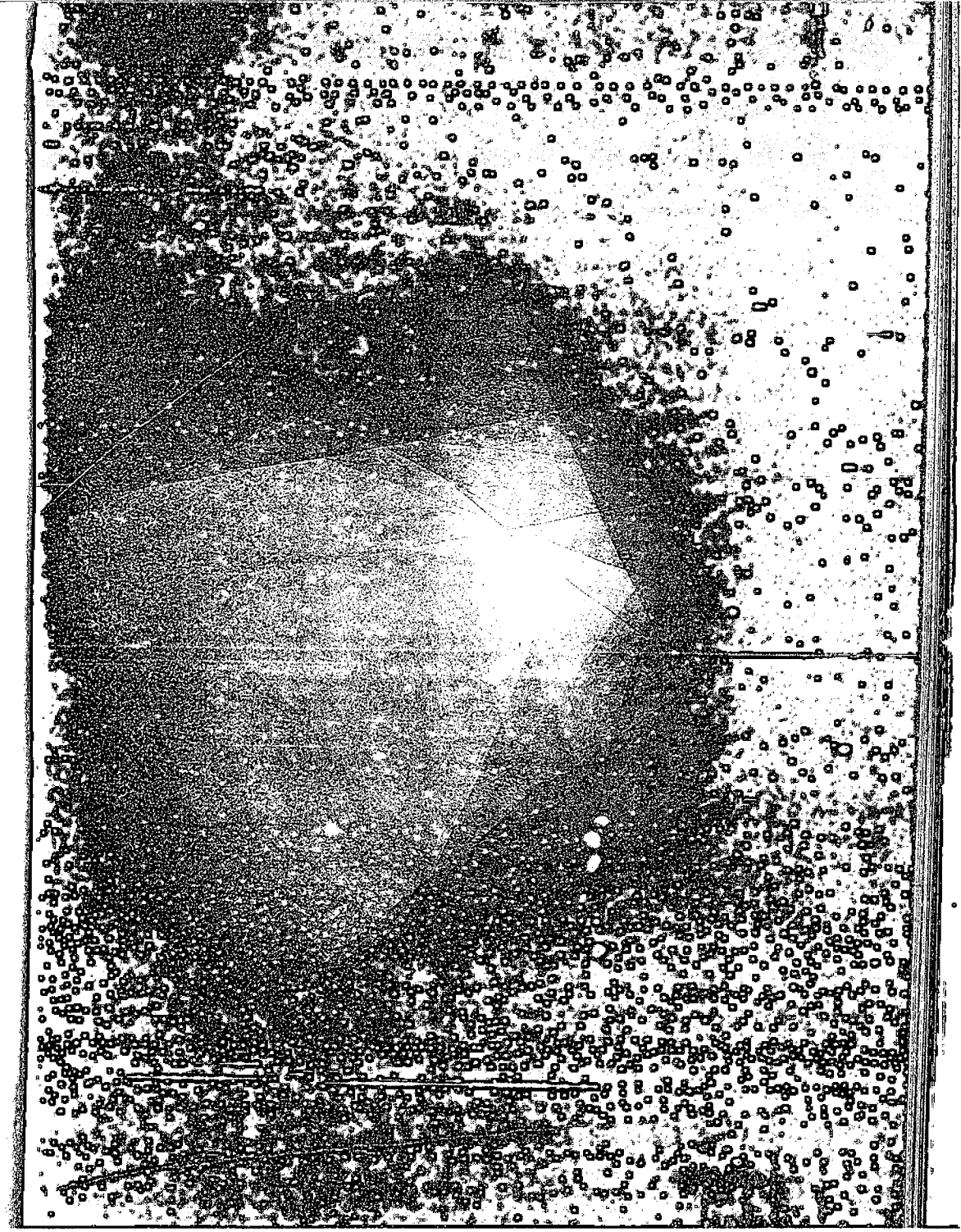
form appears smaller. In addition, light strives upwards and wants to make things volatile, whereas darkness draws things downwards and makes them heavy.

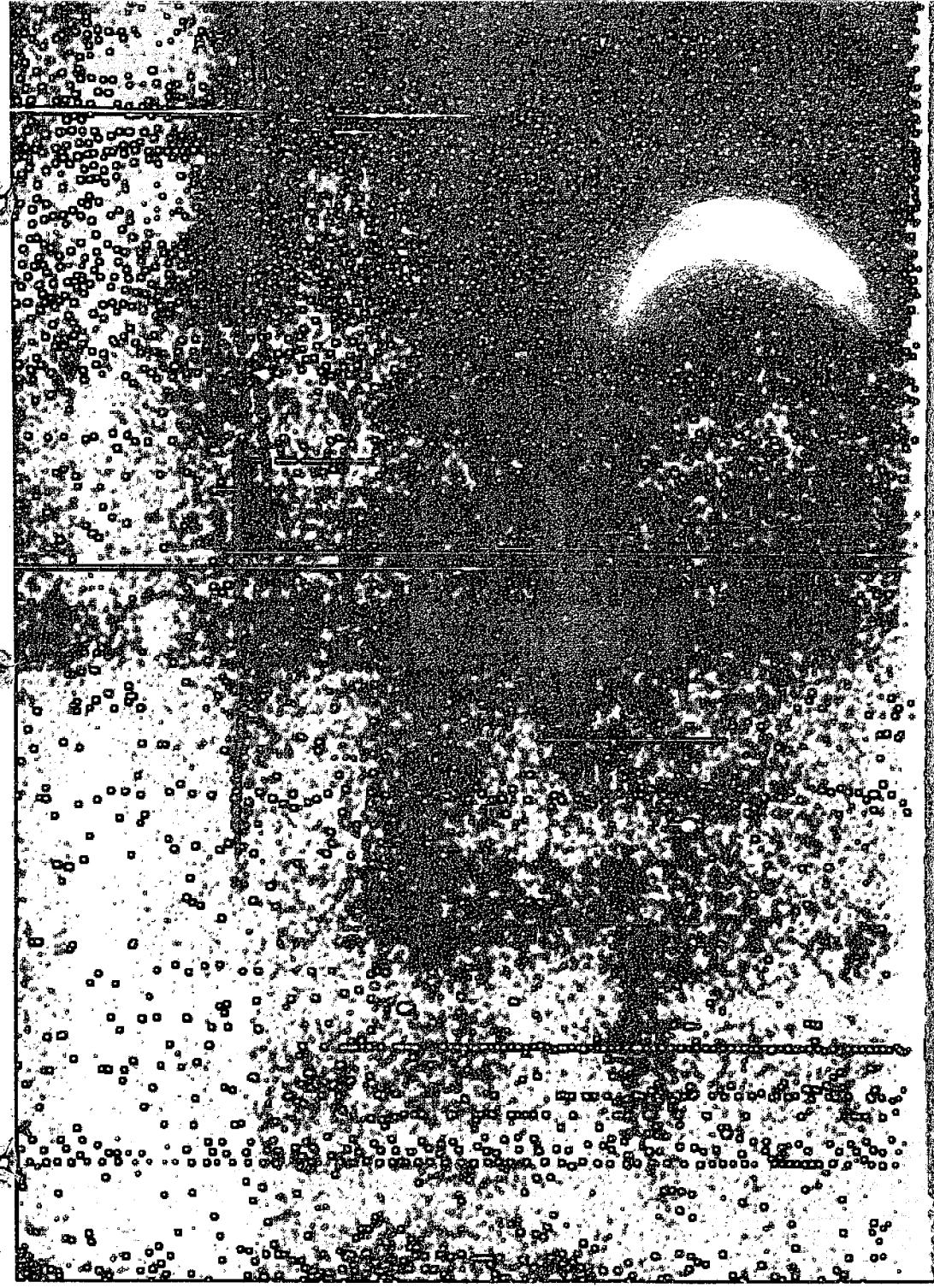
This polarity of forces between light and darkness is also at work in human beings, and they can experience it in themselves if they try to become aware of it. It will be experienced differently according to the way the various parts of the organization are related to space. Thus they feel thinking as bringing light to the head and the unconscious pole of the limbs as being in darkness. The arms have their movement between the upper and the lower forces – light and dark. Right and left must be distinguished. On the right there is more emphasis on the will and on the left feeling predominates. When the two sides are compared the right side appears darker, and the left brighter.

Teachers can take time in lessons to awaken sensitivity to these perceptions. The pupils themselves choose where to put light and dark. Whenever a pupil demonstrates with arm movements whatever has just been discussed, their left arm will naturally follow the light and reach upwards and forwards, and the right arm will point downwards and backwards into the darkness. The pupils know this sound 'I' (ee) with which a human being designates himself. Human beings' experience of light and dark is an ego experience in which they strive for a living balance in themselves between the light and the darkness.

A similar gesture exists in the central figure of the large carved statue in Dornach which was intended to be placed in the first Goetheanum*. The arm position of this figure, who is holding the balance between the polar opposite forces of the adversaries and striding between them also points from above right to below left, from the spectators' point of view. This is the direction a black and white draughtsman often assumes as a matter of course.

15. A veiling exercise with the three main colours yellow, blue and red, Class 10.
16. A black and white picture transformed into colour, based on Dürer's "Melancholy", Class 10.
17. A nature mood, Class 10. "Sunrise", done in a light veiling technique.
18. A nature mood, Class 10. "A moonlit landscape".



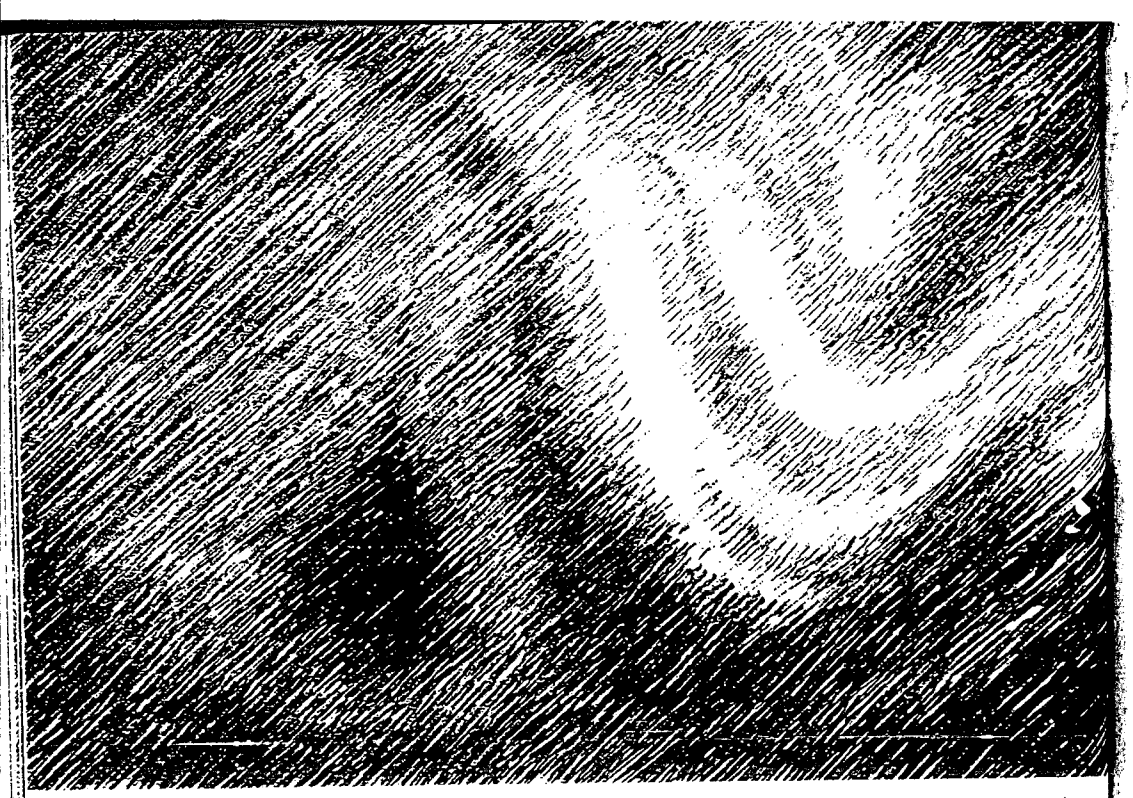


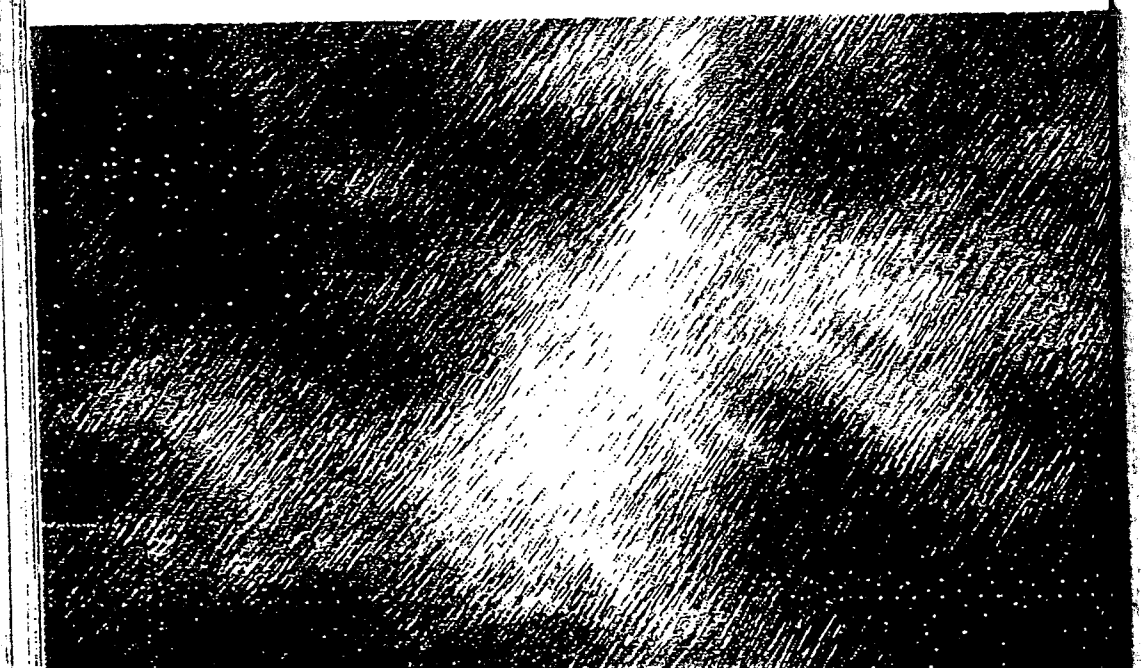
Creating structural forms in black and white

The technique of black and white drawing takes some time to master. One exercise is to try and create a surface containing continual transitions from the utmost lightness to the deepest darkness. The first stage is to experiment with the various strokes, strong, delicate, shorter, longer, etc, and see what can be expressed with them. Pupils will soon discover that it is more difficult to draw a large, even surface that has no boundaries than to draw one with forms that usually appear involuntarily. Whatever direction the strokes take, they will show boundaries to start with, and that means forms. This can be avoided by putting individual strokes far apart and then putting new strokes deliberately in the gaps. It is a continuous process of adjustment. In this way a more or less compact structure of slanting strokes will be arrived at, all fitting into one another to form a plane. In order for the surface to remain alive each stroke must be drawn consciously, resolutely and confidently. The more typical the strokes are the more expressive the surface will be. Perseverance is essential. Above all, the diagonal direction must be strictly adhered to. The shading must never be done by scribbling. Any kind of mechanical routine must be avoided.

The best medium to start with is coal-black chalk, (conte sticks), which produces thinner or thicker strokes according to the way it is held. It is important that even the thinner strokes come out on the paper really black and not grey. Dead black on a white background is effective and exciting. In some way it resembles working through 'death' to the 'spirit'*. The deep black continually creates bright after-images in the white, and these light up like flashes of lightning. Strong lines of black chalk on white can be as powerful as flashing flames.

For the next exercise pupils draw the surfaces of two circles, one light against a dark background and the other dark against a light background. They then experience the differences already described. As part of the technique of shading, a new aspect to practise is to round off a form tidily. The production of two similar circles may not be a great artistic achievement but it is necessary in order to observe the phenomena in question, and it leads to a great many other things. Once the two circles have been observed, the next exercise consists in transforming them to express the tendencies that have been observed. The circle that is felt to be light and striving upwards and outwards lends itself to the form of a goblet or blossom, and the dark circle that is striving downwards





seems to want to condense into the form of a drop. The whole process should be conceived not as a position but as the living workings of force and form. The most important thing is the forming of the transitions. This exercise makes the pupils picture forms in a living way. Instead of seeing from outside, they have to change into seeing from inside. Exercises of this kind are an education in exact imagination. The results will be very diverse, as they are the expression of the pupils' individualities and their present possibilities. Some of the pieces of work may be a bit stiff even though the strokes are firm and steady, whilst others may show a living grasp of the idea yet lack the necessary care. Further exercise and advice will help both these qualities to exist together. However different the pupils' examples may be, one basic motif often re-occurs, a kind of 'palm leaf form' that was used a great deal in earlier cultures, especially in Greece*. The two forms that create the motif: the fan and the bud (the light and the dark form) were originally experienced as motifs for 'sun' and 'earth'.

Many exercises can be developed from these first efforts at creating forms. They can be placed opposite one another. Either the light or the dark side can be played with on its own. As the process takes its course the forms become more set and lead to motifs that resemble certain sense phenomena. This is quite natural and also justified. In the light direction forms such as a morning mood or a flower scene will arise, or even winter landscapes; and in the direction of darkness rain or thunderstorms, moonlight or night landscapes, and so on will be described. Pupils should never be set themes such as these, they must come naturally from the interplay of light and dark. A preconceived picture will always show signs of a certain narrowness, whilst one that arises independently of a model will have more generous proportions and also be a better composition from the point of view of light and dark.

A certain parallel can be seen in Cubism. This started with making an abstraction of objective form and passed from pure abstraction to a new objective picture which, however, is not a copy but a newly created structural product.

In contrast to Cubism, Waldorf teachers try to avoid all abstract geometrical forms, in favour of trying to feel the way into the creative forces behind sense reality.

Above
Exercise in diagonal strokes: Movements of light and dark developed from the basic circle. Black chalk, Class 11.
Below
Free composition in black and white. Black chalk, Class 11.

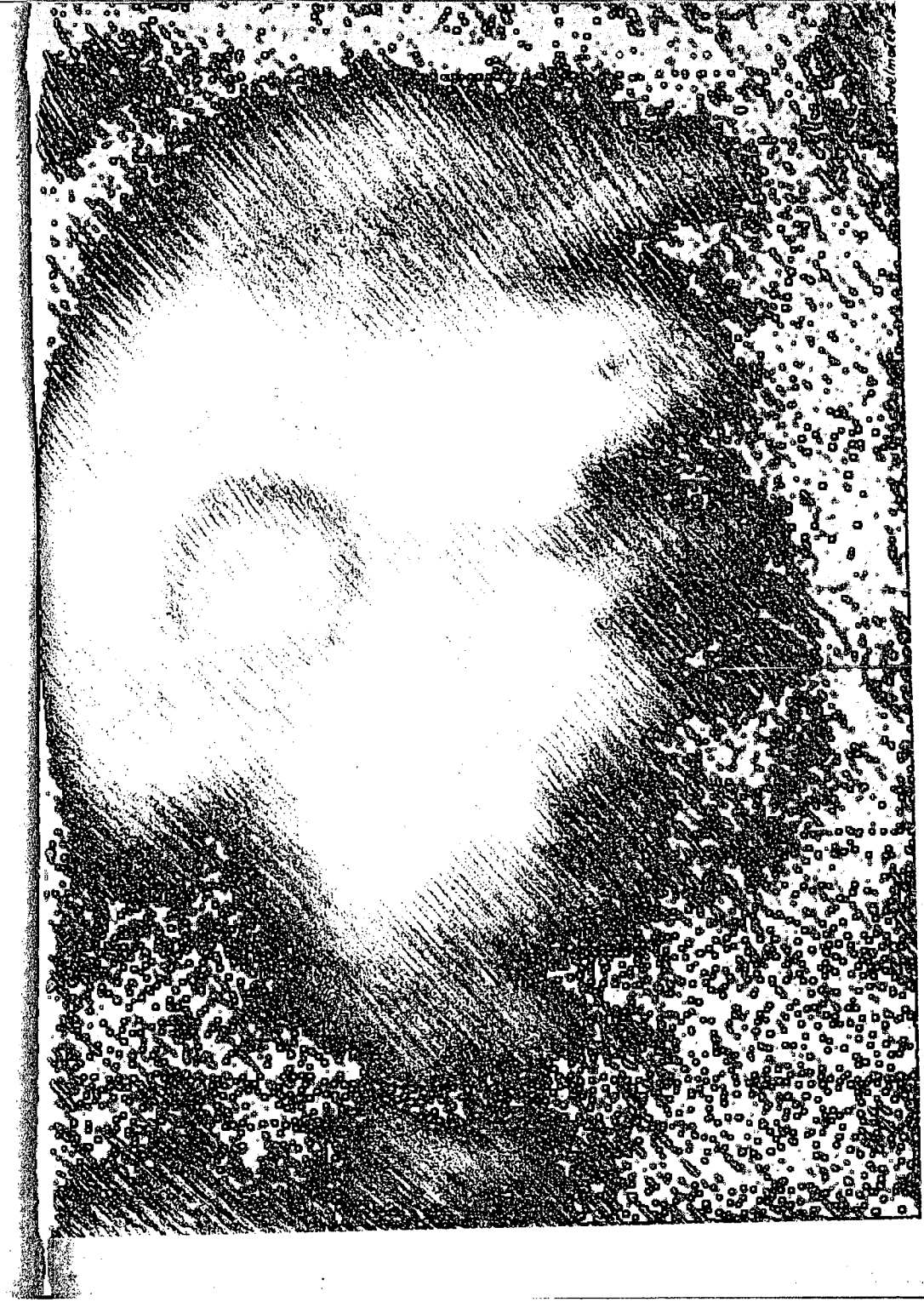
A block of drawing lessons usually lasts six weeks, and makes great demands on the pupils' empathy, inner mobility and perseverance. They enjoy practising their hand at the structural forms of masterpieces. Many of them would like to do more of it. The transition from imitation to doing their own creative compositions in diagonal shading is not easy for some pupils. It takes time to adjust to this new way of drawing. A new understanding and a new commitment of will are both necessary. Pupils' first successful attempts strengthen their confidence and spur them on to find their own creativity. Soon a valuable process of mutual encouragement and emulation starts to happen. If in some cases there was a crisis, these become turning points to new accomplishments.

It can always be seen how progress comes through struggle rather than from doing what comes easily. In a drawing block of this kind the pupils pass through several stages of transformation whereby they acquire capacities that become permanent possessions.

On the two following pages:

A free exercise in black and white which turned into a landscape by moonlight. Black chalk, Class 11.

In this one, the composition became a tree landscape. Black chalk, Class 11.



Painting in Class 10

The changes of puberty are expressed by the pupils in Class 10 in a far more discriminating attitude to life. The young people form human attachments, and friendships play an important role. They show their sympathies and antipathies more clearly. The teacher's task, here, is to transform the newly awakened interest in people and in their environment into enthusiasm and the thirst for action. Learning must not stop at the level of observation but must go past observation into action and realization.

> It is impossible for fifteen to sixteen year olds to have the kind of interest in other people that will last a lifetime unless a proper interest in the world around them has been cultivated*.

The life and variety in the world of colour provides very suitable material for the complex soul situation of a sixteen to seventeen year old. In class 10 or 11 (depending on when further black and white drawing is introduced) the pupils start painting again.

Technical Painting Exercises

A good starting point comes from the class looking together at the paintings from past years of pupils of the same age. This reawakens a feeling for painting in colour and stimulates many of them to want to paint. It is important to draw attention to the professional basis of the arts in general. Pupils who think they are not gifted are encouraged when they hear that every handicraft is learnable. Those who want to proceed too fast have to realize that they will not get anywhere without a sound foundation.

Since the class will not have done any painting for at least one, and probably two years, the beginning exercises use only one colour. Blue, as the darkest colour of the spectrum, contains the possibility of showing the greatest variety

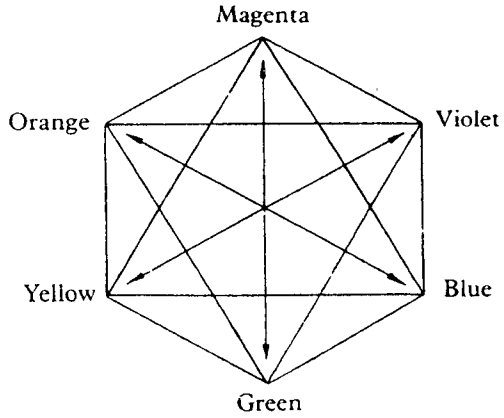
of light and dark, from deep indigo to a light sky blue. Its form-creating force leads to structure more readily than any other colour.

A professional approach has to be practised right down to the practical details, from stretching the paper on the board to how to lay on the brush strokes. Laying the colour on in layers brings out the unique radiance and transparency of water colour. Tremendous discipline is necessary to achieve this effect in its full purity. Each veil of colour must be put onto a completely dry part of the paper and has to be applied carefully so that the lower layers are not dissolved. With this age group the painting process is raised to a greater level of consciousness, namely wide-awake observation, reflection, planning, and skill in applying the whole process. This belongs to a craft. Yet each picture will show a different blue layering, for the forms of the coloured surfaces are entirely individual. Both strict discipline and imagination are necessary. Each pupil will discover how to bring one layer over the other to make interesting effects.

When the principle of veiling has been practised with one colour, a further one is added. If yellow is added to prussian blue, the possibilities of combining these contrasting colours to make different greens is almost inexhaustible. Every nuance of yellow-green and blue-green can be made by lightening it up with fewer veils or condensing it with more. Further qualitative differences are made by either putting a yellow veil over blue or a blue veil over yellow. The richness of colour is even greater if other variants of blue are included, such as ultramarine and cobalt blue. Quite different feelings will arise when the colour combinations blue-red or red-yellow are used and a great variety of shades of violet or orange are created. Carmine and vermilion are available for red. A beautiful violet is obtained with ultramarine and carmine, orange with vermilion and yellow. When all three basic colours are eventually used, blue, yellow and red, the possible colour combinations become virtually endless. When painting with all three colours the clarity and beauty of the greys and browns are a surprise, for these are never made by mixing the colours directly. These exercises all require a great deal of patience, as a great many layers are needed to get real depth. The process of condensation gradually leads from light to dark.

When painting with a number of colours it will depend on the relationship of the colours one to another. Laws apply here. Pupils need to be introduced to, and to experience, Goethe's theory of harmony. This was previously directly applied in the painting lessons in the lower school. The best description of this theory appears in the chapter on Goethe's approach to colour in the first part of this book. Goethe arranges the six colours of the colour circle into three pairs of colours. He calls them harmonious, characteristic and non-characteristic

(monotone). The harmonious pairs are diametrically opposite one another in the colour circle. They are also called complementary colours, i.e. magenta-green. The characteristic colours are found by taking every second colour in the circle. Either a combination of pure colours will be produced, i.e. blue and yellow with which the veiling exercise began, or a combination of mixed colours, i.e. orange and violet. The non-characteristic colour combinations are the colours that are neighbours in the colour circle, such as yellow and green, green and blue etc.



With veiling, as with painting altogether, all these colour contrasts appear. It is important to keep returning to this threefold pattern among the colours in order to remain sensitive to the colour possibilities. It will provide a firm foundation where questions of composition are concerned.

The way the colours shine and radiate has a direct effect on the pupils. They are fascinated by their inherent life and their magical shining quality. They never tire of experimenting with new untried combinations and nuances. The innumerable variations within the scope of one exercise stimulate them to try again and again. The pupils' intense involvement shows a real hunger for colour following their long break from painting. A new encounter takes place with the very essence of colour. They really experience this when they subsequently look at their pictures. Many of them would not have believed what they had achieved if they did not see them arranged and put up on the wall. From out of their experiences of the last year's black and white work, colour arises again from the workings of light and darkness. In order to activate their will their

lessons began with an appeal to the pupils' sense of the professional and down-to-earth technique of crafts, but their own paintings now supply the counterbalance, the life of colour.

The shining quality of many of these free compositions suggests a comparison with crystal formations. Mineralogy and crystallography belong to the natural science lessons of class 10, therefore there could be an inner connection. It becomes more evident why painting in the upper school starts with the shining quality of minerals* as a foundation for working later on with the forces of life, soul and spirit in nature.

Transforming Black and White into an Imagination of Colour

The exercises just described complete to a certain extent the possibilities for the pupils in the realm of free colour compositions. Their colour imagination has come to life, and they have gained experience in the technique of painting. But they no longer have the same naivety for creating their own pictures as they had in the middle classes. They need a new starting point from which to compose pictures. Rudolf Steiner recommended something for this which has proved very successful: the conversion of a Dürer engraving into colour*. Many pupils are initially reluctant to attempt this. There are however two arguments in its favour. The copying of picture compositions of other masters has been practised in all ages in the field of art. It is nothing new. Many significant artists, including Dürer, right up to our own time have borrowed from other artists. In earlier times the only way of acquiring expertise in handicrafts and the arts was to copy the works of great masters*.

However, for working with a class, there is another important point of view. When concentrating for any length of time on a Dürer engraving, such as "Jerome's Study", a viewer instinctively changes the black and white delicately into colour. This is most obvious in particular parts of the picture where the artist's handling of physical objects, such as the bull's eye window panes, the grain of the wood, or the lion's skin arouse memories of colour. The explanation of this is given by a fact Goethe refers to in his approach to colour: colourless shadows have a special tendency to take on colour.

> Colour itself is shadowy... and because it is related to shadow it joins forces willingly with shadows, appearing in and through them whenever the occasion occurs*.

When a picture is changed into colour the painting process is showing in reality what human nature is continually doing unconsciously. The art of black and white is a half truth, for complete reality is coloured*. Black and white seeks colour. With the coming of print, copies of woodcuts were often subsequently coloured.

A familiar black and white composition forms a definite starting point for using colour. The very fact of having a given motif leads to the exercise being a sound and valuable one: It is a golden bridge to artistic imagination. The composition tells pupils what to do, they have to find out how to put it into colour.

Earlier colour exercises supply the necessary preliminary stages to a solution to this problem. The pupils have acquired the experience of how to achieve certain shades by means of veiling. This experience can now be put into practice. The mood of the picture has been put under the spell of black and white, yet essentially it already has colour, and the task is to make this colour visible. The lights and shadows and transitions all have to change into colour and be rearranged according to the laws prevailing there. There has to be a thorough metamorphosis. It is no use simply laying on arbitrary coloured surfaces and combining them abstractly, the mood of the picture must be maintained. The black and white laws have to supplemented by the laws of painting. Just as a bright light produces a dark shadow, a warm light has a cold shadow and a cold light a warm one. This interplay of coloured light and shadow forms the coloured composition that has to be developed from the black and white structure. The resulting coloured composition will differ from its uncoloured model, for the colours seek their own form. A pedantic transcription of the motif would not be in keeping with the imagination of colour that has to be created, and this is not part of the task*.

To achieve the metamorphosis colours ask for a greater diversity and freedom of movement. Veiling has to make way for a more spontaneous method, and pupils paint wet-on-wet. They are acquainted with this from the lower school, and it takes on a new interest. With veiling rigid edges appeared, but the damp texture gives smooth transitions from one colour to another. It also means that there is no interruption of waiting for the colours to dry, on the contrary, the paper must be kept damp for as long as possible, as it is only possible to paint while it is damp. An intermediate stage does in fact exist, when the colours have been absorbed into the paper but are not yet dry. At this moment colour can be added once more, even veiling can be attempted while it is damp. This requires some skill, using stronger colours than with veiling because the damp paper thins them down. The mixing of colours must be done solely on the canvas and not on the palette or in the pot, as it is part of the formative process.

Wet painting can easily lead to the colours swimming. It would be better called damp-on-damp than wet-on-wet. It is important to be conscious of what the colours are doing. Now there is the danger that the colours will run, whereas with veiling the danger is that they will get too set in form. This onesidedness can be avoided by alternating the two techniques.

Since the pupils already know the content and the form of the picture, they feel at home with it and can concentrate on the choosing of colours. It can be of technical help if the teacher recommends that they sketch in the distribution of light and shade in the picture with a warm and a cold colour. They can then orientate themselves colourwise, for this gives them the basis for choosing the individual colour. If they are not satisfied with their picture it is better if they try a second or even a third time. It is all a matter of practice. Some of the pupils may be able to carry on in the next lesson with the same picture that is now dry, and change to veiling, though the spontaneous impression of damp-on-damp will of course easily be lost.

Enthusiasm for the new freedom in painting and the opportunity for the pupils to express themselves directly will be considerably dimmed when they look at their pictures the following day and compare them with veiled pictures. The glow of the damp colour has gone. The paintings have become dull and ordinary. Beside them the veiled paintings shine with undiminished radiance.

The question therefore arises whether there is a painting technique that combines the advantages of both methods, to get the radiance and clarity of colour in the one kind and the freedom of movement and the possibility of getting beautiful colour transitions inherent in the other. The problem can be solved by loosening the tight arrangement of layers and bringing more movement into them. Instead of putting on the colours in even surfaces they can be varied by using shorter, lighter brush strokes and at the same time varying the thickness of the colour. This produces smooth transitions instead of the clear separation between the surfaces of colour. At this point care must be taken so that undisciplined brush strokes do not dissolve what is already there. One brush stroke must be placed right beside another so as not to produce a restless effect. It must not lead to 'pointillism'.

This painting technique largely satisfies the requirements of a water colour painter. By allowing freedom of form it extends the expressive possibilities of the art. This is undoubtedly the most difficult method, but previous exercises have prepared the pupils for it. To start with, only a few of them will succeed, but gradually every pupil in the class will be able to handle it. The first successes of some pupils will encourage all of them to go on trying. Mutual encouragement leads to emulation and increases their abilities. With the overcoming of technical difficulties and clumsiness new gifts can be set free. It

is extremely interesting to watch how the talents within a class can change in the course of an art period. Gifts that appear to begin with, and which they have brought with them, often make way for new gifts. In the coming classes the appearance of new artistic capacities becomes more and more apparent.

Towards the end of the painting period a few of the pupils will express the wish to have larger painting papers on which to try out their creative forces. The results can be brilliant but a large paper is not suitable for every pupil, and the teacher must discover which size they can master and must differentiate in this respect.

When transforming black and white pictures into colour compositions the pupils were left completely free. This freedom sometimes leads to results that deviated from the actual task. For example "Melancholia" might become a "Sanguinia" to match the cheerful disposition of the painter. Such a painting is generally accepted as a welcome and original contribution and causes the class to look more closely at the theme. Melancholy gloom is the counterpole to the bright and cheerful side of life. Dürer set his motif between these contrasts: the blackness is overcome by the light.

In the painting lessons that fall in Advent, a coloured composition can be made of a Dürer engraving containing a madonna motif. The principle of keeping to one theme throughout a whole painting period has for many years proved valuable. The theme may appear in countless variations, but it is still there in principle. By using different painting techniques it becomes interesting in ever new ways. This produces concentrated work that would hardly be possible otherwise. Because pupils remain for longer in one experience they attain a depth and intensity that can clearly be seen in their work. One way of encouraging the pupils is to tell them about artists who worked at the same theme for a long time, even for their whole lives. They are always intrigued by the story of Jawlensky*, who for years expressed himself solely through the mysterious language of faces.

The secret of artistic productivity of a class is based on imponderable factors. There has to be an atmosphere that encourages creativity. Any worthwhile work depends on creating the kind of working climate that inspires creative fantasy. This indicates different working habits in pupils and adults. Whilst the grown-up gets his impulses from his own ego, a young person who has not yet matured into a full personality needs an outside stimulus. The teacher's warmth and enthusiasm must give him the kind of impetus that later on he must give himself. This is often overlooked, but it explains the fact that artistic work continued at home does not often lead to the sort of results attained in the lesson.

The exercise of transposing a black and white picture into colour is not the

only theme for painting lessons in Class 10. The black and white nature motifs (discussed in connection with class 11) also call for colour, but in a different way, whether we are thinking of the mood of a particular time of the day or year, or of a tree in sunlight. Exercises of this kind can also be set throughout a whole period*.

Whichever educational method a teacher uses, the fact should never be overlooked that everything must be in tune with 'living art'. In the artistic realm the teacher must really become an artist in order to bring reality to the young people and lay the basis for capacities they can later develop on their own.

Painting in Class 11

In the course of education a young person acquires knowledge of the laws of nature. It is not possible to get a thorough grasp of reality without including art. In a Waldorf School the teaching – based on the observation of phenomena in a Goethean manner – is founded on this. Goethe stated that:

> As soon as a person begins to become a recipient of Nature's open secret he acquires a longing for Nature's worthiest exponent, art*.

Nature is full of secrets that disclose themselves only to an artistic approach, but it is not sufficient merely to copy things from nature. Nature is never absolute nor concrete, there are countless different forms.

An artistic sense for nature has to be cultivated, especially in the upper classes where the pupils have to acquire a comprehensive knowledge of natural science. In class 10 the emphasis is on the solid form of the earth as a basis for the other kingdoms of nature. The work with plant life in class 11 draws their interest into the environment, the landscape and the part it plays in the cosmic rhythms of day and season. Class 12 includes a comprehensive presentation of the animal kingdom, and culminates in a survey of all the natural kingdoms, leading to the image of Man*.

The starting point for painting is given by outer sense impressions. In the lower classes simple colour harmonies are appropriate, reflecting the child's soul experience, but in the upper classes the starting point comes from impressions of nature. Up to class 8 the curriculum leads from the experience of pure colour to that of a formed theme, in the upper school the process begins with a theme picked from nature and turns more and more towards purely artistic composition.

The pupils will eventually learn how both directions sometimes alternate and sometimes appear alongside one another in western art – the one determined more from outside, taking its departure from impressions of nature, and the other an inner expression of the soul*.

A typical theme looks at a tree as an archetypal image of living nature*.

Taking root in the earth, its leaves spread into the region of the atmosphere where they are open to the forces of the periphery. To paint a tree pupils start with the surfaces of light and darkness so that the tree arises out of the light and dark qualities of the colour, the colour that comes from the light. The living picture of a tree is not called up by the green of the physical object and the individual leaves, but by the interplay of coloured lights and shadows from the sunlight shining upon it. To paint this it is necessary to be perfectly clear what the sunlight does when it shines on the tree from a certain direction*; how the green becomes whitish in the light, how it acquires a blue tone where the light cannot reach it, where green is seen and where the dark shadows are*.

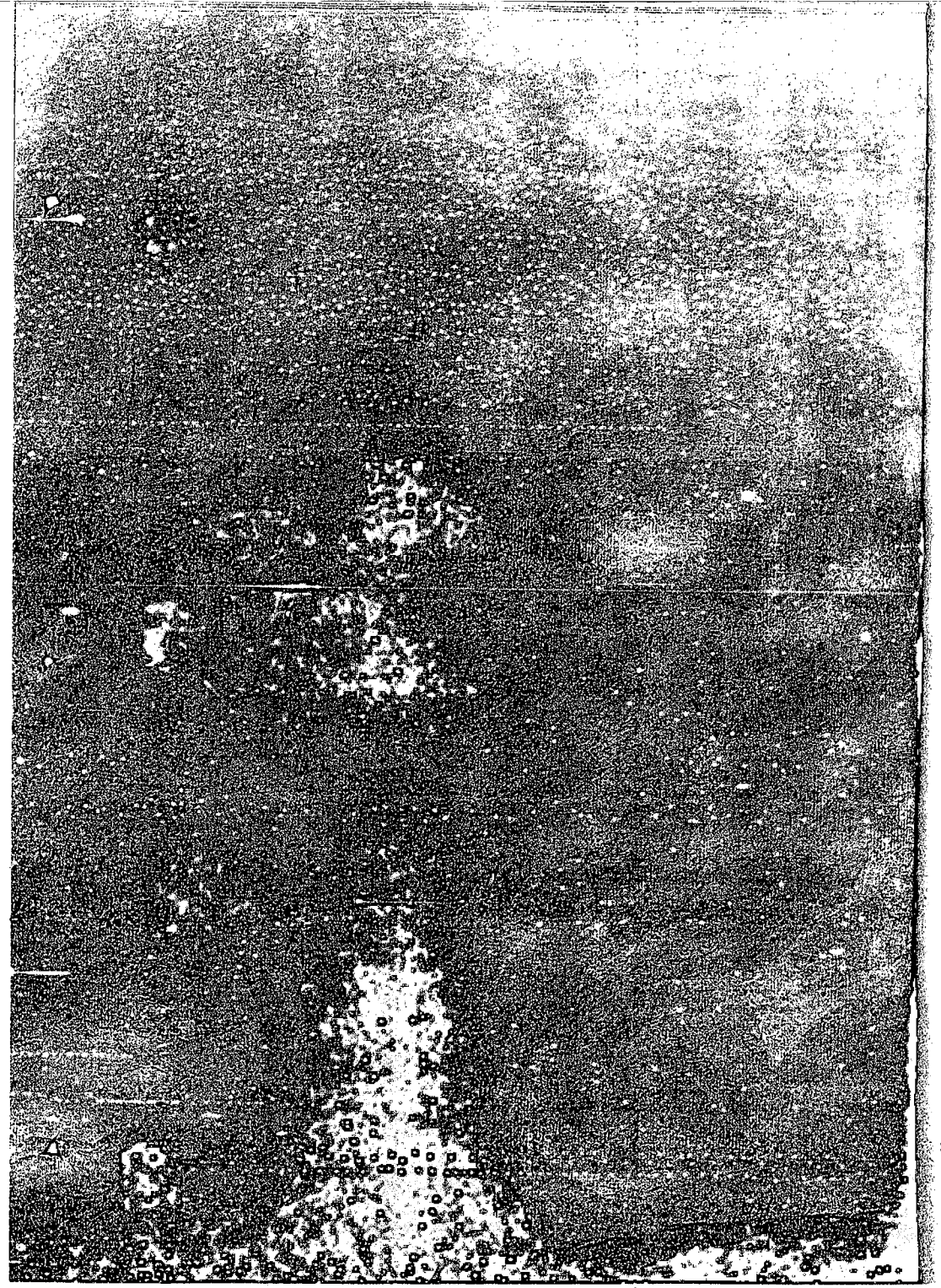
This may sound like impressionist painting. However, an impressionist painter stands in front of the nature theme, studying and capturing the transient play of colour. Waldorf pupils begin from an imaginative perception that is not bound to the object yet is in harmony with the nature process. This inner distance creates the freedom of space where art can live. Rudolf Steiner stated:

> The task of a painter is to catch with his brush and paint the fleeting impression that the object gives him and to relate it to a spiritual dimension*.

This aspect of relating it to a spiritual dimension goes beyond impressionism. Rudolf Steiner gave practical examples for this in the continuation school in Dornach, where he gave several painting demonstrations to pupils of seventeen and eighteen. In this way a cycle of seven pastel sketches arose that are particularly instructive for painting with this age group.

Painting a tree theme is a return to something used as an exercise at the beginning of adolescence, from the beginning of the 12th year onwards. That was a time of radical change in which pupils turned from looking inwards to looking outwards. Causal connections were brought to the children for the first time. From class 6 onwards the children paint similar nature moods to the kind that crop up again in the upper classes. In principle there are no new painting

19. *"Cloud scene". A contrast in light and dark, class 11.*
20. *"Forces". Preparatory exercise for tree motifs, class 11.*
21. *Trees in the cycle of the year. "Blossoming tree", in the colour combination green-pink, class 11.*
22. *Trees in the cycle of the year. "An autumn tree", class 11.*



tasks for these age groups. The task lies solely in the different approach the older pupils have from the one they had when they were younger. A comparison of the paintings of both age groups is instructive*. In the uninhibited pictures of the younger pupils there is an echo of nature moods they remember from past experience. In the older pupils' work we can see that they are trying to have an inner imagination of the natural phenomenon that will lead from imitating it to expressing its essential beauty. As with Cézanne, this process of turning inward can happen when confronting nature. The important thing is to pass from the chance factors to the essence of the thing.

Practical Painting Exercises

When they enter class 11 pupils cannot clearly recall all that happened in their last painting period. A certain timidity and insecurity has to be overcome. An introductory painting exercise could be a painting of the elemental forces that are an essential part of the life of a tree and without which it would not exist. The combined working of the earth forces rising out of the darkness, the light forces raying in from the cosmos, and the atmospheric interplay of damp and warm air produces vegetable life. Even the visible form of the tree can be regarded as a consolidation of these forces. The pupils easily find yellow tones for the element of light and choose dark blue and violet for the wet and earthy part. Red is the obvious colour for the warmth.

An exercise such as this introduces the pupils in the right way to the life of nature whilst at the same time preventing their painting the fixed form of trees too quickly, merely in superficial imitation. This life and movement is a suitable theme for painting with flowing, interweaving colours on damp paper. This method frees and relaxes the pupils and helps them to overcome their heaviness. This fluctuating colour brings life and movement into the class. It is not long before beautiful colour harmonies arise, and these stimulate their powers of fantasy and composition. Wet-on-wet painting provides an immediate relationship with colour. Pupils gain confidence through artistic work.

Tree Motifs

The veil technique is best suited to express the fluctuating play of light and shade and the radiance of the colour. A process of mutual encouragement, help

and advancement begins again, as it did in class 10. Apart from general directions to the whole class and observing the pictures afterwards, it is of course also necessary to help individuals over their difficulties as and when the need arises.

When the class as whole has achieved satisfying results, a different approach must be adopted. Painting groups of trees leads to a study of composition. According to the way the trees are placed on the page, the picture will be either boring or full of character. Pupils must experience this difference. They will learn that they can create satisfying contrasts if they distribute the focal points, the light and dark and the degree of colour properly, and if they make use of a shift in direction. The teacher must awaken and train their feeling for the laws inherent in a picture.

Another variation is the annual cycle of a tree. Characteristic colour combinations fit the changing moods of the tree as it passes through the year. In spring the delicate colours of the buds and the pale green of the meadows are in direct contrast to the darkness of the trunks. In summer the green of the trees is heavy and earthy against the deep blue sky, and glistens in the light of the warm sun, or there may be dramatic flashes of light in the darkness as the trees are blown in the wind of a stormy day. In the autumn the tree has its golden age. Leaves and fruit turn to every shade of gold: green gold, yellow gold and red gold shine with an unreal light in the mild sunshine. The climax has been reached. But autumn also shows a counter image. The trees become ghostlike shadows in the mist that spreads, cold and grey, over the landscape, extinguishing the colours. In winter nature has withdrawn all its living forces, and crystal clarity surrounds the lifeless forms of the trees that are storing up new life in their roots and seeds. Their clear silhouettes stand out against the glittering white or pastel-coloured background like runic signs, revealing a new kind of beauty.

Eventually the theme turns to forest motifs. Their solid strength bring the single trees together in a new unity. The essential quality of a tree comes to full expression in nobility and grandeur. Forests can produce very different experiences. There is a huge contrast between a beech wood in spring when the sun shines through the fresh green foliage and fills the whole wood with light, and the shadowy darkness of a pine wood. A sudden shower of rain changes the mood of a wood instantly. Each mood has its own beauty, there is a musical element in the dripping of the raindrops and the trickling, rippling and splashing of the rills, and the subdued colouring seems interwoven with a silvery and flowing grey. A rainy scene in the wood is beautiful to paint, for the pure colours have to mingle and turn into different shades of grey.

Rudolf Steiner sketched a 'sunlit tree beside a waterfall', in a demonstration lesson as a direct example of the elemental life with which these exercises began. At a more advanced level, it offers the possibility of combining all the elements of light, warmth and air, watery coolness and mineral earthiness in a living play of colour. These elements can actually intermingle where light and shade play upon the tree and the rocks. Such a picture can become a colourful image of life.

Sunrise - Sunset

Rudolf Steiner made two further sketches, "Sunrise" and "Sunset" which provide another exercise for class 11*. The two motifs have to be tackled quite differently. It is a twofold exercise. First a continuous series of colours is painted, starting in the middle of the bottom edge. Pupils must paint upwards in semicircles, going through the colours in the following order: vermilion, orange, yellow-orange, and yellow getting lighter and lighter and ending with light blue. On another sheet of paper a different colour series is painted in a half circle from above downwards: deep violet-blue, blue getting paler until it reaches a cerulean blue, ending with a delicate orange. Both colour compositions can stop at the lower edge with a neutral stretch of a greyish shade. These are two contrasting colour sequences, one warm and the other cold.

These exercises should be painted in liquid colour. When the two are hung up near one another the first impression is one of tremendous colourfulness enhanced by the juxtaposition of opposites. When a class look at them together further observations will arise. Some of the pupils will see sunrises and various other natural phenomena in the pictures. The important thing is that they discover that the colours show intense movements: the red and yellow picture shows a movement that rays outwards, and the violet and blue picture shows a movement raying inwards. Looking to and fro from one set to the other there is a kind of breathing rhythm, inbreathing and outbreathing. The course of the day between sunrise and sunset can be felt as one great breath of nature. The colour process shows an inner dynamic similar to the natural process. In this way the class experiences something objective, something absolutely fundamental that is behind the phenomena of the morning and evening sky and can be translated into colour. A great variety of painting processes can be built on this basis. The aim is not to copy nature but to create in the way nature does. The pupils discover that the simplest exercises are the most instructive ones because they are clearest.

This introduces the actual theme. Pupils paint the first of their sunrises and sunsets, but these throw up new questions and problems. What colour difference can be made between the two phenomena? What colour is the sun? In nature the rising sun appears to radiate outwards, and often the setting sun glows red because of the dimming effect of the earth's atmosphere. Imitating the impression made by nature is not enough, the colour dynamics observed in previous exercises must be used to interpret this impression. The outward-raying centre was vermilion, but in the inward-raying series only pale orange existed in the middle. From this pupils can discover that the strongest colour, vermilion, must be used to convey the strength of the rising sun, and a paler colour for the weaker force of the setting sun.

The next question is how to use the language of colour to differentiate between the two different atmospheres. An experiment can help. On large sheets of paper the teacher makes the pupils two identical sketches, in coloured chalks, similar to the first of the two exercises. The sun appears above the horizon as a powerful centre of colour with all the transitions from vermilion, orange and yellow right to a delicate peripheral blue. The experiment consists in making a slight change of colour in one of the pictures. A little of the delicate blue is brought from the periphery over the light yellow towards the middle. A delicate green is created such as can often be seen in the evening sky. This brings a change of mood to the whole picture. Green has a quality of setting limits, and prevents the red and yellow rays at this point from penetrating the atmosphere any further. It stops it, dams it up. An impression is therefore created of the raying-out force being turned back on itself and ceasing to glow. The pupils immediately call it a sunset. This impression comes from comparing the picture with the unchanged one beside it, for this has now clearly become a sunrise. A small change in colour has made it completely different.

A basically different colour mood will be chosen for morning and evening when pupils actually paint sunrise and sunset. For morning, in addition to the radiant strength of red, cooler colours will be added because the cool of the night can still be felt. Warmer shades suit evening, just as the earth rays back the warmth the sun has left behind. By indicating cloud formations and atmospheric currents the ascending and descending movement of the sun can be enhanced. Even the line of the horizon can be included in the dynamic by being given an upward or a downward curve. This means everything need not depend entirely on the difference in colour.

Beginning with wet-on-wet and then changing over to the lighter type of veiling technique requires practising again and again. It is ultimately the most satisfying method because it gives the greatest scope for expression. The range of the different approaches is so enormous that each pupil will find their own particular painting technique. The colour experiences in the preparatory exercises will have given the pupils a bolder conception of painting which will stand them in good stead in the further work.

Themes can also be varied. Some pupils may like to try a pre-sunrise picture, others one which shows the sky after-sunset. This focuses interest on what happens in the sky at night, which is then brought into the painting realm*.

Moon Scenes

As light implies shadows, so day implies night. A healthy striving for wholeness is indicated if the pupils want to paint moon scenes to complement the sun scenes. Whereas a sunny day shows the world's beauty, a moonlit night uncovers its mysterious depths. Apart from the glow of sunrise and sunset, the light of the sun can be dazzling during the day, yet at night there is no difficulty in looking at its gentle reflection, the light of the moon. The moon is not overpowering like the sun, and it often forms a personal relationship with human beings, because it is closer and therefore more familiar. Its face resembles that of an old acquaintance accompanying us on our journeys by night. The magical being of the moon has inspired many a poet.

Just as with the sunrise and sunset, the different moods between the rising and setting of the moon can be distinguished. Each time the moon appears as an orange disc on the eastern horizon after the sun has set onlookers are filled with wonder. Equally impressive is the picture at night when the moon, large and majestic, moves towards the western horizon before the first light of morning, hurrying in its full glory through the haze of the earth's atmosphere. If moonrise and moonset are considered in this way a difference of mood is easily discovered that can be translated to the realm of painting. The ascending moon rises above a warm horizon that still retains and radiates the power of the sun, while its setting is accompanied by chilliness. As well as a warmer and a cooler basic mood and dynamic colour movement, gentle variations of form can also be made to enhance the expressiveness and the differences. The moon is equally expressive when it is shining high in the night sky, sometimes it passes in and out of passing clouds that are illuminated by its silver light, at other times it is surrounded by a delicate coloured halo. There are many moon moods to stimulate the imagination of artists.

Pupils who have the inclination to be romantic will find plenty of scope for their artistic fantasy in opportunities offered by this theme. Favourite themes are 'Moonrise over the forest'; 'The moon over the mountains'; 'The moon

reflected in the lake'. When the pupils' imagination enters fully into the element of painting the aims of artistic training are realized.

Flower Motifs

Flowers have provided an earlier theme for painting lessons in classes 5 and 6. Then they were connected with botany, now the theme can be introduced for purely artistic reasons. This theme is particularly relevant at the time of year when the world of the flowers reaches its climax of colour. Painters of all ages have included these beautiful living forms in their creative work. In school, even if class 11 is involved in painting the tree theme, it can sometimes be appropriate to paint flowers instead during the peak flowering season.

Green is the basis for all this beauty. The blossoms spring out of the green, and create harmony in diversity. The colour of each blossom has a special relationship to green, of which so many varieties appear that it is impossible to say there is one 'natural green'. The more green is examined the more mysterious it becomes – it can be a real problem for painters.

The Goethean colour circle shows green as a simple mixture of yellow and blue. Carmine red at the top is opposite green at the bottom. This is considered the culminating point of the whole colour sequence, the result of the intensifications of yellow and blue and of their eventual union. Green and red therefore have the same roots: yellow and blue. This explains the special relationship these colours have to one another despite their being polar opposites, it is inherent in the way they tend to assume the complementary colour: red turns to green and green to red. This happens throughout nature: red plant shoots turn green and green fruits turn bright red. The leaves of certain trees also change from one colour to the other.

Rudolf Steiner calls green "the lifeless image of life", red "the glow of life", thus pointing to their common basis: the element of life, as represented by the plant world. Red and green are different expressions of the same thing. Green is the likeness of life in lifeless matter; life that is constantly budding and sprouting glows in red. The green colour of plants provides an external likeness which conceals the essential living quality of the plant – its formative forces – without which it would be mineral. When this is realized a painter is enabled to see the green of nature with open eyes. Green vegetation is so coloured because of the life at work in it and there is a considerable amount of red in green. Every shade of green in plant life has some red in it, and it is this that gives plant colour its particular warm red shadowy quality and distinguishes it from a

mineral green. A sensitive eye will hardly bear to see pictures containing sharp and glaring greens for the plant world.

It is not only the relationship of green to red that is mysterious, but also its relationship to all the other colours. Goethe says of carmine red:

> If you know the prismatic origin of this colour you will not think it a paradox if we say that it contains partly *actu*, partly *potentia* all the other colours. (793)

Green also appears to contain potentially all the other colours concealed within it. Green also comes out of yellow and blue, but it stops at the stage of the first blending. The ability of yellow and blue to become more intense, a possibility which leads to carmine red, cannot materialize when they mix as green. All the colours from yellow to vermilion and from blue to violet and finally to carmine red are potentially contained in green. If the green of plants is observed as a colour which holds all other colours trapped, unable to release them, when all the colours of the flowers burst from their buds it almost seems like the breaking of a spell. The sun continually brings about this miracle in nature. Just as nature holds all the other colours under a spell in green, a painter can bring all these colours back into green by arriving at green out of the totality of the other colours. There is a living relationship between the green of the plants and the colours of the blossoms.

Such an observation points to the various stages of the painting course. The first step is to produce green on wet paper. The paper is first covered with pale red, so as to begin with life. Then from two directions yellow and blue introduce the forces of light and darkness that meet and mix upon the red base in a number of different ways. The most beautiful paintings will be those that show all the stages of the process that gradually produces a subdued green.

The second step consists of a repetition of this play of colours, but this time the red base only covers certain parts of the paper. The result is the colour combination green-pink: a scene of wild roses. This motif can be developed in veiling. In a following variation the patches of pale red can be increased to red and the green toned down to match, whereupon the wild roses become a hedge of red roses.

In this way the whole colour circle can be studied 'by way of the flowers', looking at every colour of the colour circle in its relation to green. Starting with the colour combination of red and green then, taking red first, flowers are painted in all the colours in the colour circle. One direction goes through vermilion to yellow, the other through violet to blue. Each colour represents a flower blossoming at the time, in order to establish a direct connection with the

life of nature. Apart from roses, fiery poppies can also be used, shining sunflowers, delicate harebells, irises and blue larkspur. A few pupils finally brave a leap right out of the colour circle into the white centre, to paint lilies before they withered.

Painting flowers is a living study of colour, showing how differently various colours relate to green. The scale extends from the strongest mutual enhancement to the greatest diminution. With green as a background poppy red starts to burn, and even the surrounding green becomes radiant, whereas blue larkspur nearly disappears in green and actually seems to take the green with it. The colour of wild roses stays in balance.

The most beautiful and convincing flower pictures arise when the pupils apply the artistic differentiation Rudolf Steiner recommended, in his theory of colour, for the painting of plant life. The green of vegetation and also the colours of the flowers are painted slightly darker and more shadowy than they actually look in nature. They are then painted over with a yellowish-white layer of shining light, which belongs essentially to plant life. The colours then will have greater depth and a subdued glow. A new kind of liveliness is produced that gives the impression of 'plant life'. Rudolf Steiner called this quality of colour 'a radiant image'. It can also be used for painting trees and landscapes, with much success.

It is always an impressive experience for the pupils to look at all their own pictures in sequence at the end of a painting period. The thread can be seen leading from the introductory exercises right up to the leading tasks. This applies to individual as well as to class work. Among the smaller pictures there are also large ones in which their creators made a supreme effort to demonstrate all that they had learnt in the period. Others did this on smaller sheets. Many difficulties have obviously been overcome and much self-confidence gained. Any criteria for judgement should principally be based on a consideration of the developing personality rather than an artistic merit. If the pupils come to the conclusion that they have really learnt something, it gives them deep satisfaction. They sense that the artistic activity has helped them in their whole being, and this enables them to experience art as something real. The most important aspect of what has taken place is often not directly visible. Some of the pupils want to continue painting in free periods at school, or even at home, after the period is over. This shows that what has been stimulated in lessons has developed into a personal interest.

Painting in Class 12

Themes from the Human Realm

According to the curriculum for class 12 every subject refers to the Study of Man. This is an essential part of nature study. The image of Man that pupils learn about can be supplemented by their own creative activity in art lessons.

Of course the image of Man was always there in the background in all their lessons, and was actually the theme of the Dürer engravings done in classes 9 and 10, but young people need to have reached a greater maturity before it can be taken up as the actual motif for painting.

Even the realm of colour has in a mysterious way a special reference to Man. This is apparent when looking at the phenomenon of magenta – both in Goethe's colour circle and in experiments with a prism. If, whilst looking through a prism, the coloured edges of the dark end of the spectrum are made to overlap more intensely the magenta lightens up to peach blossom. Rudolf Steiner calls this colour, skin colour, 'the living image of the soul'. This colour only appears in its relatively pure form in small children. It does not occur anywhere else in nature, although fresh young peach blossom comes close.

Physics is as little acquainted with peach blossom as with magenta. It takes into consideration only the part of the spectrum that is brought about by the light, not the part brought about by darkness. Goethe recognized darkness as a component of light, and discovered that colours arise in the interworking of dark and light. The spectrum conceived of by physics as continuing ad infinitum to the right and to the left contradicted Goethe's natural feeling for wholeness. By bending the band of colour into a circle, with green in the middle, magenta-peach blossom arose through the overlapping of the enhanced opposite of yellow and blue.

If the way magenta-peach blossom arises can be experienced as a living process, the colour circle can become a picture of the way the colour of our skin is connected with our soul. This helps us understand the following words of Rudolf Steiner:

> When we look at nature we see as it were all the colours of the rainbow as a symbol of God the Father. But when we look at a human being we see the colour of the skin as the expression of a person's inner nature where all the colours meet....*

Individually the colours express a particular soul quality, but when they meet they neutralize one another and become the image of the soul itself.

When the pupils are given the task of choosing a human face as a theme for painting, they find this just as much of a miracle of colour as the sparkling dew drop, the rainbow or the quality of blossoms.

A class 12 has an immediate empirical connection to this theme. What is a human being? Who am I? Who is my neighbour? These are the sort of questions they ask themselves. The large amount of self-portraits painted by young artists points to this. People constantly surround us, yet our perceptions of them are incredibly blurred. First attempts to portray a head show this at once. Pupils hardly have an idea of the shape of a forehead, a nose or a mouth, or what eyes look like. They make a lot of discoveries in the course of the very first exercises. They like learning from observation. However, this touches only the outer form and not the principles. The theme has to be turned into a painting study, as a mere imitation of the external features is not art. Questions here arise concerning the aim of art.

The Principles involved

One principle concerns painting the colour of the skin that rises, so to speak, to the surface from a person's inner being. The other concerns finding the way to capture the fluctuating colour brought about by external illumination. In the first case the colour becomes the pictorial expression of the inner life, whereas the latter is the phenomenon of colours produced on the surface by outer light.

The contrast between these two basic principles appears particularly impressively in Leonardo's "Last Supper"*. If the light and shade within the picture are carefully studied, it is found that the natural conditions are presented where eleven of the disciples are concerned but not in the case of Judas and Christ. The deep shadows on the face and figure of Judas cannot be put down to the light conditions. Nor can Christ's brightness be explained by outer circumstances. Leonardo, who valued a true impression above all else, contradicts in these examples his strict artistic demands. He was endeavouring to make visible the fact that in the contrast between Christ and Judas light and

darkness do not merely arise from outside but are inwardly motivated. The soul living in Jesus gives light to his face from out of itself, therefore it shines despite the outer light conditions. The figure of Judas has in a similar way brought a shadow upon itself where there is no external justification for it. With this use of polar opposite modes of expression Leonardo has given us a marvellous example of the fact that there is always the possibility for a painter to express the human being both from outside and from inside.

Goethe described this aspect of painting quite clearly:

> The chief skill of a painter always consists in his imitating the actual appearance of a given substance and destroying the universal, elemental quality of the colour. This is most difficult of all in the case of the surface of the human body. (877) On the whole, flesh colour is on the active side of the spectrum; however, a bluish tone from the passive side also plays in. The colour is altogether removed from its elemental condition and neutralized by the organism. (878)

There are, however, more interesting comments in Diderot's experiments with painting which Goethe translated and annotated. Diderot enlarges on the way the colour of flesh,

> this living white that is not pale or dull, this combination of red and blue that imperceptibly passes through (yellow), through the blood and life...drives a painter to despair*.

Goethe's comment on this was:

> The way this colour of healthy flesh feels - a living perception of it, by means of which an artist endeavours to make himself capable of producing something similar, requires such a mobile and delicate flexibility of mind and hand as well as of the eye, and such a fresh, new feeling for nature together with mature mental faculties, that anything else is trifling, or at least everything else seems to be covered by these crowning qualities.
>
> The difficulty is made even worse through the fact that this surface belongs to a thinking, reflecting, sentient being, in whom the slightest modification, however inward or hidden, passes like lightning over the surface*.

The theme which the teacher and pupils now have to tackle is introduced as simply as possible. It is helpful to let the pupils look at the work of a previous class 12. Thoughtful viewing of these pictures creates the mood to paint. The pupils can gain courage and confidence from their predecessors' achievements, for if past pupils could do it so can they. The success of the whole period rests on pitching the first exercise at a level that makes nobody feel overtaxed and that every pupil in the class can undertake.

The simplest presentation of a face is a profile. The first task concerns the aspect of form. The best colour to begin with is blue, as its great range of shades, its formative quality and its ability to create space lend themselves especially well to this exercise. Beginning from the periphery a space for the profile must be left in the middle. It will arise as a bright negative against a blue background. By means of observation, self-correction or, where necessary a little help, the pupils will gradually get the individual features in proper proportion.

The use of flowing colours on damp paper provides ample chance to try things out, since paint can be both put on and taken off again. As the picture proceeds the empty form will also be painted over and brought into harmony with the darker background. The shades of light and dark in the picture will then have the same effect as the planes of light and shadow when a head is illuminated from outside. Frequently a red gleam appears here and there in the light parts even though that colour was not used. When an empty space is surrounded by blue it clearly shows traces of orange. Goethe described such phenomena as 'physiological colours'. In this case blue creates within the eye the required colour (orange) and makes it visible in the colourless parts. A colour combination has unexpectedly arisen and produced wholeness.

A particular mood belongs to painting with blue. It does not only cover the papers but at the same time fills the whole room; it can be felt as a shining soul quality.

When the pupils come to working on the form this can be referred to the study of Man, showing for example how the head is a repetition of the whole human form. The actual form of the head can be seen in the forehead and upper dome of the skull, while the middle realm of eyes and nose relate to the rhythmic system, chestman; whereas the upper and lower jaw shows its connection with the limbs. Once the idea has taken hold, the pupils will discover a great many comparisons by themselves.

The first wet-on-wet exercise in blue can be intensified by using veiling in the following exercise. Once the first difficulties with the form have been overcome more attention can be paid to the quality of the colour. The pupils can choose prussian blue or ultramarine blue, their colour and warmer effect combine very beautifully. The blue can be further enriched by introducing gentle shades of yellow and red in the same way as seasoning is put in food. This helps the blue to lose some of its exclusiveness, and takes its severity away where necessary. Pictures from Picasso's early blue period can provide hints for these exercises.

Blue does not only express gentleness and inwardness but also tends towards consolidation and hardening. If it is darkened to an active violet its formative power is increased. This double increase of both colour and form will become increasingly apparent in the pupils' pictures. They begin by sketching out their pictures delicately enough, but the colours get stronger and stronger and the silhouettes more and more pronounced. The pupils love doing the forms of heads. With great amazement and surprise they find a soul gesture, a particular human look or a certain temperament, whether they intended it or not, speaking to them out of their picture. This stimulates them to observe one another and paint their observations. However, this experience and overemphasis of form leads away from the artistic element, therefore the next exercise has to be on a different level.

This exercise has no subject. The first choice is to take the previously discussed colour combination blue-yellow-orange, which the pupils have already seen as a physiological phenomenon. With this exercise the warm colours are chiefly put inside and the cold colours more on the periphery. The aim is to pay attention to the harmonizing of the colours and the balancing of contrasts: warm-cold, light-dark, inside and outside must contrast yet harmonize. Even at their full intensity the colours should give the impression of floating in the way colours fluctuate over the illuminated surface of an object. This floating quality can best be achieved with freely-applied veiling, as this gives the greatest possible differentiation and radiance.

Further progress depends on the success of this seemingly simple exercise, as many attempts must be made to grasp the exercise satisfactorily. It takes time to live into each new exercise, and the process will not reach maturity until the second or even third try. Although this exercise is a preparation for the actual theme it is completely self-contained, it is of unique importance for education in painting, and the pupils' achievements need to be of the highest possible quality. These subjectless colour pictures will consequently often have an incredible radiance.

Whereas the form tendency of blue had something compulsive about it, the hovering colours of this exercise in basically two contrasting colours have a freeing and harmonizing effect. The exercise requires the pupils to take

independent artistic decisions, and this contains an impulse that works on into the future. Progress is maintained and kept in the right channel by comparing and discussing a number of the examples. It is of pedagogical importance that the teacher gives due praise in the case of individual progress, for praise and approval can work wonders. More attention must always be given to the ostensibly less gifted and timid pupils than to the gifted and self-confident ones who are more ready to help themselves. In the course of a painting period the situation can change with regard to who is gifted and who is not. It is best to let especially self-willed pupils have their own way, and wait and see what happens. After all, it is only what comes alive through their own insight and experience that gets them anywhere.

The third phase of the work brings the pupils to the actual theme. A profile of a head has to be formed by means of a colour interval. The way has now been prepared to allow the form to be more pronounced again, but it must be painted and not drawn. Pupils must not draw the form because it leads away from the real process of painting by beginning with the form. In a painting approach the form comes at the end of the process of working with the colours and is not known to begin with, for it is the final result. It comes into being out of the colours and then colour and form are one.

The actual task consists in taking the previous colour exercises further. Therefore it is perfectly possible to continue to work at a previous day's colour composition. Until now the main emphasis has been the effect the colours have had on one another, now the teacher asks the pupils to create form. If they look with a little imagination at their colour pictures, they will see faces appearing everywhere that nobody put there intentionally. If they look at their paintings from different directions and angles they will find one possibility after another that could lead to form. This becomes an exciting game of discoveries.

Anyone who finds it initially difficult to have an eye for a form can easily acquire it with practice. Some pupils have to be shown what a beautiful beginning of a head they have in their picture that only needs a little helping hand to come to full view. Every painter is free to choose which opening to follow. Generally speaking the painting will develop better if the painter holds back the thematic form until it appears as though by itself from out of the whole colour configuration. Some pupils will not dare to take the step from colour to form because they do not want their imagination to be restrained in its free use of colour. This is perfectly acceptable since the quality of a painting does not depend on its having a subject.

The theme can be varied in many ways. The original colour interval can be replaced by other ones chosen by the pupils themselves, and these bring new experiences. A complete change of mood is brought about if yellow and blue are

exchanged for either red and blue or orange and green; there is an enormous difference if the green in the periphery changes place with the orange or red in the middle! In each case the task is to paint the picture according to the character of the colours the pupils have chosen to work with. These paintings will come from applying Goethe's theory of harmony based on sets of three colours: the harmonious ones, the characteristic ones and the non-characteristic or monotonous colours.

Some examples of Goethian colour sets have already been discussed. Of interest to the upper school is Runge's addition to the theory of colour*, because he further differentiates Goethe's so-called characteristic colours. He gives a special place to the group of mixed colours, orange-violet, violet-green and green-orange, calling them harmonious contrasts. A mixture of these contrasting colours produces shades of grey that are particularly successful in the case of veil painting. In each of the colour pairs one of the fundamental colours is doubled – to get reddish grey, bluish grey and yellowish grey.

After profiles, the pupils pass to full face presentations and other head positions. Once they have entered the creative element of painting this transition is not too difficult. The impression of a head in a certain position will often be suggested from the play of warm and cold or light and dark colours, together with the way the surfaces are placed. The teacher must demonstrate on the blackboard or easel to give the pupils clues about the altered proportions for the various head positions. Following full face paintings the pupils come to the different character of the faces of men and women and people of different ages. In a mixed class the faces of girls and boys may offer different characters. The contrast between a child and an old man is a particularly popular theme. The colour of skin and all the proportions are completely different. In the soft round face of a child the forehead is strikingly large, whereas the distinctly long face of an older person divides fairly equally into forehead, middle part of eyes and nose and the lower part of mouth and chin. The fresh and fragrant skin of the child is in direct contrast to the almost pale grey colour of the old man. This theme provides the teacher with an opportunity to speak more about the colour of a person's skin and the way it shows the soul playing on the instrument of the body. When the instrument becomes infirm it has the effect of dimming down the light of the soul, and the skin becomes pale. The 'mother and child' motif is the final climax of the theme.

For reasons of time it is not possible for every pupil to paint every theme. Therefore for the last exercise of all pupils can choose from various themes. This relaxing of control gives them more creative space and promotes their individual creativity. For this final stage pupils are given the option of using

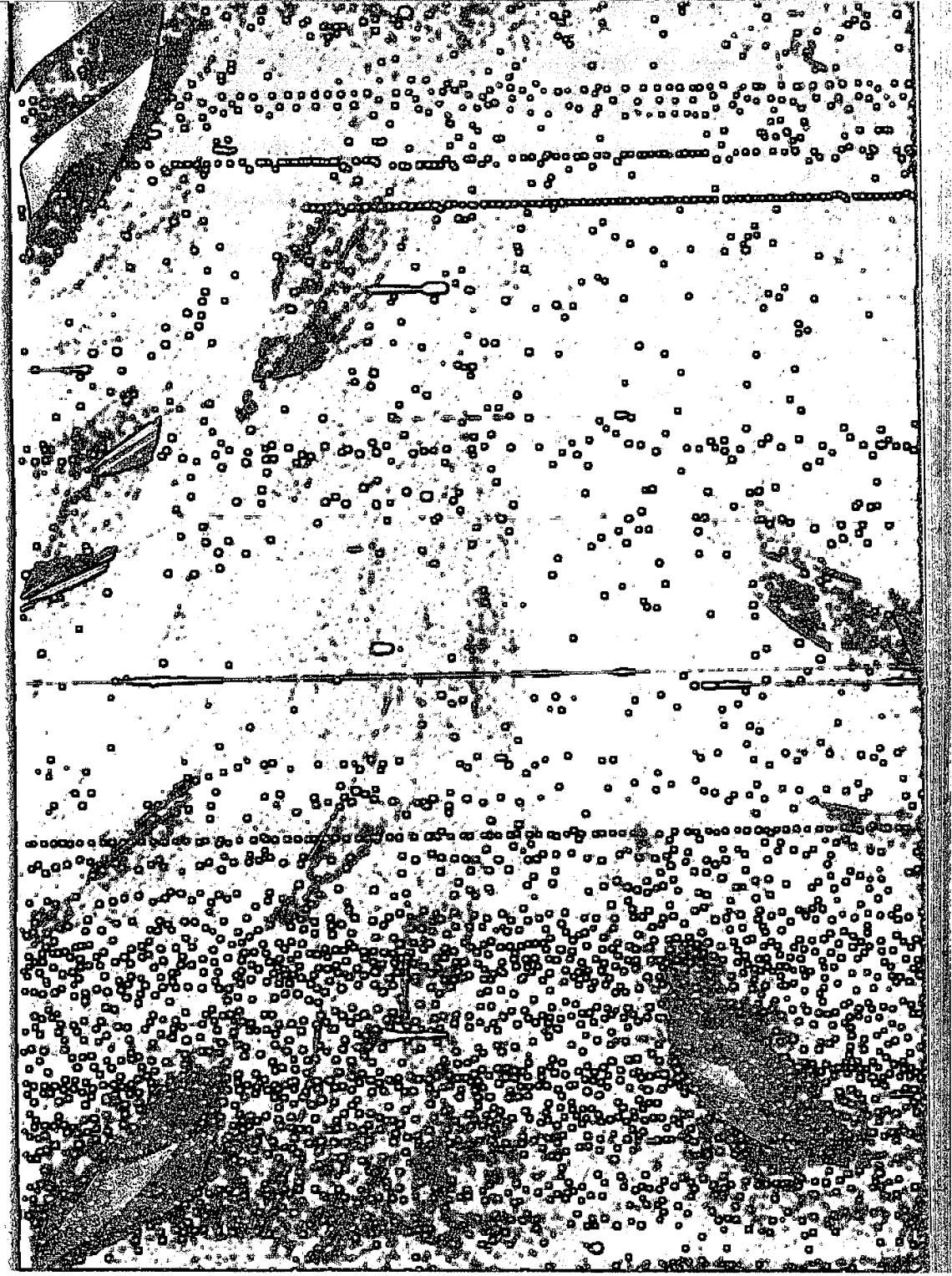
large painting papers and broad flat brushes. These generous proportions are a further inducement to be independently creative.

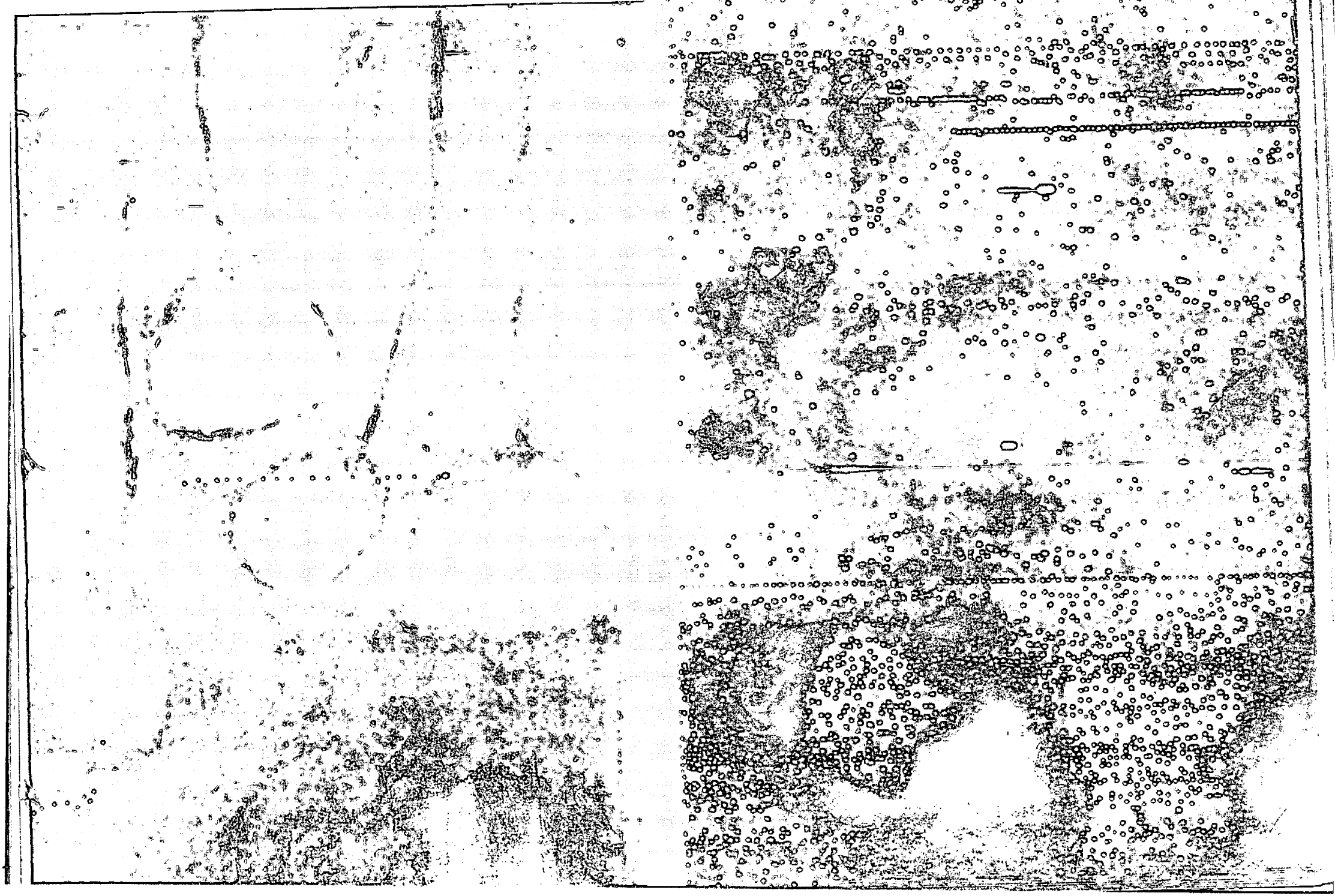
Special pedagogical Exercises

There are always special cases. To consider them as fringe phenomena, and therefore as less important, would be pedagogically unjustified. They often offer a particular important contribution. Each human individual is unique. In the painting lessons the progress of one individual has often proved to be an event for the whole class – this is both because the pupils always take a sympathetic interest in unusual occurrences, and because anything unusual and unexpected always makes a special impression. In cases of this kind the art teachers face difficult challenges. Everything depends on their success in sufficiently recognizing a pupil's individuality to be able to do it justice. Rules will not help here. The only guide will be the teacher's artistic sense combined with genuine interest in the individuality of the pupil. The right course to follow can vary. Here are a few examples from the author's experience:

A somewhat sensitive boy loved drawing in class 9 but did not take readily to the change over to painting in class 10. By class 11 he had started to specialize in the veiling technique, and in class 12 he perfected it even further. He refused to do wet-on-wet painting. His ability was generally admired by his fellow pupils and his own feelings confirmed this. However, despite all due respect for his ability, his achievements were too one-sided and perfect to be trusted. They seemed to be blocking any further artistic progress. What should I do? Should I intervene or let him continue to go his own way? It was a particularly difficult question because, in the light of the boy's disposition, there was a risk that however carefully I put it he might lose his love of painting and become

23. *"Forest theme". The original Veiling technique. Class 11.*
24. *Flower Painting as a living study of colour. "Harebells", Class 11.*
25. *Flower Motifs. "Sunflowers", Class 11.*
26. *Flower Motifs. "Tulips" (radiant image). Class 11.*
27. *The painting of heads as a free colour exercise. "A head in the mood of yellow-blue", Class 12.*
28. *"A study of a head". Arising out of the colour interval green-orange, Class 12.*





indifferent towards it. A conversation after school, in which I spoke about various possibilities of artistic expression and demonstrated with spontaneously painted sketches, awakened his interest to such an extent that he saw the one-sidedness of his previous painting and was prepared to make an absolutely fresh start with colour. My attempt had succeeded. The very next day he prepared a wet paper and began laying on generous sweeps of colour. He was experiencing it now as a means of expression and not merely aesthetically. He went on to make tremendous progress with his painting.

An opposite example:

Right from the first lesson of the term a girl showed a bored and supercilious attitude to painting. One knows, of course, how labile a young person's feelings often are at this age, and that the relationship of body and soul has not yet become re-established. Therefore it is best to ignore such behaviour. But this attitude proved unsuccessful in this case – a cleansing storm seemed called for. I had to tell her straight that her bias had absolutely no foundation. She was given the alternative either to take part properly or to stop altogether. The effect was startling. In a surprisingly short time she had familiarized herself with the world of colour and made a personal contact with it. In the course of the painting period she became a most enthusiastic worker, using every spare moment she could, and went on with painting after the period was over. Her artistic achievements were astounding.

A transformation need not be restricted to the painting period itself. Sometimes a teacher will notice that there is an important step forward just in between two periods. Another example from the author follows:

In class 11 painting lessons there was a girl who, although she had a good feeling for colour and an ability for colour composition, had difficulty in painting the shape of objects. When the moment came to condense the colours into form she stood as though in front of a closed door. She begged me to give her a demonstration on her own paper which, after a few objections, I did. The following year she tackled the subject with complete mastery. In the intervening time her difficulty to arrive at form out of the colour had metamorphosed into an actual faculty. She now had a great gift for painting heads; one picture appeared after the other, each one more convincing than the last. All I needed to do was watch and

encourage her. The only occasion when she required help was when the blank white of an overlarge painting paper daunted her.

This was a case that called for the greatest reserve on the part of the teacher. All she had to do was to give the pupil the best possible working conditions and to remove outer hindrances. A characteristic of this particular case was that the gift appeared solely at school and was not seen at home. This is quite a general phenomenon. Pupils who are especially successful in painting lessons and try to develop it further at home are usually disappointed. Their efforts lead to unsatisfying results because of the lack of the stimulating atmosphere provided by the lesson and the fact that the rest of the class are painting too. This shows that youthful creations are not as yet achievements of the ego but preliminary efforts that flourish in the nurturing atmosphere of the school.

Experience as a painting teacher shows that in general pupils who have a tendency to be pedantic ought to paint predominantly with wet-on-wet, because the flowing colours encourage a more generous attitude to art and to life in general. On the other hand pupils who are over-confident in their own gifts need to be set high standards of perfection and given specifically defined exercises, preferably in veiling. [illegible] The goal of painting attempts must be made to balance and harm[illegible] lessons should never be to train individual pupils to be specialists but to give all of them the opportunity to experience the world of colour and form. This will be of service to their whole development as human beings, and prepare them for many a good achievement in later life.

Review and Questions

The description of painting lessons in the upper school was written on the basis of many years' teaching experience by the author at the Ulm Waldorf School. The choice of themes and their sequence in the various classes is based on the indications of Rudolf Steiner. As each Waldorf School is autonomous the experiences would vary under other circumstances.

Rudolf Steiner basically provided teachers with models to follow which lead to a balanced relationship between artistic – pedagogical considerations and the reality of human nature. Rudolf Steiner always presented life situations in his models. All themes involve both an experience of the natural world and a grasp of human nature; the aim of painting always focuses on the experience of both the outer and the inner source of colour and on the interaction of both. His 'school-sketches' are based on the creative world. Young people encounter this first in Dürer's black and white pictures where the created world lights up in the form of all the four kingdoms of nature: stone, plant, animal and man. Artistic imagination has to add colour to the reality of the image. This approach to painting has an inner relationship to nature study and the study of man. The link with the curriculum is decisive for the choice of themes for art lessons.

In the lower school nature study begins with man and animal in class 4, and botany and geography come from class 5 onwards. In the upper school these come in the opposite order. After geology in class 10, botany and zoology follow in classes 11 and 12, and the study of man, which has been a guiding thread throughout all the lessons, becomes the culminating point of all the subjects. The intellectual learning process is transformed into practical and artistic activity. In the painting themes of the upper school there are no animals. Rudolf Steiner made special reference to this theme. In his *Colour Lectures* there are direct references to the way a painter should handle the realms of nature and man in order to express through colour the various levels of being. He distinguishes between image colours and radiant colours to indicate that colours must be used differently in the realm of lifeless minerals, living plants, ensouled animals or human beings in order to make visible the invisible aspect of their being.

This leads to a further look at the upper school's painting programme regarding animal themes. In class 10 the central theme is to develop colour imagination based on Dürer's black and white drawings. However positive the work turns out to be, it is unrealistic to expect every teacher to relate to it in the same way. It would be quite possible to begin the series of school sketches as early as class 10, starting with the sun themes. The tree theme could then follow in class 11. The preliminary exercises in class 10 begin with the introduction to veiling technique. An objection could be made that the art theme should not come out of the technical-handicraft aspect. Although this is correct, in this case the painting technique paves the way for progress in an artistic direction. Veiling exercises have a crystalline character, but a link with the mineralogy and crystallography of class 10 comes later. Some teachers believe the subjectless colour pictures should lead into presentations of crystals.

Class 11 looks predominantly at nature themes, especially trees, and flowers, in harmony with current botany. Living plants are at the second level of natural existence. Painting themes here are so varied, that the teacher can choose from many exercises. Themes, such as contrasts, intensification, distinguishing, and transformation, crystallize – they can be found among the themes of Rudolf Steiner's sketches. The rhythm of nature and the element of light play decisive parts where plant themes are concerned. Light veils of yellow make plants appear full of life and lift them above the dead quality of still life. In class 12 a gap appears between nature themes and the portrayal of man. This is apparent because of the lack of animal pictures that belong to the third level of natural existence. It is uncertain whether Rudolf Steiner deliberately omitted animal themes from the sketches he painted for school pupils. Animals express their nature through instincts which they have in common with human beings. Man's task is to tame them. Both "Melancholia" and "St. Jerome's Study" portray tamed animals. Perhaps at the point where human beings start working on the actual realm of instincts, it is a more appropriate time to paint the etheric world of the plants. Zoology is more scientifically inclined and calls on a different soul activity than the feeling in which painting lives. Schiller wrote:

> Are you searching for the highest and greatest of truths? You can learn it from a plant. For what a plant is through no will of its own, that you must will to be!*

Rudolf Steiner suggests that animals should be painted with pale enough shades to allow a dash of blue over the whole thing. The colour blue, identified as the radiance of the soul, points to the soul level of an animal*. Bearing this in mind

makes it easier to understand many animal pictures, especially blue horses as painted by Franz Marc and others. Real artistic feeling always reaches right into objective realms of existence.

Young people always feel much love and interest for animals, perhaps coming from an unconscious feeling that all people share a responsibility for them. Animal forms certainly belong to the choice of themes for modelling in class 9 and 10. Towards the end of class 11 or in class 12 the soul element of the animal world could be portrayed in painting lessons, even though nature and landscape themes are given priority. In the top class, however, the main emphasis should be on portraying man.

PART THREE

RUDOLF STEINER'S RECOMMENDATIONS REGARDING A NEW KIND OF ART EDUCATION

Fritz Weitmann

A Basis for Artistic Creation out of Rudolf Steiner's Approach to Colour

While studying mathematics, physics and chemistry at the Vienna Technical High School, the young Rudolf Steiner's search for knowledge led him by way of his own experiments more and more in the direction of Goethe's views. He reports at that time:

> I applied this orientation to the optics of the physicists. I had to reject much in this science. Then I arrived at views which paved a way for me to Goethe's Colour Theory. From this side I opened a door for myself to Goethe's writings on natural science.....I felt a need at that time to test through sense experience, by means of certain experiments in optics arranged by myself, the ideas I had formed regarding the nature of light and of colour... in spite of all objections raised by the physicists against Goethe's theory of colour, I was driven by my own experiments further away from the customary view and towards Goethe.

It was not purely by chance that the twenty-one year old student was recommended by his teacher, the Goethe scholar K.J. Schroer, to take on the task of editing Goethe's scientific works including his colour theory*. The publication of the very first volume on morphology gave Rudolf Steiner the recognition of the professional circles of his day. In his introduction he developed Goethe's principle of exploring the realm of the organic, and explained from a great many points of view the way Goethe endeavoured to study and compare the various phenomena in each field until the connection or the idea came to him as it were of itself. Goethe himself called this kind of scientific investigation 'an intuitive power of judgment'. Rudolf Steiner realized the importance of this method for researching the realm of the organic; he called Goethe 'the Copernicus and the Kepler of the organic world'.*

In 1890-91 – one hundred years after Goethe had begun his colour studies, the first edition of Goethe's *Theory of Colour* was published with a thorough introduction and a great many commentaries. Rudolf Steiner wrote then that

he would consider it one of the finest tasks he could undertake in life to write a theory of colour such as Goethe's, at the level of the natural science of his day. He never realized this aim, to begin with he did not have the necessary equipment, and later on he did not have the time.

Following his publications of the work of Goethe, Rudolf Steiner was appointed in 1888 to take part in the work on the large Weimar edition of Goethe's works. He had to prepare a part of Goethe's natural scientific writings – including the still unpublished literary legacy – for the Weimar 'Sophia edition'.

His first book: *A Theory of Knowledge Implicit in Goethe's World Conception*, appeared in 1886 as an addition to Goethe's natural scientific writings in Kürschner's Deutscher National-Literatur. In 1892 this was followed by *The Philosophy of Freedom – The basis elements of a modern world view – The result of observing the human soul as natural science observes nature*. Here Rudolf Steiner applies Goethe's method to the realm of thinking. This was the beginning of Steiner's spiritual research. His further work on Goethe's colour theory is part of this.

At the age of thirty Rudolf Steiner wrote in a letter:

> To want to stop at the level reached by Goethe is absurd. Yet unless one thoroughly involves oneself with him and devotes oneself heart and soul to his impulses no progress will be made. This will not happen as fast as our contemporaries would wish, but... we must on no account allow ourselves the luxury of being as naive as that....*

Goethe was profoundly convinced of the truth and the timelessness of his work:

> I have no grand illusions about my poetical achievements... however, I am proud of the fact that in the difficult science of colour I am the only one in my century who knows the truth....*

The actual motive of research for Goethe and Rudolf Steiner was to promote art and bring a fresh impulse to painting. The foremost incentive for Goethe to study colour came from the need of painters who could find no help from existing theories but were forced to rely entirely on their own feelings and dubious colour tradition. It was ideal that his theories should be speedily tried out, leading to further development. This further development was undertaken by Rudolf Steiner. Goethe's observations on the sense perceptible-ethical effects of colours were consistently followed up in Rudolf Steiner's research to reveal the spiritual nature of the physical colours.

Although Rudolf Steiner never completed an entire 'Theory of Colour', he gave many lectures containing descriptions of the nature of colour.

Most of Rudolf Steiner's lectures have now been published in German, and some translated into English. Therefore it is becoming easier to review his theories. His ideas on colour describe the supersensible nature of the colours. Knowledge of colour goes beyond physics into a spiritual scientific way of looking at the world

> so that a theory of colour can actually be founded which, even though it is far removed from the habits of thought of modern science, can supply a proper foundation for artistic creation...*

There seem to be certain important basic ideas and themes which can be verified through personal experience.

Goethe arrived through exact experiment and attentive observation at the archetypal phenomenon of colour, the point where colour passes from the physical to the non-physical realm. He was personally convinced that in essence it originated in the realm which he calls the kingdom of the Elohim. However, as he could not prove his own personal conviction within the framework of his colour theory, he decided that it would be better not to amplify this belief for fear of being suspected a fanatic.

Goethe describes the individual colours and their specific feeling content. He recommends looking through pieces of coloured glass in order to identify oneself as intensely as possible with one particular colour and experience the special quality of a colour, its soul language.

Rudolf Steiner goes beyond this and shows how an experience of colour can be increased to the point where it passes from a physical to an 'ethical-spiritual' experience.

> Human beings will make significant discoveries with regard to this in the future. They will in fact really unite in their ethical-spiritual part with the impressions brought them by their senses. A tremendous deepening of the human soul can be foreseen in this field.

He then describes the process of having a deepened experience of red which, starting from a sense impression, turns into a moral feeling and then a colour imagination that inspires artistic creation:

> We will simply imagine we are looking at a surface shining all over with the same shade of strong vermilion, and let us assume we succeed in

forgetting everything else around us and concentrate entirely on experiencing this colour, so that we have the colour in front of us not merely as something that works upon us but as something with which we ourselves are united, that we are within. You will then be able to feel as though...the whole of your innermost soul has become colour, and wherever your soul goes in the world you will be a soul filled with red, living in, with and out of red. You will not be able to experience this intensely in the soul, however, unless the corresponding feeling is transformed into a moral experience...

If we float through the world as though we were red....we shall not be able to help feeling that this whole red world is filling us with the substance of divine wrath coming towards us from all sides in response to all the possibilities of evil and sin in us. In this infinite red space we shall be able to feel as though we were before the judgment of God... And when the reaction comes, when something emerges in our soul... I can only describe it by saying we learn to pray. If you can experience in red the raying out and glowing of divine wrath, together with all the possibilities of evil in the human soul, and if you can experience in the red how one learns to pray, the experience of red is enormously deepened. We can also experience how red takes on form when it enters space. We can then experience a Being that radiates goodness and is full of divine kindness and mercy, a being that we want to feel in the realm of space. Then we shall feel the need to let this take on a form arising out of the colour itself. We shall feel the need to let space be pushed aside so that goodness and mercy may shine forth.

Before space was there it was all concentrated at the centre, and now goodness and mercy enter space

and just as clouds are driven apart, all this is pushed away and recedes to make way for mercy, so that we have the feeling that what is being scattered must be drawn in red. Here in the middle (he did a coloured drawing on the blackboard) we shall have to indicate faintly a kind of magenta shining into the scattering red. We shall then be present with our whole soul as the colour takes on form.... We shall feel an echo of how the beings who belong especially to our earth process felt when they had ascended to the Elohim stage and learnt to fashion the world of forms out of the colours.

This describes the process in which colour becomes form showing it to be a force at work within the creative element of colour.

Rudolf Steiner continues to show the experience that can come from other colours, if a similar direction is taken. Completely different soul experiences will arise depending on the initial colour:

Thus we learn to know the inner nature of colour...We can foresee a time when an artist's preparation will mean a moral experience in colour, of this kind, when the experience preparatory to artistic creation will be much more inward and intuitive than it ever was in past ages.

The inner dynamic of colour is a part of its living nature. This overcomes the surface nature of the paper on which it appears; the colour seems to move, either coming in front of the surface or going behind it. Red appears to attack, to come forward whereas blue seems to retreat and wants to take an onlooker with it. This aggressive or passive nature of the colours suggests inner colour movement where colour distances and spaces are not three-dimensional but can be experienced both in the soul and in space as a pictorial colour space. Rudolf Steiner says that anyone with a sensitive feeling for colour cannot visualize a red and a blue ball standing still; he sees them revolving round one another, the red one moving towards him and and the blue one away from him. In themselves the forms are stationary.

But the moment a form is coloured the inner movement of the colour sets the form in motion, and the world's ripples, spiritual ripples, pass through it. If you colour a form you immediately give it a soul quality of a universal kind... You are breathing soul into dead form when you give it colour*.

Because colour is alive and shining, its movement brings about a kind of colour play:

The colour red, when it moves and advances towards you, has directly in front of it a kind of orange aura, yellow aura, green aura. And when blue moves it will bring other colours along with it.

This inner dynamic of the colours can also be called colour perspective, and this was taken into account by painters right up to the time of the early Renaissance. Line perspective then largely replaced this qualitative spiritual colour perspective. Spatial perspective was experienced which takes into account sizes

in space:

> Now distant things were painted not blue but small; close things not red but large... Today we live in an age when we must find our way back to the true nature of painting.

In a lecture given in 1923 Rudolf Steiner refers to colour in its unattached state, pointing out how colour was experienced differently in earlier times from nowadays. This is evident in early paintings and sculptures. Rudolf Steiner tries to explain this difference by describing what human beings experience unconsciously between falling asleep and waking up:

> Things are non-existent as far as the aspect of weight, measure and number are concerned... What does exist there, if I may use the expression, are unattached sense impressions moving freely about. But human beings at their present stage of development are not capable of perceiving an unattached red or waves of unattached sound moving about freely... One could say: here on earth we have solid, weighable objects (he drew a picture) and the redness or yellowness which the senses perceive on them adheres as it were to these. When we are asleep redness and yellowness move about freely and are not fixed to conditions of weight. And it is the same with sound: it is not the bell that rings, but the ringing that moves freely.

In the physical world we tend to consider something an optical illusion if it does not have weight:

> We see a red object. In order to convince ourselves that it is not an optical illusion we lift it up, and if it is heavy that is a guarantee that it is real.

Anyone who attains consciousness in his ego and astral body during sleep

> eventually realizes that these free-floating colours and sounds also have something of a similar nature, yet it is different. Free-floating colours have the urge to vanish into the far reaches of the world; they have an anti-gravity. These earthly things press towards the earth's centre (he did a drawing), those press outwards towards release into world spaces.

It is the same thing with measurements.

> You will discover this if, let us say, you have a small reddish cloud hemmed in by a large yellow formation: you will not use a measuring stick but you will measure the weaker looking yellow one qualitatively by means of the red one that looks the stronger. And just as the measuring stick tells you that it is five metres, in this case the red will tell you: If I were to spread out I should go into the yellow five times. I must expand and get larger, then I shall become yellow.

Counting therefore also turns into something qualitative.

> With his waking consciousness a human being sees only the outer side of the minerals, plants and animals. But he is in the company of the spiritual element indwelling these creations of the natural world when he is asleep... And when he enters into himself again on awaking his ego and astral body maintain their affinity to these outer things and cause the human being to acknowledge an outer world...

> If we go back to very ancient times, when people still had primitive clairvoyance, they were not so aware of the aspect of measure, number and weight regarding earthly things. What they were aware of was the world's carpet of colours and the movements and waves of sound. Physical existence was accompanied by these experiences. This gave them the possibility of having quite a different conception of mankind from the present one, namely they regarded mankind as the product of the whole universe. Man was a confluence of the cosmos... They thought of the human being more as an image of the world. The colours floating in from all sides gave him the colours, and the harmony of the spheres sounded through him giving him his form.

This way of living in the qualitative element caused people to create art in earlier times.

> The last traces of what once existed in the realm of art and which has now disappeared, namely painting from out of the cosmos - which they could do because weight still played no part, can be seen for example in Cimabue and especially in Russian icons. Icons were painted from out of the world, from out of the macrocosm; they are like a little bit of the macrocosm. Then this came to an end, for they could not do it any more, simply because mankind does not see things this way any longer ...

There is a tremendous gulf between Cimabue and Giotto. For Giotto actually started with the kind of thing which reached its climax with Raphael, Cimabue still worked out of tradition, whereas Giotto was half way to naturalism. He was aware that tradition was no longer alive, that artists now had to come to terms with the physical human being, for the cosmos had receded; that they could no longer paint out of the gold, but had to paint out of flesh and blood... Giotto was the first to paint things in such a way that they had weight... The cosmos receded from mankind, and all that people could now see was man as a being of weight. So flesh took on weight, yet because there was still a feeling for olden times it so to speak took on as little weight as possible. And the Madonna came into being in contrast to the icons; icons being weightless, whereas the Madonna has weight even though she is beautiful. Beauty still persisted... Raphael's style of painting, which actually arose out of what *Giotto* made of *Cimabue*, can remain artistic only so long as the glow of beauty from ancient times still irradiates it...

But this came to an end...And nowadays, where art is concerned humanity sits between two stools, the icon and the Madonna, and it is up to us to discover the nature of free-flowing colour and free-flowing sound that have the kind of weight which is opposite to measurability and weighable countability. We must learn to paint out of the colour. However primitive and poor our present experiments in this direction are, it is our task to paint out of the colour and to experience colour itself, free of weight...'

This was followed by a reference to the large water colour pictures Rudolf Steiner painted for the programme of performances in the Goetheanum:

> If you look at our elementary efforts at programmes you will see that although it is only a beginning it is at least a beginning in the direction of freeing the colours from weight, experiencing colour as a self-supporting element, and getting the colours to speak...

Another point of interest is the change in colour perception in the course of successive cultural epochs. Rudolf Steiner repeatedly pointed to the fact that the ability to perceive colours changes over long periods of time. He cited the case of the Greeks who saw the world very differently from the way we do nowadays, and Greek literature confirms this. For instance the pre-Socratean Xenophanes of Colophon made the following remarkable statement about the rainbow:

> En t'Irin kaleusi, nephos kai tuto pephyke, Porphyreon kai phoinikeon kai chloron idesthai'.*
> What you call Iris is also essentially only a cloud that looks magenta, light red and yellow-green.

The Greeks used the word *chloros* for green, and used it also for describing honey, yellow resin and yellow leaves in autumn. Apparently therefore they did not distinguish the colours green and yellow. They also had the same word for lapis lazuli as for dark hair, 'the colour of violets'. Plato related the four main colours white, black, red and yellow to the four elements, and named several mixed colours. To our surprise we find among ultramarine blue *(xuavoũv)* as a mixture of 'radiant white and saturated black'*. Blue was perceived only as darkness, so we could say the Greeks were blind to blue. They could not see the blue constituent in green.

> The whole environment looked much more fiery to the Greeks because everything they saw tended towards red ... It is evident that the Greeks' whole colour spectrum had shifted towards the red side; and they did not perceive the blue and purple side. They saw purple much redder...than present-day people do.

The sense of colour has changed:

> We have acquired a perceptiveness for the blue part of the spectrum... The Greeks were primarily receptive to red...But as we develop an awareness for this part of the spectrum... (he did a drawing) and become more and more fond of the colour blue and blue-violet, our senses have to change completely of course...

On another occasion Rudolf Steiner brought this aspect of colour in connection with light and darkness. Goethe realised that colour arises through the interaction of light and darkness. Rudolf Steiner showed many aspects of the parts that light, darkness and colour play in world existence. The following comes from a lecture given in 1920:*

> We experience light spread out in the phenomena of nature. However we also experience it in thought – we speak of the light of thought. We often use the expressions "Now I see" or "It dawns on me". The light of thought illumines the past, and points back to things that once existed. Just as light is related to thought, so is darkness related to will. The will,

striving towards action, leads into the future. We feel this as dark. Thus light and darkness appear to us as thought and will. They have been woven into the human organization; the thoughts living in the head and the will working in the limbs. These polar opposite forces also come to expression in our natural environment.

In the brightness of the Spring flowers we see an enhancement of light. This is the past; it is dying beauty. The ripe fruits of autumn contain in material form the seeds for the future. Within us light is thought, in its external form will is matter. Between the blossom and the fruit are the plant's leaves. In the green of plants the light of the past comes together with the darkness of the future in the present. Light-related yellow and darkness-related blue combine in green. When this turns bluish we sense the future, when light is intensified to heat and becomes red, the past is shining through (see drawing).

Fig. 1

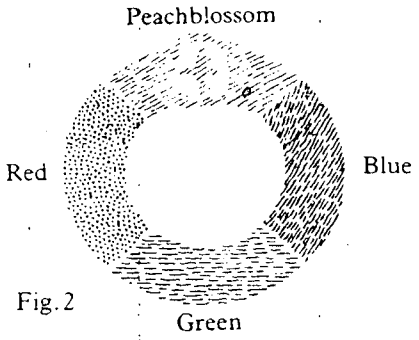


Fig. 2

If we were to continue the band of colour in both directions we should have the rainbow spectrum known to physics. But we shall not get the real spectrum until we bend the band of colour into a circle. The light yellow-red on one side joins up with the dark blue-violet on the other to make the colour of peach blossom – the human colour. It is opposite in the circle:

But that is where we are as human beings; we have within us what the green plant world has externally, our human etheric body is the colour of peach blossom. And this is the colour which appears at the point where blue goes over into red... But because we are within the peach blossom... we can perceive it just as little as we can perceive thought as light...Therefore we omit peach blossom... and only see the coloured world from blue to red and from red to blue, by way of the green.

*The Nature of Colour**

In three lectures for painters the important new conception is the distinction between 'image' and 'lustre' colours. The way Rudolf Steiner came to these concepts affects painters right into the practical handling of colour.

Rudolf Steiner painted three green patches on the blackboard to demonstrate how experimenting with colour leads to colour experience. He put vermilion inside the first one, peach blossom inside the second and blue inside the third, and drew attention to how different they all looked. To make an even stronger appeal to the imagination he suggested the picture of red, peach blossom and blue people walking on a green meadow. This produces quite different experiences. The red people enliven the green of the meadow: it becomes even greener, richer and more radiant. The red figures appear to move about, to hop and skip – they should actually be painted like flashes of lightning. In contrast to this the peach blossom people behave quite neutrally and do not affect the green meadow, nor their own colour. The green cannot assert itself at all where the blue figures are concerned; they tone it down so that it becomes bluish itself and seems to disappear into the blue. Rudolf Steiner says that such imaginative experiments are necessary to enter the world of colour.

Rudolf Steiner describes the image nature and the lustre nature of colours. The four image colours are green, peach blossom, white and black. Green is the colour closely connected with plants. It is a very powerful connection. Yet green is not the expression of the archetypal being of a plant. A plant's being is its life, its 'form body' or 'etheric body'. This is what distinguishes a plant from a mineral. Yet the mineral element is incorporated in the plant, it fills out the form body. Green is the expression of the lifeless mineral element in the living body of the plant. It appears as the image of it. Rudolf Steiner compares it with the photographed or painted image of a person in contrast to the real person. As green derives from the element of lifeless mineral it becomes the lifeless image of the living.

Green represents the lifeless image of the living.

Peach blossom or the colour of human skin presents itself from outside as the colour of the skin but is also experienced within a human being. Rudolf Steiner says that we experience our own soul as being skin colour. This becomes apparent in the way a person's soul shows itself on the surface of their skin, either in passive withdrawal or positive assertion, for the colour will tend either towards green or red.

Peach blossom represents the living image of the soul.

The colour white is related to light. The source of all illumination is the sun; apart from the colours of sunrise and sunset its light is experienced as white. White light is perceived differently from the colours that are attached to things. It makes colours and objects visible but shows itself only in its effects. People feel an inner kinship between the light and their own essential being. If a person wakes up in darkness at night, there is a feeling of inability to reach their real being.

> In light...we find what really fills us with spirit, connects us with our own spirit...There is a definite connection between the "I", our spiritual being, and this experience of the light shining through us... The "I" is spiritual, but it must experience itself within the soul; this it does when it feels itself filled with light.

White or light represents the soul's image of the spirit.

The polar opposite of white is black. As white is connected with light so black is connected with darkness. The most impressive example of black in nature is coal which owes its whole existence to its blackness.

> Black is so characteristic of coal that, were it not black but white and transparent it would be a diamond... Just as the plant has its image in green, so does coal have its image in black. Now submerge yourself in black: you are completely surrounded by black... in this black darkness a physical being can do nothing. Life is driven out the plant when it becomes coal. Black shows that it is hostile to life....
>
> Our soul life deserts us when this awful blackness is within us. But the spirit flourishes; the spirit can penetrate the blackness and assert itself within it.

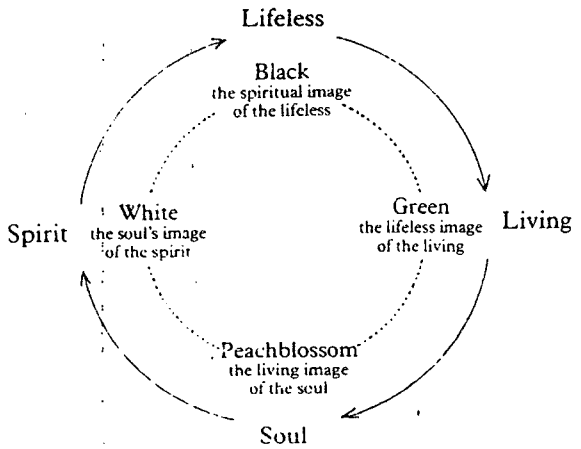
Rudolf Steiner then refers to the art of black and white:

> If you use black on a white surface you introduce spirit into it; the effect of a black stroke, or of an area of black, is to spiritualize the white. You can bring spirit into the black. But this is all that can be brought into it.

Black represents the spiritual image of the lifeless.

In this grouping of the four image colours the objective nature of the colours indicates also the reality of the world of images:

Green represents	*the lifeless image of the living*
Peach blossom represents	*the living image of the soul*
White or light represents	*the soul's image of the spirit*
Black represents	*the spiritual image of the lifeless*



If this scheme is arranged in a circle it forms an evolutionary cycle, a progression through life, soul, spirit and death and a return to life again. Ascension through the colour series black, green, peach blossom and white, parallels ascension through the kingdoms of nature from the lifeless through the living and the soul to the spirit, i.e. from the mineral to the plant, animal and human being.

In the second of the three lectures Rudolf Steiner discusses the image colours from another aspect. He describes their origin using concepts from the study of shadows. He distinguishes between that which gives, or the illuminant, and that which receives, or the shadow-thrower. In the interaction of these two factors the shadow arises; the image colour or – as he calls it – the shadow colour.

Illuminant:	*shadow-thrower:*	*shadow or image*
the lifeless	the spirit	black
the living	the lifeless	green
the soul	the living	peach blossom
the spirit	the soul	white

Each of the four realms, the lifeless, the living, the soul and the spirit, occurs as an 'illuminant' and then as a 'shadow-thrower'. For instance, if the shadow-thrower is the lifeless and the illuminant is the living, green arises as the image of the living in the lifeless. Thus green is the shadow of the living in the lifeless, or 'the lifeless image of the living'. All the other formulae for the image colours can also be arrived at by way of this chart.

Rudolf Steiner illustrates yet another way in which green and peach blossom can arise, and goes on to discuss the other colours.

> If I get yellow to shine onto a steady white from one direction and blue from the other I have green. Peach blossom is not produced so easily. Imagine I paint with black and white alternately, first black, then white, then black again, and so on, and the black and white are not still but in movement, weaving into one another. Then imagine this interweaving movement of black and white shone through, irradiated, by red – then peach blossom arises.
>
> Notice that we must make use of quite a different method. In one case we take a steady white, i.e. one of our series of image colours, and we let two other new colours play into it. In the other case we take two of the

> colours we already have, black and white, and set them in movement; then we take another new colour, red, and let it shine through the black and white. The same thing will strike you when you observe the living element. Green you will find in nature, but peach blossom, in the sense I mean, you will find only in the healthy human being whose soul is present within his physical organism. This colour can only be approximately reproduced (in painting). One would really have to paint the process, and this process is actually present in the human organism. For it is never at rest, and just because it is always in movement this colour arises in the skin....

Green and peach blossom are just as different when used in painting as they are different in their origin. Green tends to move planewise, and wants to be confined – plant leaves are the prototype of this – but a confined peach blossom is unbearable, it wants to fly away. Rudolf Steiner continued to characterize the colours yellow, blue and red, the so-called 'lustre colours'.

If yellow is spread onto a surface evenly and within boundaries, in the manner of green, this seems completely against its nature. The light-filled character of yellow wants to ray out and dissolve boundaries. It wants to be stronger in the centre of a surface and become weaker as it gets further out.

Yellow wants to shine outwards.

Blue on the other hand should be deeper on the outside and weaker in the middle. Blue dams itself up at the edges and has lighter and lighter rings towards the middle.

Blue wants to shine inwards.

Red – magenta red, shining in full force beside yellow and blue – holds the balance between them. It wants to spread out evenly over the surface. Red can best be understood in comparison with peach blossom, in which it appears as an illuminant. Peach blossom wants to disperse and become thinner and thinner until it has evaporated altogether. Red asserts itself strongly.

Red affects me through its stillness.

Despite its tendency to evaporate, peach blossom is not mobile in the wilful manner of yellow, red or blue. The intense mobility of these colours distinguishes them from the shadow character of the image colours.

The essential nature of these colours lies in their radiant quality: yellow radiating outwards, blue radiating inwards...and red, which neutralizes them both, radiating evenly.

For this reason Rudolf Steiner calls them 'lustre colours.'

Yellow Red Blue

Yellow is a joyful colour. Being joyful means, fundamentally, being filled with a greater vitality of soul.

Yellow is the lustre of the spirit.

Blue, which gathers itself together inwardly, becoming enclosed within itself, is the lustre of the soul. Red, filling space evenly, is the lustre of the living.

Yellow is the lustre of the spirit
Blue is the lustre of the soul
Red is the lustre of the living

Red can easily be accepted as a surface . However, when blue is spread evenly on a surface, it is outside the human element.

When *Fra Angelico* painted his even, blue surfaces he summoned, as it were, something divine into the earthly world. He felt he could paint an even blue only when he wished to bring something divine into the earthly world.

In order to fix yellow by painting it as an even surface it must be deprived of its will to radiate; it acquires weight and becomes the colour of gold. Many old masters painted a gold background, fixing yellow on the surface.

When, like Cimabue, they painted a gold background, they gave the spirit a dwelling on earth, they realized the heavenly in their pictures.

The figures could stand out from the gold background, growing out of it as creations of the spirit.

Think what this signifies for art. We have an artist who knows that when he handles yellow, blue and red he is conjuring into his pictures something that has an inwardly dynamic quality that gives it character. If he is working with peach blossom and green or black and white he knows that an image quality is already present in the colour. This kind of study of colour....is so alive that it can pass immediately from a person's soul experience into art.

The living, the soul, the spirit and the lifeless - with only one exception – can appear either as image or as lustre. The lustre colour corresponding to the image colour of the lifeless (black) is missing. In an extract from one of Rudolf Steiner's notebooks there is a reference to brown; though this colour is not mentioned in the lectures.

	Image colours:	Lustre colours:	
Green	the lifeless *image of the living*	Red	the *lustre of the living*
Peach blossom	the living *image of the soul*	Blue	the *lustre of the soul*
White	the soul *image of the spirit*	Yellow	the *lustre of the spirit*
Black	the spiritual *image of the lifeless*	Brown	the *lustre of the lifeless*

It is not difficult to gain a living conception of the double nature of colours: If anybody stares intensely at a strong red and then looks at a neutral surface a green after-image will appear:

The red shines into you and forms within you its own image. But what is the image of the living within you? You must destroy the life to have the image. The image of the living is green. It is little wonder that the lustre red, when it shines into you, forms green as its image.

Yellow, blue and red: these are the outer aspects of an inner reality. They are illuminants. Green, peach blossom, black and white are never more than reflected images, always of the nature of a shadow...Shadows and images are closely related.

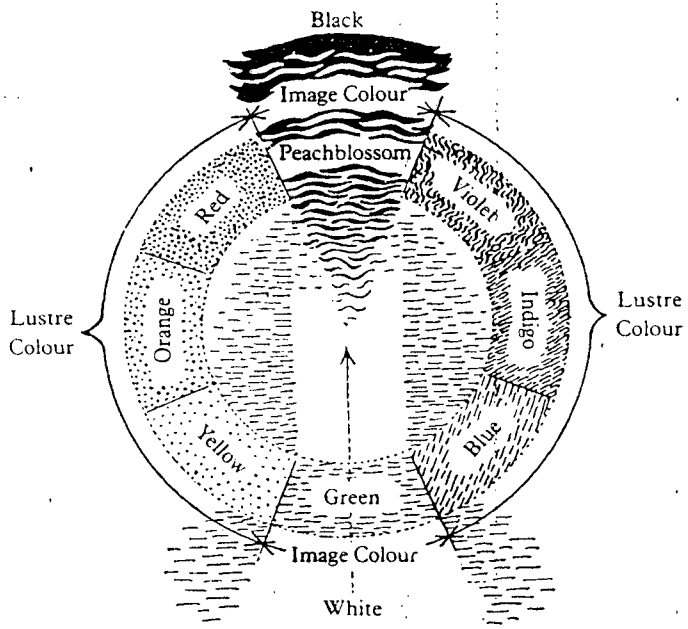
Lustre colours are the active colour types. They are the colours that shine, that have inner differentiation, inner movement, whereas the others are quiescent images. This is something which has its analogy in

the cosmos. There we have the contrast between the motionless constellations of the zodiac and the differentiating activity of the planets. It is only a comparison, but one that is inwardly founded on fact....

These colours can be arranged to form a 'cosmic' picture. In the physical spectrum colours are ranged alongside one another in an endless row of red, orange, yellow, blue, indigo, violet.

But in the spirit and soul everything is linked together. So we must join the ends of the spectrum.

If the warm side of the spectrum is connected to the cold side to form a circle, peach blossom occurs at the top as an image colour with green opposite it. This is a significant pattern. There is an image colour at the top and an image colour at the bottom, a lustre colour on the right and a lustre colour on the left. Magenta, as the third lustre colour, is present in the glow of the peach blossom. Black and white enter the sphere from above and below, indicating their presence in a mysterious kind of way in the creation of green and peach blossom (see drawing).



You see, if I bring the white up here (from below upwards) it would stay in the green, but then the black comes down to meet it from above and they begin to ripple into each other creating, with the red lustre, peach blossom.

This arrangement of the colour circle shows us the whole series of colours culminating in the peach blossom colour of our skin.

If we train ourselves to see not only peach blossom but the movement inherent in the colour of our skin, and train ourselves to see this colour not merely as an indication of what is human but as something in which we live, we shall become aware how the soul dwells in the physical body as the colour of the human complexion. This is the entry, the door, that leads us into the spiritual world. Colour is something that descends onto the surface of objects, but it also raises us from the purely material and leads us to the spiritual.

Aspects regarding Painting

Although Goethe touched on the problem of colour being attached to matter, he could not reach 'the inner causes of colours'. Nor did he know how to distinguish between image and lustre colours. Runge made initial steps in this direction, *and he spoke of transparent and opaque colours, describing opaque colours as the 'image' of the real, transparent colours.

The 'appearance of colour in material existence' is highly relevant to the art of painting because the phenomenon of giving colour to matter is more or less put into the painter's own hands. A painter must even use material colours to reproduce pure immaterial colours such as those of the rainbow spectrum:

For when we paint we do this phenomenon ourselves, or so it seems. We fix the colours and try by means of this fixed colour to evoke the impression of a painted picture.

Colour in the Plant Realm

In the external world green is the most clearly visible expression of this

image character. Black and white are in a certain sense borderline cases and for this reason are not generally considered by many people to be colours. Peach blossom, we have seen, is really only to be grasped in movement. Thus in green the image-character is most typically portrayed and with it we have the colour which is really attached to the external world, in particular to the plant kingdom. In the plant, therefore, the origin of fixed colour as image really becomes apparent.

In their original condition plants can be viewed in an element of flowing colour; it was only in the later phase of evolution that they incorporated mineral substance into themselves and acquired the distinct form that we nowadays know as plants.

The plant world is full of bright shining colours. Blossoms open up to the sunlight, thus showing their relationship to light. The sun transforms plant green and produces the glowing colours out of it. It is the sun that works on the green and changes its condition*. The fixed green of plants has the same relationship to the radiant colours of the blossoms as moonlight has to sunlight.

> Moonlight is the image of the sunlight. In the same way the image of light, colour as image, appears in the green of the plant.

When painting plants and landscapes an artist must first of all strengthen the image character of plant life and its green. At the same time all the other colours must be made darker and more shadowy than they are in reality. Then a yellowish-whitish veil of light must be painted over it all, symbolizing the lustre of sunlight - the lustre of the spirit. By painting this lustre over the dimmed down image colour the appearance of the living will be created. Rudolf Steiner considers that the old masters could not actually paint plant landscapes, because they did not make the distinction between image and lustre colours, all colours were given an image character.

Colour in the Mineral Realm

In the mineral realm colour appears in the form of shining crystals and jewels.

> The moment we see green, red, blue or yellow in a precious stone we look back into an infinitely distant past. For when we look at colours we do not merely perceive what is contemporary, we look back into distant

> time-perspectives... And when, in looking at a jewel, we look back into time-perspectives, we are looking back upon the primal foundation of earthly creation....*

The whole inorganic mineral realm seems to shine from inside. Therefore colours must be given a lustre character when painting minerals, they must all be made to shine. If minerals are painted exclusively with image colours the real nature of a thing is missing.

> We must endeavour, when painting something lifeless, to give the image the character of a lustre....We must give the colours which have an image character (black, white, green and peach blossom) an inner luminosity – a lustre character. Then what has been enlivened to lustre can be combined with the other lustres, blue, yellow and red. The image colours must have their image character stripped off and be given a lustre character; when painting the inorganic the painter must always be aware that a certain source of light, a dim source of light, lies within the things themselves. In a sense he must think of his canvas or paper as such a source of light. He needs the shining light present in the surface on which he paints....
>
> It is necessary to imbue the colour with the quality of reflected light, of something which shines back at us; otherwise we merely draw and do not paint....If a wall is depicted in a painting it will not be a wall but only an image of one unless the colour is made inwardly luminous. We must make the colours shine inwardly; they will then, in a certain sense, become mineralized.....
>
> Recall the diagram... when I said that black is really the image of the lifeless in the realm of spirit. We made the radiance come from the spirit and let the lifeless be reflected within it. And when we colour the lifeless, when we transform it to lustre, we evoke its essential quality. This is in fact the process we should follow when we paint inanimate things.

The essential difference in the presentation of the organic and the inorganic realm lies in the handling of light. In the organic realm illumination is from outside, and a whitish-yellow sheen has to be painted over the image colours. Inorganic objects are illuminated from within, so the image colours must be given a lustre character.

The Painting of Animals

The essence of an animal is its soul nature, whereas the essence of a plant is life. An expression of ensoulment in colour comes in blue, the 'lustre of the soul'. Blue should therefore be used for painting animals. The animal soul gives animal nature an inner brightness.

> ...If you want to introduce animals into your landscape you have to paint the colours of the animals somewhat lighter than they really are and spread a pale bluish light over them. If you want to paint, shall we say, some red animals (not very often of course!) then you must allow a light bluish shimmer to play over them, and where an animal is among vegetation you must lead the yellow shimmer over into the blue one. If you motivate the transition, it will enable you to paint the animal kingdom without merely giving the impression of a lifeless copy.

By making the colour lighter the image colour turns into a lustre colour, and darkening the colour turns a lustre colour into an image colour. For these two different treatments Rudolf Steiner coined the expressions 'lustre-image' and 'image-lustre'.

> If we paint a lifeless object it has to become all lustre, shining from within; if a living plant, then it must appear as lustre-image. We first paint the image colour so strongly that we depart from the natural colour. We give it the character of an image by painting it somewhat darker and then spread the lustre over it: lustre-image. If we paint animals, or ensouled beings, we have to paint the colour as image-lustre... We achieve this by painting more lightly and transforming the image into lustre, but onto this we put a wash that in a sense obscures the pure transparency (the blue shimmer). In this way we get an image-lustre effect.*

The Painting of Human Beings

The next stage is to pass from painting ensouled creatures to those with a spirit, to human beings. They are painted as pure image colour. Human beings appear as an image of their own being. The colour of our skin is a pure image colour. It

is a combination of all the colours in the world, a fact which points to man as an image of the whole universe, as indicated in Genesis.

However, not only skin colour but all the other colours must acquire image character when used to portray human beings and their clothing. Yellow, blue and red have to be deprived of their lustre character, their 'will'. If yellow and blue are painted as uniform surface colours they are transformed into image colours. If the radiance of the colours is also toned down a little or if yellow is given a certain weight, as with gold, the image character is further emphasized.

> Above all one needs to develop a feeling for the change that takes place in a colour when it is transformed into image... The quality of image colour approaches more nearly to the nature of thought and the further we penetrate into the image quality the closer we come to thought. When we paint a human being we can in reality only paint our thoughts about him, but these thoughts must be clearly expressed. They must be expressed in the colour. And one lives in the colour if one can say for example, when painting a yellow surface: it ought really to fray out at the edges, but as I am transforming it into an image I must let it be modified by the other colours it meets. I must, as it were, apologize to it in my picture for not letting yellow have its own way.

Rudolf Steiner speaks elsewhere in greater detail of how the embodiment of colour in minerals, plants, animals and human beings mirrors the whole evolution of the earth. In re-creating the colour processes a painter connects himself with this. A painter must always live in the colour when painting.

Mineral	–	lifeless	=	*lustre*
Plant	–	living	=	*lustre-image*
Animal	–	ensouled	=	*image-lustre*
Man	–	spiritual	=	*image*

> Living in colour means that I let the paint dissolve in my paint pot and only when I have dipped my brush in it and spread it over the surface do I allow it to become fixed.... In this way I gain a relationship to colour. My soul must live with the colour. I must rejoice with yellow, feel the seriousness and dignity of red; I must share with blue its gentle...mood. I must spiritualize the colour if I am to transform it into inner capacities. I should not paint without such a spiritual understanding of colour, and especially not the lifeless, mineral kingdom.

Beginning from pure observation Rudolf Steiner extended his colour studies until they became cosmology and joined up with the mainstream of artistic creation. Colour studies and painting each lead to the other; science and art re-unite. These indications could be continued indefinitely.

> Goethe was not able to discover the inner causes of colour, and yet he did find the elements for its discovery... In Goetheanism we find a way of knowledge which embraces the realm of soul and spirit but which needs to be developed further. Goethe, for example, was not able to reach the distinction between image and lustre colours. We must follow Goethe's approach in a living way in our thinking so that we can continually go further. This can only be done through spiritual science.

29. *Rudolf Steiner, "Moonrise", pastel, 29.5 x 21cm (25.9.1922)*
30. *Rudolf Steiner, "Man in the Spirit", pastel, 49 x 74cm (2.7.1923)*
31. *Rudolf Steiner, "New Life" (Mother and Child), water colour, 66.5 x 100cm (15 to 29.2.1924)*
32. *Rudolf Steiner, "Archetypal Plant", water colour, 66.5 x 100cm (programme picture 21.5 to 5.6.1924)*

29. *Rudolf Steiner, «Mondaufgang», Pastell, 29,5 x 21 cm (25. 9. 1922)*
30. *Rudolf Steiner, «Der Mensch im Geiste», Pastell, 49 x 74 cm (2. 7. 1923)*
31. *Rudolf Steiner, «Neues Leben» (Mutter und Kind), Aquarell, 66,5 x 100 cm (15. bis 29. 2. 1924)*
32. *Rudolf Steiner, «Urpflanze», Aquarell, 66,5 x 100 cm (Programmbild 21. 5. bis 5. 6. 1924)*

Samples of Rudolf Steiner's Paintings

The Cupola Paintings in the first Goetheanum

When Rudolf Steiner was put in charge of the decorating of the great hall for the Munich Congress of 1907, it was the first time he had the opportunity to give artistic shape to the outer environment in accordance with the laws of the inner life*. From then on the artistic element took on visible form and accompanied all his work. All his activities were on an artistic level. Goethe's fairytale of the green snake and the beautiful lily became for him the starting point of his dramatic portrayal of four mystery plays performed in Munich from 1910 to 1913*. A certain group of people wanted to create a setting worthy of the play, and this led in 1913 to the laying of the foundation stone of the first Goetheanum in Dornach near Basle. Rudolf Steiner himself made only the artistic plans and the technical drafts. This building was an attempt to harmonize all the arts*.

The words and the music coming from the stage were to form a consistent whole with the sculptured forms of the architecture, the coloured light of the engraved windows and the paintings in the cupolas. The spiritual nature of the building was to relate to the artistic forms like a nut to its surrounding shell. Rudolf Steiner often used this image to interpret the forms of the building*.

Intense artistic activity accompanied the erecting of the building. Sculptors, painters and glass grinders practised on models and samples to gain practical insight into the style of the new conception of the art of building. Every participant found themselves confronted with new and unaccustomed tasks. There were a number of architects, painters and sculptors among Rudolf Steiner's pupils, and they were all given particular tasks. A great many other helpers gave voluntary assistance to help the impressive plan to become reality. According to the reports the work of shaping the huge surfaces of the wooden building with a sculptor's chisel and mallet was done by people of almost every nationality and social standing. The descriptions are reminiscent of the building of medieval churches, when all the people of the town took an

enthusiastic part in the work*.

In 1913 drafts for the paintings in the large and small cupolas were made, and Rudolf Steiner distributed their motifs among several painters*. The ceiling paintings were destroyed in the fire, but Rudolf Steiner's coloured drafts and drawings still exist. They remain important study material for painters. Photographs and reports made by artists who actually participated give an impression of the paintings and their effect. Dynamic sweeps of colour covered the large cupola and formed a flowing sea of colour. These sweeps were experienced as picture-building forces, and the various motifs developed out of them. If a viewer entered by the West door they met, from the East side of the building, waves of condensed light in red and yellow-red tones that passed through yellow and became green in the centre when they united with the blue of the western half of the cupola. This blue in the West contained spiritual beings creating the world. It was also possible to see the sweeps of colour condensing to the right and to the left in colour imaginations that portrayed earlier earth conditions and human cultural epochs. First were Lemuria and Atlantis. These were followed by pictures of ancient India and ancient Persia – steeped in the vermilion and orange of the East dome. Towards the middle of the green part, in the transition from the yellow-red surface to the blue-violet one, were portrayals of ancient Egypt and Greece. The central position of Greece was expressed through shades of green-gold arising between the yellow and blue. Further picture motifs filled the intermediate spaces.

The motifs in the small cupola pointed to inner aspects of historical evolution. The pictures led in a flowing way from one to the other and showed initiates of the various cultures, with their inspiring spiritual beings above them. As well as pre-Christian figures there were others representing the present and the future one, the latter belonging to the coming cultural epoch in the Slav world. The current cultural period was represented by a Faust figure and his inspirer, with death below the figure and a child above it. These picture imaginations culminated in the portrayal of the Representative of humanity between the adversaries – a theme which Rudolf Steiner also carved as a statue*. This sculpture was intended to be set up in the East underneath the painted picture. The qualities of the colours were even more important than the subject matter. Rudolf Steiner himself emphasized that the theme of the picture should be understood through the inner nature of the colour. For this reason he was reluctant to show uncoloured slides, however some very early colour photographs of the domes exist. Their colour is not good and fails to show the subtleties, but if projected onto a large screen they still convey an impression of the whole*.

Referring to the cupola pictures Rudolf Steiner said that the real essence of

whatever one wanted to put on the wall could all be created out of the colour:

> People should not be misled about this because of there being so many figures there, even the cultural-historical figures. When I painted the small cupola the point was not to draw one or another theme on the wall, but that for instance over here there is a patch of orange in various nuances and out of these colour nuances the figure of a child arose. And the point over here is that it encountered blue and this figure (of Faust) arose... The form, the substance, comes entirely out of the colour*.

Although Rudolf Steiner was helped in the painting of both the cupolas by other able artists, he was not very happy with the results. The unfamiliarity of this kind of painting required a totally new way of thinking and working with paint, and other artists found it hard to grasp all this immediately.

By the time they came to paint the small cupola the painters had grown more at home in the work. Nevertheless, or perhaps because of this, they realized that some of their efforts did not do justice to the themes, and begged Rudolf Steiner to correct them. This was how Rudolf Steiner came to do some of the paintings himself, and gradually many of the pictures were completely changed and re-formed. They filled the space of one half of the cupola, and the other half was intended to be painted as a mirror image of it in complementary colours*. However, this intended change demanded transformations in form as well as colour, and the painters felt this was too difficult and merely copied the painting onto the second half of the cupola.

Although Rudolf Steiner himself described the paintings in the cupola as primitive and imperfect, they nevertheless point the way to a kind of painting that is suitable for our age. Even in uncoloured reproductions a strong dynamic quality is evident.

The School Sketches

In the Waldorf School founded in Stuttgart in 1919 and the School for Further Education that arose in Dornach in 1921, painting lessons were run on the artistic principles described in the main section of this book. As exercises for the upper classes Rudolf Steiner created a series of pastel sketches, previously discussed in connection with work in class 11*

The first two sketches "Sunrise" and "Sunset" arose at the same time. Both themes are outwardly similar, showing the sun rising and setting behind a flat horizon. Pupils have to look for the difference in mood between the two paintings – this is the educational value. The difference in mood is obvious when both paintings are looked at together. However, some pupils find this hard to explain because the essential difference is not overemphasized but expressed through the art of painting itself.

In the morning mood the sun comes in vermilion through the gate of day. Bluish-greenish hues express the refreshing coolness of morning. Traces of clouds in yellowish-reddish tones take up the form and gesture of the ascending movement of the sun. In contrast, the evening mood shows warmer but more subdued colours. Even the orange of the sun is weaker; it has lost its radiance and seems to be fading away beneath the descending cloud forms. The rising and setting of the sun form the boundaries to the night. The interchange of day and night draws human beings into the great breathing rhythm of the earth, and connects them with the cosmos. The pictures actually describe this sun-earth relationship: the vertical, ascending or descending movement of the sun and the horizontal movement of the earth's horizon can be viewed as an invisible hieroglyph, a cross that is written into the process.

The next sketches, "Trees in the sun-filled Air" and "Trees in a Gale" also arose at the same time and are also similar in composition. But they are totally different in mood. They approach the stage of consolidation into an image. This process increases considerably from the first sketch to the second. Relationships between the cosmos and the earth have strengthened in an earthly direction. The unusually wide paper emphasizes the earth's horizon. Even the hurricane clouds' concentrated atmospheric movement is forced into

a horizontal direction. The cosmic forces of light are overlaid by the strength of the gale.

In the first sketch a group of trees are rhythmically spaced out in a hilly countryside which is almost drawn in silhouette. The light green surfaces of the leaf-covered crowns, the different directions of the reddish-coloured trunks, the forms of the rich green hill and the blue of the sky combine to make a composition full of movement and tension. The delicate green of the trees seems to hover in a light sky blue, and the reddish brown of the trunks adds a joyful, enlivening note.

"Trees in a Gale" is a variation of the first sketch. As the atmosphere consolidates to hurricane clouds everything else also materializes: the green of the trees, the colour of the trunks and the meadow floor. This process leads to all the objects becoming more formed. The trees are caught up in the movement of the wind, and the dark red trunks are bent in one direction. The dominant colour scheme comes from the steely blue of the clouds and a shadowy earthy green. This creates a dramatic, threatening mood.

The cosmic breathing rhythm of the earth is disturbed by the occurrences in the atmosphere and the gale and storm formations. Whereas the first pair of sketches are concerned with the artistic approach to the differences in colour, the second pair focus on the composition and the increase of colour, and the law of polarity and intensification becomes clear.

A third pair of sketches are "A Tree in the Sun, growing beside a Waterfall" and "A Head Study". Although the themes are quite different they both have the same motif, describing illumination. The theme of outer illumination is dominant. In the previous stage the mood of the picture had consolidated as far as the actual objects. Now the incarnating process has advanced to the point where the formed objects themselves appear illuminated from outside, and light and shadow play on them.

In the colour sketch "A Tree in the Sun" yellowish tones of light stream diagonally down onto a tree and inspire a play of light and shadow in shades of green, yellow and black. The coloured composition is completed by a waterfall in dense blue, contrastingly strongly with the yellow stream of light. Patches of spray and light-filled air play between the tree and the water in bluish-yellowish tones. The whole composition is bounded by firm ground painted in a strong brown.

It is easy to imagine this picture full of fluttering butterflies, swarms of insects and bird song. It inspires thoughts of the activity of elemental beings in nature the way they appear in myths and fairytales or as seen by the eyes of a higher consciousness, particularly in places where the different elements, warmth and water, or water and rock, meet and impinge on one another.

When painting this picture for students Rudolf Steiner began with the falling sunlight. He then condensed it into a tree of light and flame and wove an earthy green into this. The trunk, consisting of the densest material, was the last to be painted, unlike the earlier tree motifs where trunks were sketched in first.

This sketch is an example of Rudolf Steiner's demand that the play of colour seen around the objects should be brought into 'relation to a spiritual element'. The light falling diagonally on the tree and flowing over it is in reality not perceptible in the sketch, but it can be felt and experienced inwardly. It becomes visible only where it touches the object. However, what is inwardly experienced is no less real than what is outwardly visible. The visible and the invisible part together form an image of reality. The inwardly experienced elements in this picture can be called expressionistic, and the visible elements impressionistic. Rudolf Steiner once said that a future style of painting would lie in between expressionism and impressionism.

The "Head Study" is also dealt with as an illuminated object. A simple profile appears in yellowish-reddish colours out of a blue background. Delicately shaded parts show clearly where the light is falling. The painting process is quite different from that followed for the "Tree in the Sun, growing beside a Waterfall". The tree arose gradually through a condensation of the light, but the head was formed by leaving space. The blue background was painted first and the profile was a kind of negative. Then the illuminated head developed using shades of yellow and orange. This picture began at the periphery, whereas the tree started at the centre.

Rudolf Steiner once demonstrated during a lecture how to paint a head with the colour combination blue-yellow:

> If you really feel colour to be alive, you will not be able to help seeing a yellow patch edged with blue as a profile of a head.... If a person is in touch with the creative element of colour two patches of colour will convey an experience of something real.*

On another occasion he said that yellow wants to 'fray out' and form a nose, eyes, mouth and chin, whereas blue retreats. He called this colour structure the 'first basis of a face in profile'.

The colour study "Mother and Child" forms the conclusion and climax of this series. Rudolf Steiner explained the various stages of this painting while he was actually at work. These stages spell out the process a pupil passes through in his twelve years of painting lessons: First comes the soul experience of pure colour, becoming more and more complex through the first school years, then in the following years comes a gradual forming and consolidating of the colours

to form a picture, and finally, in the upper classes, a more conscious approach to creative painting, and the acquisition and development of artistic values. The painter, L.V. Blommestein, attended the lecture and took notes*.

Rudolf Steiner had told the pupils that he wanted to paint them something entirely out of colour. He put a delicate blue in the form of a curve going upwards and a patch of yellow side by side on a stretched white paper. He explained that the two different colours go very well together and are very pleasant to look at, and he asked what colour would be suitable to put beside them. He then mixed a delicate lilac colour and put a small patch of it beside the yellow. Turning to the pupils he said:

> Good, that goes very well together, doesn't it? These three colours form a chord, just like in music. This chord is a unity in itself... But let us now go on with the painting. We must choose a colour that does not belong to this chord at all.

He put a fresh, delicate green around the other colours, and the whole thing was accentuated by adding a violet on the left below the blue.

> Look, down here (lower right) a small patch is still white. In order to keep the whole thing together we must fill this patch with one of the colours of the chord. Do you feel how the composition requires it?

He used a pale blue for this, and went on to say:

> It is finished now, the page is nicely covered and it forms a symphony of colours. It is beautiful just like that. – But we now want to try and see what we can do with it. Let us paint something into the yellow. But you don't see yellow in yellow. So we shall have to add a little red to it.

L.V. Blommestein then described the care with which Rudolf Steiner continued painting, until eventually a face appeared. Then he formed the lilac colour into a small head.

> What else can we do with it? - mother and child, let us say, but there has to be a connection between the mother and the child.

This was created by painting the arms and hands of the mother and child a golden orange. After he had worked a bit further at details and at harmonizing

it all, he painted a shining yellow over the background with broad strokes from top to bottom, turning the green to gold.

This is the light which comes from above and which should ray out...

The build-up occurred in three clear steps. The first led to experiencing the harmony of the colours as a chord; the second to the richness of the colour composition or colour symphony, and the third to the colours becoming a picture, a theme. Out of the colour experience of the soul mood of mother love the picture of mother and child arose.

Sketches for the Training of Painters

At about the same time Rudolf Steiner gave a series of nature moods to the artist Henny Geck, at her request. These can be seen as a supplement to the school sketches. They are known as the "Nine Sketches for the Training of Painters"*.

The themes of "Sunrise" and "Sunset" are represented twice. In the first pair of sketches the emphasis is on the dynamic impetus: delicate chalk strokes follow the movement of the living light, whether it rays outwards or inwards. The other sketches express the extremes purely through the colour.

"Moon Shining", "Moon Rising" and "Moon Setting" are compared with pictures of the sun; it can be seen how the sunlight is expressed by means of an element of rhythm. The moonlight spreads out in decreasing repetitions of the bright form of the sickle, like ripples in a lake. The externally-perceived picture becomes an inwardly-experienced imagination.

In "Blossoming and Fruiting Trees" the light darkens around the periphery of the tree in tones of yellow and red which contrast strongly with the black of the earth. Between the dead nature of the lower part and the light nature of the upper part the balance of green is 'the lifeless image of the living'. The "Summer Trees" are rich green in the blue of the summer air that harmonizes with the warm yellow of the earth made bright by light forces.

Large Pastel Sketches and Water Colours

Fourteen large pastel sketches concerned primarily with the nature of the human being followed the nature moods painted in 1922. "Light and Darkness", "Threefold Man", "The Druid Stone" and "Elemental Beings" are known in reproduction. These themes were intended as advanced study material for painters, to be transposed into water colour and worked on in a free way. According to Rudolf Steiner real painting could only be carried out in a liquid technique. Henny Geck established a painting school on the foundation of these educational sketches which she led until her death.

"New Life" (mother and child), "Easter", "Archetypal Plant" and "Archetypal Human Being" were Rudolf Steiner's last paintings. The last two of these were used as programmes for eurythmy performances - this was a typical example of his basic principle of combining everything artistic directly with life. The programme illustration "Moonrider" arose jointly with Henny Geck. These pictures are of special importance, not only because of their exemplary water colour technique and their powerful effect, but because they also give an idea of the cupola paintings which were destroyed.

The scale is initially surprising – water colours are generally small. The colours are as strong and powerful as oils. There is a brilliance and depth to the lasure technique. The handling of the colours shows a simple unaffectedness and originality and the colour application is spontaneous and expressive. These pictures contain elements of the art of painting that are filled with possibilities. Rudolf Steiner once said, in self-judgment, that he would have to paint for thirty years before he would be able fully to realize his ideas. These examples were given to encourage painters to free colour from weight and to experience it as a self-supporting element, to let the form arise from the colour. Rudolf Steiner thought that laymen would probably take his pictures as uselessly futuristic, but the painters with whom he had discussed art matters would come to understand them.

The reference to futurism led to questioning about the relation to contemporary art. Cubism and Futurism were contemporary new art forms. Cubism sought to overcome three-dimensionality through abstraction, whereas futuristic painters aimed to express directly or indirectly experienced movement in their pictures. The year in which Rudolf Steiner took his first steps in working with colour was the same year in which Picasso painted his first cubist picture. Picasso, Braque, and in other ways Gris - the most significant representatives of Cubism - created various new picture contents by means of abstraction and simultaneous reproduction. To grasp these

phenomena clearly it is interesting to compare one of Rudolf Steiner's pictures with, say, a cubist picture by Picasso, without in any way attempting to evaluate the artistic merit.

A cubist picture will probably be composed of planes, lines and forms that can be recognized as parts of well-known objects, but the surface composition is in some kind of cypher. The parts hint at different viewpoints simultaneously. The dull colours are in shades of natural colours which suit the severe form. The direct natural impression is of a picture consisting of splinters of reality – a compositional structure of lines, forms and colours. These pictures are not meant to be illustrations of anything but new painting themes. Despite their organized composition they appear disunited because the forms of objects appear to our normal consciousness to be set down haphazardly. The intention behind such pictures is to turn three-dimensional space into a field of planes so that a comprehensive field of perception is arrived at by dispensing with conventional perspective views. The picture creates 'painting objects'. This process may appear liberating, but the means to achieve it are unsatisfying: Human beings' deeply rooted consciousness of objects cannot come to terms with the partial forms distributed over the picture. This difficulty can only be overcome by becoming totally abstract and renouncing any relationships to objects.

Rudolf Steiner's paintings, such as the "Archetypal Plant", show that similar aspirations can lead to totally different results by using other media. This picture is composed of intensely radiant, transparent colours on a coloured background. Many layers overlap – this applies also to the forms and colours in a cubist picture. In the latter the colours are materially heavy, whereas Rudolf Steiner's colours appear to hover. Although the "Archetypal Plant" is purely a colour composition a plant theme is easily recognizable. Different parts can be distinguished, such as a root and sprout, a leaf and a blossom. A structure of that kind does not exist in nature. The details are not drawn directly from the world of natural phenomena but are organs of the 'image of the plant' that creates the archetypal plant out of forms of colour. From the reality of Goethe's archetypal plant Rudolf Steiner created a 'painting object', a real picture of a colour imagination of an archetypal plant. The cubist painter simultaneously shows aspects which can only be acquired one after another by altering position. This pins down objective form elements on the level of external phenomena even though they are used freely. The archetypal plant shows a process taking place in time made visible in comprehensive picture form.

A higher stage of picture reality can therefore be obtained on a basis of pure colour composition. To paint a cubist plant would require taking plant forms one after another and composing the picture according to the principles of

surface rhythms. This could be beautiful, but it would not convey the impression of life.

Dismembering or joining together forms taken from the sense world is only possible with lifeless forms. On the other hand painting out of the colours can imitate life processes. This way of painting is therefore especially suitable for growing children.

Goetheanum and Bauhaus

The artistic impulse of Rudolf Steiner is still extremely fertile today. As traditional culture is increasingly breaking down the need for the influence of this creative impulse becomes ever more apparent.

Rudolf Steiner said in 1914 that people might fully understand the new impulse in art by the year 2000*. At the end of the nineteenth century Herman Grimm, known for his lectures on Goethe and writings on Michelangelo, also gave the year 2000 as the time when a general appreciation of Goethe's life work could be hoped for.

At the same time as new art potentials were developing out of a new understanding of art at the Goetheanum, Walter Gropius was founding the Bauhaus in Weimar. This year, 1919, was also the year in which the independent Waldorf School in Stuttgart was founded. The founding of the Bauhaus led to far-reaching results in the style and composition of our environment. Bauhaus and Goetheanum, as parallel phenomena in time, became the source of polar opposite cultural impulses. Both sources strove to integrate all the arts in a work of art as a whole.

The leading idea in the Bauhaus was the concept of a building's design, and the actual craft activity was the foundation for the unfolding of every branch of art. The determining, formative principle of the Goetheanum was the idea of metamorphosis. The goal was not design but an art form filled with soul and spirit that also obeyed the laws of life. The idea of metamorphosis – developed by Goethe as a natural scientific method for the study of the organic realm – was raised by Rudolf Steiner onto the level of an artistic principle. This was a decisive step in the development of European art, even if few are aware of it as yet. The Goetheanum was the first building that had been created as a living organism:

> Every part of this building was developed in the same way as one plant leaf grows out of the other: in an artistic sense it is absolutely a process of metamorphosis*.

The Goetheanum building was to be the 'house of humanity'. In a broad sense this was to be man's home where the individual would meet himself face to face. The conception of the building was not based on outer, rational viewpoints, but its aim was to meet human needs in this cultural age. This was to be a modern expression of the coming spiritual culture in the manner of temples in bygone ages, the Egyptian and Greek temples or the Medieval cathedrals.

The Bauhaus, with its stress on design, initially harked back strongly to the medieval Bauhütte. A new guild of craftsmen was to be formed: architects, sculptors and painters should all re-discover their craft as the one and only foundation out of which art could arise. An artist was seen as a stage higher than a craftsman. The "Bau" was to be the goal of all formative activity. The new building of the future was to contain everything in the one form: architecture, sculpture and painting; it was seen as a crystal symbol of a new faith to come*.

This picture of the future contained in the Bauhaus manifesto awakens memories of lofty Gothic cathedrals. But since no new faith was mentioned which was meant to create this wonder building of the future, can it be seen as a picture from past times projected into the future? This ideal of a building did in fact remain a pipe dream. The abstract element of design contained within the impulse of the Bauhaus is basically the last surviving expression of a past culture. In periods of creativity in the lives of individual artists abstract form as a rule appears not at the beginning but at the end of the period, in the same way the Bauhaus can be seen as a winding-up of the cultural process. A young artist starts with the search for the element of life in phenomena, only later does he gradually come to laws either in the form of abstractions or images.

However similar the aims of the two cultural streams proceeding from the Bauhaus and the Goetheanum appear, their direction and their concrete results are very different. One impulse, despite its modern orientation, harks back to the past, while the other is futurist. Whilst the Bauhaus impulse, metaphorically speaking, unfolded in the shadow of the cathedral, the Goetheanum building, with its character of metamorphosis, seemed like an image cast by the future into the present, giving both direction and purpose. Weimar, the home of Goethe, the founder of the theory of metamorphosis, and also the place where the Bauhaus was founded, can be called a significant crossing point of these two streams.

The Bauhaus impulse asserted itself forcefully in many artistic spheres, particularly in painting. This was partly because the most eminent representatives of the Bauhaus were painters appointed as 'masters' by Gropius. Gropius was convinced that painting had become the leading art since

the turn of the century. His choice of appointments determined the fate of the Bauhaus and also the fate of cultural development for decades to come. This choice included the most significant representatives of the abstract and cubist stream: Kandinsky, Klee, Feininger, Schlemmer and Itten among others. The expressionist painters more popular at that time – Nolde, Chagall, Kokoschka and the painters of the "Brücke" - were not considered. The Bauhaus painters became, each in their own way, the trail blazers of modern art.

It is interesting to reflect upon what has become of the Bauhaus and the Goetheanum impulse. The world we live in nowadays, with its cheerless, purpose-built buildings – warehouses, banks and insurance offices, factories and blocks of flats – has arisen largely out of the Bauhaus. This world gives no evidence of a crystal symbol of a new faith; it resembles more the expression of a functional and therefore basically soulless or even misanthropic world. This one-sided development may not have been the intention of the founder of the Bauhaus and his colleagues, yet the element of functional design contained in it has compelling power and is a law unto itself. The Bauhaus master would not be able to hold his place in the world of today: instead there are constructors, engineers and statisticians. The master principle that harked back to the romanticism of the past has no place in the modern world. Crafts, that as the basis of art were intended to bring a new golden age, were to a large extent supplanted by advancing technology and industrialization. Economics and expediency are now determining factors.

Respect for human dignity was doubtless a special concern of the members of the Bauhaus. However, deeper sources of human understanding are necessary in order to find creative forms to equal this. This requires a science of the spirit, not just a mere belief. The Bauhaus impulse has inevitably reached its conclusion in its present position.

The Goetheanum impulse was almost unnoticed by the general public, and apparently unconnected to anything that was happening in modern art. Yet a new creation arose on the Dornach hill in Switzerland for which the contemporary world was hardly prepared. Members of countries that were fighting one another worked side by side at a peace-bringing enterprise. The inspiration for the building was not merely a figment of the imagination but something fully real and astonishingly complete. This project can be described as an anticipation of the future, because the instructions did not necessarily always meet with understanding – their creator was too far ahead of his colleagues. The building work was in itself a demonstration of the way training leads to new faculties. A new craft can be learnt relatively quickly, but a new conception of the world is not acquired in a hurry. This is the reason for the slow if steady spread of the new artistic impulse.

The Dornach building required total open-mindedness on the part of the people who saw it, for it had no typical past antecedents. Everything was unusual about this building. Today some people regard the first Goetheanum as a successful expression of a work of art comprising all the arts, which was the ideal aspiration of the artists of the so-called art nouveau. This is understandable, because art nouveau was the expression of a trend that searched for a spiritual element in art — in its efforts to be organic it borrowed from outer forms; its linear elements appear related to the plane movements of the Goetheanum forms. Unfortunately such an interpretation overlooks the most important aspect. Rudolf Steiner only came to a full understanding of the concept of Goethean metamorphosis when he had attained to his spiritual scientific knowledge. This knowledge enabled him to create artistically in the way nature does.

On New Year's Eve 1922/23, soon after its completion, the Goetheanum was destroyed by arson. Before his death in 1925 Rudolf Steiner actually created the outer model for a second building, but this one was not a double-domed wooden building but a monument to modern material, using a type of concrete*. It cannot be compared with the first building, but it was created out of the same spirit, and it is in the same sense a new creation. For example, the would-be builders experimented with the possibilities of using molten concrete for making living forms. In this way the model second Goetheanum is in the best sense a token of our modern culture and a counter image of roughcast concrete.

The first Goetheanum, chiselled out of wood set up on a concrete base, with cupolas, pillars and engraved glass windows, was an unforgettable sight. Many members of the younger generation of artists inspired by Rudolf Steiner keep its description alive. A settlement of dwelling-houses sprang up around the concrete Goetheanum, some of them even designed by Rudolf Steiner. Buildings now exist all over the world that attempt to express this organic style of architecture. Many of the Waldorf Rudolf Steiner Schools, kindergartens, curative homes and other institutes, churches, factories and dwelling-houses, are examples of the fertility of the Goethean concept of architecture. Compared to the 1920s, a sense for organic forms is now far more common.

Rudolf Steiner's art impulses are cultivated in independent schools of sculpture and painting and in architectural offices. Many creative artists have also taken them up. Their output is very varied and promising, even if the artistic processes need more time to be accepted as eligible examples of a new spiritual culture. A new spiritual art presupposes new capacities.

A new art will arise when the human soul learns to penetrate into the

living elemental world. We can argue against this and hold the opinion that it should not happen, but our argument is sustained solely by our human inertia. For either human beings will enter with their whole humanity into the forces of the elemental world and become receptive to the spirit and soul of outer nature or art will become more and more the solitary affair of individuals. And though this might produce very interesting insights into the psychology of one or another soul, the achievements would never be reached that art alone can reach. When we speak in these terms we are still speaking very much of the future: nevertheless we have to go to meet this future with an eye enlivened by spiritual science, otherwise all we shall see is the dead and dying part of humanity's future'*.

A real turning from evil to good in human souls will in the future come about solely if the atmosphere of real art enters human hearts and souls. For when in our hearts and souls we have an appreciation of the new architecture and other forms that surround us, people will, if they have a tendency to tell lies, stop telling lies, and if they have a tendency to disturb the peace they will cease disturbing the peace of their fellowmen. Buildings will begin to speak. They will speak a language that people cannot even imagine today*.

Art as a general Educator

To conclude, instead of discussing the question of art education the question should be asked: what is art itself? Some people insist that art has been superseded now that science has taken control of the whole of our lives. Rudolf Steiner's work would then be an anachronism in the flow of progress.

However, artistic media are used all the time, as a matter of course, especially for commercial purposes. Psychological effects can be investigated with scientific methods, but if as a result of these investigations other work is necessary, the images of applied art must be used. Applied art has at all times taken what it wanted from so-called fine art. This clumsy example merely emphasizes the paradoxical situation: it points to a misunderstanding conjured up by the theory of art of the last two centuries. The consequences of this misunderstanding have led to the turning of art education into a theoretical study which seems unfruitful. This can only be overcome if the question of the nature of art itself is clarified.

Rudolf Steiner dealt with this question in his early article 'Goethe as the Founder of a new Science of Aesthetics', published on 9 November 1888*. Since the middle of the eighteenth century philosophy had been concerned with 'finding the worthiest scientific form for the unique way in which spirit and nature, or ideals and reality fuse into one in a work of art'.* Because nature and spirit were still experienced as an indivisible unity in the time of ancient Greece, Aristotle could declare that the principle of art was the imitating of nature. The Christian Middle Ages felt alienated from nature because they no longer perceived it as Divine. They may have created by natural means magnificent works of art in honour of their God, but the split between spirit and nature caused artistic confusion. This split also gave rise to the following interpretation of art common among the philosophers of German idealism from Kant to Schelling:

> A work of art is not beautiful for its own sake, for what it is in itself, but because it is an image of the concept of beauty. It is merely a further consequence of this opinion, that the content of art is the same as that of

science, because they are both based on eternal truth which is at the same time beauty.

This interpretation did not satisfy people. Up till then no scientists who were involved in the problem of art had taken any notice of Goethe's opinions. The idea of a split between spirit and nature was foreign to Goethe. He sought to reunite the two opposite poles on the heights of the spiritual progress that was being achieved. He wanted to find the archetypal image at the root of all phenomena, 'nature's higher nature'.

Between the idea on the one hand and reality on the other

> human beings need a new realm...where the single thing and not only the whole species represents the idea, a realm in which an individual thing bears the character and quality of universality and necessity. This world, however, does not exist in reality, and human beings have to create it themselves, for it is the world of art: a necessary third realm beside the realm of the senses and the realm of reason....
>
> An artist has to return to what he sees as tendencies in nature. And this is what Goethe means when he describes his creativity in the words: 'I will not rest until I find a pregnant point that is the start of many things.' An artist must express the whole inner essence of his work of art in the whole of its outer nature, whereas in nature this does not happen entirely, and the enquiring human mind has to search for it and find it. Thus the laws an artist follows are no different from the eternal laws of nature, only that they are pure and uninfluenced by any restraints. So artistic creations are based not on what *exists* but on what *could* exist, not what is but what could be...The content of a work of art is that of any sense reality – that is *what* it is; but the artist endeavours to give it a form that surpasses the work of nature....The object presented to us by an artist is more perfect than it is by nature; yet it bears no other kind of perfection than its very own...'
>
> Nature is raised to the spirit and the spirit descends into nature...
>
> Works that arise in this way are therefore not totally true to nature, because in reality spirit and nature never coincide, as if we compare works of art with those of nature they appear to us as *mere appearance*. This is necessary, however, for otherwise they would not be real works of art. With regard to this concept of appearance *Schiller*, the aesthete,

> is quite alone, unsurpassed and unequalled. This should have been carried further.... But instead of that *Schelling* came on the scene with a totally wrong conception and inaugurated an error from which German aesthetics has not recovered. In company with modern philosophy Schelling also envisaged the search for the archetypal images of things as the highest human aspiration.... To Schelling art was objectified science... The sensory image is only a means of expression; it is the form in which a supersensible idea is made manifest.

Art therefore has no significance in itself. Goethe saw things differently. In *Dichtung und Wahrheit* (Poetry and Truth) he quotes a saying of Merck's which he himself found meaningful and which explains the situation particularly well:

> "Your endeavour", he says, "your undeviating course is to give reality a poetic form; other people try to bring so-called poetry, the world of imagination, to realization, and that only produces nonsense!"

To which Goethe says:

> If you understand the tremendous difference between these two methods, hang on to it and make use of it. It will explain a thousand things.
>
> This is a clear statement of the kernel of the problem where art is concerned. Not the embodying of a supersensible element but a recasting of what is perceived in reality. The real part must not sink to the level of a means of expression: no, it must keep its full independence; but it must acquire a new form, a form that satisfies us... And this is totally different from what the idealist German aesthetes want. It is not the "idea in the form of a sense phenomenon" but just the opposite, a "sense phenomenon in the form of an idea"... German aesthetics... has simply turned things upside down. Beauty is not the divine clad in sense reality but sense reality clad in heavenly raiment. The artist brings the divine realm onto the earth not by causing it to stream into the world but by raising the world into the sphere of the divine. Beauty is appearance because it conjures up a reality in front of our senses which, though still a reality, seems to present us with an ideal world...
>
> The kind of aesthetics that is based on the definition: "beauty is a reality for the senses that appears as though it were an idea", does not exist as

yet but has to be created. A good name for it is the aesthetics of Goethe's conception of the world. And that is the aesthetics of the future*.

The history of art shows the natural human need for artistic activity. It is in the caves of the Ice Age and in the forms and ornaments of the oldest utensils. However, a spiritual scientific understanding of the human being was necessary to show that this artistic impulse is founded in human nature to the same extent as the religious and the scientific impulse.

Rudolf Steiner spoke in 1918 of two sources of art that are deeply rooted in the human soul and express themselves in different ways*.

The need for art comes from subconscious depths of the human soul, an area where human beings have a wealth of experience but very few are aware of this inner life. Soul-life alternates between two states of being.

One element in the depths of the soul torments the soul – in most cases unconsciously. It tries to rise up into consciousness in a visionary way, but it cannot and should not. In a healthy soul these suppressed impulses of feeling and of will must not become perceptible. The force of these impulses is toned down by our outer impressions to the level of healthy thought. The visionary urge in every human soul is appeased when it encounters in outer form, such as in an external form like a sculpture, the equivalent of the content of its vision. The soul is only being offered a real work of art if a human being can become aware what pictorial form the work has to have to satisfy its needs.

> I can imagine someone, whatever his artistic media may be, restricting himself to portraying soul moods, feelings, by combining colours that perhaps do not even correspond to any outer object – possibly the less they correspond the better – because they are as it were the counter image to the visions endeavouring to rise up in his soul*.

This kind of portrayal lies in the direction of expressionist art.

The other source of the artistic impulse is based on the inner relationship of a human being to nature. Nature contains secrets that can be drawn out by art. Nature contains not only endless life but also death and destruction. Processes in nature decree that one life is constantly being destroyed by another. This can be clarified in the example of the human form in whose formations lie hidden mysteries. The outer form would look quite different if the human soul and human life were not constantly killing it. If the form was able to follow its own innate tendencies, its own life, it would turn into something quite different, but its suppressed life cannot develop according to its own nature because the higher life of soul and the forces of life prevent this. The artist can disenchant

this hidden life and make it visible.

Rudolf Steiner points out that in the human form the head and the rest of the organism are separate to the extent that each of these parts appears as a whole, and that one part can be regarded as a metamorphosis of the other. A sculptor might decide to complete each part separately. Something totally different would appear in each case. If the form of the head bones was the starting point, a portrayal of something totally sclerotic would result. On the other hand the form tendencies in the rest of the organism, including all the desires and instincts that live in it, would lead to a sculpture very dissimilar to the human form.

It is the same with colour. In nature colours appear attached to objects. Yet colour has a life of its own that has nothing to do with colours on objects. Art can set this life free. The revolutionary impressionist painters of the nineteenth century followed this path of freeing colour. Their greatest merit was that they discovered colour anew in their paintings and freed it from the compulsion of naturalistic forms. Colour became recognized as a creative essence with the innate power to testify to its own unique life.

Cezanne said

> To an artist colours alone are true. In the first instance a picture...ought to portray nothing but colours*.

Rudolf Steiner goes even further.

> I believe that in all the various tendencies and endeavours that have been begun but have remained stuck at the initial stages, and that can be classified as Impressionism, we can perceive the longing of our time to discover a kind of secret of nature, a kind of sense perceptible-supersensible quality and to bring it to portrayal.

And further:

> What immense significance attaches to all the endeavours of modern artists really to study light and the different colours in all their various shades in order to find out that at bottom each light effect and each shade of colour strives to be more than it can be when it is squeezed into a totality where it is killed by a higher life*.

To return to the two 'sources of art':

These two needs of the human soul have always been the foundation of art, only in the course of the general evolution of humanity in the immediate past... the first one was pursued expressionistically and the second impressionistically. They will probably become much more pronounced as they forge ahead into the future... To avoid certain misunderstandings, let us stress again and again that these two directions certainly do not represent anything pathological. The pathological element would only descend upon human beings if artistic expression were not given to the visionary urge which within certain limits is basically sound, or if on the other hand our perpetual subconscious urge to divide nature into its perceptible and supersensible parts were not constantly being infused with the higher life of a really artistic temperament, so that we reach the point of recreating in a work of art the creativity of nature'.

Referring to contemporary activity Rudolf Steiner said in another connection:

> In the history of art the impressionists have already had their way. They have created something new with their colouring and their plein air colours, but it was not enough: they omitted the human being himself, therefore this direction in art could not develop any further and had to collapse.
>
> The expressionists rely entirely on themselves; they dismiss the world and therefore they eventually become totally without imagination and totally abstract. They can finally draw only lines and geometrical figures. They enter a realm in themselves where mathematical activity resides... The expressionists have now and again had spiritual insights; but only flashes, fragments. These do not amount to art...*.

Rudolf Steiner stated that a new style would have to be sought just in between these two directions.

Where art education is involved, knowing about the two sources of art within the human soul brings a serious responsibility. The soul-spiritual part of a person's being contains inner pictures brought from pre-natal existence, pictures that need to be revived during life. Every myth, legend and fairytale illustrates this picture world. If a person is not permitted to live in this world of pictures the consequences are irreparable. Rudolf Steiner spoke about this in a lecture given in 1920.

> Now we must clearly understand... that we bring down from the spiritual

world, at least in the form of effects, what we have experienced in this spiritual world. When we move in ordinary life from one locality to another we take with us not only our clothes but also our soul-spiritual belongings. In like manner one brings along into this world through conception and birth the consequences and effects of what has been undergone in the spiritual world...

Now it is generally true, in the first instance, that humanity resists this emergence of images experienced prior to conception. In a way human beings repel them... The dry, prosaic attitude of the present time is one of its fundamental characteristics and there are many broadly based movements today that oppose an education whose concern would be that the forces arising from the soul will actually assert themselves. There are insipid, dry people who would really like to exclude any education by means of fairytales, legends and anything illuminated by imagination. In our Waldorf School system we have made it our priority that the lessons and instruction of the children entering primary education will proceed from pictorial descriptions, from the life-filled presentation of images, from elements taken from legends and fairytales. Even what the children are initially supposed to learn about the nature and processes of the animal kingdom, the plant and the mineral kingdoms, is not supposed to be expressed in a dry, matter-of-fact manner; it is supposed to be clothed in imaginative, legendary, fairytale-like elements. For what is seated deep within the child's soul are the imaginations that have been received in the spiritual world. They seek to come to the surface. The teacher or educator adopts the right attitude towards the child if he confronts the child with pictures. By placing images before the child's soul there flashes up from its soul those images of, strictly speaking, those forces of pictorialized representation which have been received before birth or, let us say, prior to conception.

These forces are suppressed, if the dry, prosaic person guiding the education of the child today confronts the child from earliest childhood with something that is actually not at all related to the child, namely the letters of the alphabet, for our present letters have nothing to do any more with the letters of earlier pictorial scripts. They are really something that is alien to the child; a letter should first be drawn out of a picture, as we try to do in the Waldorf School. The child is confronted today with things devoid of a pictorial element, the young person, on the other hand, possesses forces in his body – naturally I am referring to the soul when I am speaking of body, for after all we also speak of the 'astral body' – forces seated in his body that will burst out elsewhere if they are

not brought to the surface in pictorial representation. What will be the result of modern mistaken education? These forces do not become lost; they spread out, gain existential ground, and invade the thoughts, feelings and will impulses. And what kind of people will come into being from that? They will be rebels, revolutionaries, dissatisfied people; people who do not know what they want, because they want something that one cannot know. This is because they want something that is incompatible with any social order; something that they only picture to themselves, that should have entered their fantasy but did not; instead, it entered into their agitated social activities...

If the world is in a state of revolt today, it is really heaven that is revolting. This means the heaven that is held back in the souls of men, which then comes to the fore not in its own form but in its opposite – in strife and bloodshed instead of imaginations. No wonder the individuals who destroy the social fabric actually have the feeling they are doing good. For what do they sense in themselves? They feel heaven within themselves; only it assumes the form of a caricature in their soul. This is how serious the truths are that we must comprehend today! To acknowledge the truths that matter today should be no child's play; such acknowledgement should be pervaded by the greatest earnestness*.

This connection between art and the social order raises the aspect to the level of our actual human participation in society. The Old Testament heritage of having no images – 'Thou shalt make unto thyself no graven image' – has continued right up to the present day. However, from the abstract nature of a mere law:

human beings must revert to the capacity of the soul that can once more, and this time consciously, form images. It is only in images, in imaginations, that the social life also can be rightly established in the future. The social life could be regulated only as regards a single people in abstractions, and the regulation for a people in social relationships was that of the Old Testament. The next form of regulation of the social life will depend upon the capacity to exercise in a conscious way the same force that once existed atavistically in unconscious or half conscious form, in man's myth-building capacity. Human beings would be completely filled with antisocial instincts if they were to endeavour to continue to disseminate mere abstract laws. They must come again by way of their world conception to the pictorial. Out of this conscious myth creation there will arise also the possibility for the development

of the social element in the intercourse of man with man... What is flowing out from the innermost nature of man, striving toward realization, is that when one individual confronts another a picture shall stream forth in a certain way from the other person, a picture of that special form of balance manifested individually by everyone. But this requires, of course, the heightened interest which each person should take in the other person, and which I have often described to you as the foundation of social life'*.

Notes

Unless otherwise stated the quotation comes from *Rudolf Steiner*. Many of the quotations come from oral communications written down at the time or, in the case of the Conferences, afterwards. The quotations were accompanied (in the German) by the bibliographical numbers of the volumes of the complete works of Rudolf Steiner (GA) that are already in publication and are listed under the title *Rudolf Steiner – his literary and artistic works*, Dornach 1984 and the full 1983/84 catalogue of the Rudolf Steiner Verlag. If an English translation is available its particulars will replace those of the German edition.

The figures in front of the notes give the page number or the order in which they appear on the page.

iii

1 *Study of Man* R.S.P. *Practical Advice to Teachers* R.S.P. *Discussions with Teachers* R.S.P. And Conferences with the Teachers of the Waldorf School in Stutigart 1919-1924. Volume One, 1919-1920; Volume Two, 1921-1922; Volume Three, 1922-1923; Volume Four, 1923-1924. Steiner Schools Fellowship Publications.

iv

1 Hedwig Hauck *Handwork Book* S.S.F.P. 1937.
2 *The Curriculum of the first Waldorf School* arranged by Caroline von Heydebrand. S.S.F.P. 1925.
3 *Rudolf Steiner's Curriculum for Waldorf Schools* E. A. Karl Stockmeyer. S.S.F.P. 1955.
4 *Welt, Farbe und Mensch* (the Universe, Colour and the Human Being), a study series by Julius Hebing, published by the author.
   A. The Elements of Colour Theory. With 6 hand-coloured plates and 21 coloured sheets (1950).
   B. Transformations of the colour circle. Gyroscopic experiments. A new arrangement of the colour circle. With 15 plates, 8 of which are hand-coloured (1951).
   C. Physiological colours. The after-image. Coloured shadows. Pathological colours. With 4 plates, 11 hand-painted sheets and 8 coloured filters (cinamoid) (1952).
   D, 1. Physical colours, section 1. The archetypal phenomenon. Subjective prismatic colours. With 43 plates. Printed with an 8-colour offset (1952).
   D, 2. Physical colours, section 2. Objective prismatic colours. Their derivation and combination. With 8 colour plates and 9 black and white plates (1953).
   E. Chemical colours. Colours in the realms of nature, in the course of the day and the year. With 2 black and white plates and 2 tables (1954).
   F. Developing a sense for colour. The path of humanity under the signature of the colour circle. With 17 plates, 7 of which are in the original four-colour impression (1956).

L. Practical indications in painting (1951).
This series appeared in 1983 in book form as: Julius Hebing *Welt, Farbe und Mensch* (The world, colour and the human being). Studies and exercises on the theory of colour and an introduction to painting. With a contribution by Fritz Weitmann. Published by Hildegard Berthold Andrae, Stuttgart (*Menschenkunde und Erziehung*, volume 44). It is well worth reading Julius Hebing's autobiography *Lebenskreise-Farbenkreise* (The spheres of life and the colour circles) from the painter's diaries, Stuttgart 1969, where there is more about his work with colour.

Concerning F. Weitmann's Aquarellfarbe als Malmittel (Water colour as a painting medium. On a number of occasions Rudolf Steiner encouraged us to use water colour as much as possible when teaching. This is referred to in the notes to the text. Basic advice is in the *Conferences with the teachers* 22.12 1919 and 15.11.1920. Also Dornach 3.1.1922 in *Soul Economy and Waldorf Education* A.P.; Dornach 20.4.1923 in *The Child's changing Consciousness and Waldorf Education* A.P.; and Ilkley 17.8.1923 in *A Modern Art of Education* R.S.P.

The references to teaching must be seen against the background of Rudolf Steiner's prolific statements which we have described in detail in the chapter concerning Rudolf Steiner's Approach to Colour. A substantial part of it is summarized in the volume *The Nature of Colour*. Apart from 3 lectures given in May 1921 that are a kind of future theory of colour in embryo, the volume contains 9 further lectures from the years 1914 to 1924 that have already appeared in other volumes of Rudolf Steiner's complete works. This unique exception on the part of the GA of letting them reappear in this volume is justified because of the important position the theme of art has throughout the whole of Rudolf Steiner's life work, and something for which we can be very grateful.

6

1 Werner Haftmann: *Twentieth century masterpieces in water colour*, second edition Cologne 1973.
2 *Tagebücher von Paul Klee 1898-1918* (Paul Klee's diaries 1898-1918). Edited by Felix Klee. Cologne 1957 P.308.
3 See Lothar Brieger: *Das Aquarell, seine Geschichte und seine Meister* (Water colour, its history and its masters) Berlin 1923; Walter Koschatsky: *Das Aquarell. Entwicklung, Technik, Eigenart.* (Water colour, its development, technique and nature) Vienna and Munich 1969.
4 Du Mont Schauberg, Cologne, have published excellent volumes on water colours: August Macke: *Die Tunisreise* (travelling in Tunisia); Franz Marc: *Unteilbares Sein* (Indivisible being); Paul Klee: *Im Zwischenreich* (In the inbetween realm); Wassily Kandinsky: *Gegenklänge* (Counter tones); Ernst Wilhelm Nay: *Aquarelle und Zeichnungen* (Water colours and drawings); Emil Nolde: *From the cycle "Ungemalte Bilder";* Blumen und Tiere; Landschaften. (Unpainted pictures; flowers and trees; landscapes).
Corresponding volumes in the Piper series have very good reproductions.

7

1 See *"Samples of Rudolf Steiner's Paintings"* in part 3 of this book.
2 Taken from Heinrich Kluyibenschädl: *Practical instruction in fresco painting.* Munich 1925 (collection of articles on painting technique, volume 7).

8

1 Haftmann see note to P.21, of which it is P.8.
2 Due to arson on New Year's Eve 1922 the first Goetheanum burnt down completely before the inner rooms were quite finished and before it could be consecrated.
3 Plant colour laboratory at the Goetheanum, a department of the Section for Fine Arts, CH-4143 Dornach. With special reference to their reports which appear at irregular intervals.
4 Dornach, 8.5.1921 The Nature of Colour, RSP.

9

1 Kurt Hentschel: *Wir färben mit Pflanzen* (We Dye with Plants). Frankfurt am Main 1949.
2 Semper: *Textiles,* Munich 1878, quoted in *Färben mit Pflanzen* (Dyeing with Plants) published by Renate Jörke, Stuttgart 1975, appearing in the series *Arbeitsmaterial aus den Waldorfkindergärten* (materials for use in Waldorf Kindergartens) book 3, P.15.
3 Report sheet of the plant colour laboratory no.7/1977.
4 Information to be had in report sheets no.6/1974 and 7/1977.
5 Concerning M. Jünemann's *The basic Principles of Painting from the first to the eighth class.* Her approach to the human being is based on: *The Education of the Child in the Light of Anthroposophy* R.S.P. and *Study of Man* R.S.P.

13

1 *Entwurf einer Farbenlehre* (Sketch of a theory of colour). The instructive first part of volume I, which is the most important part for teachers, is contained in every relatively complete edition of Goethe's works. It was published by Rudolf Steiner with all the other natural scientific writings, between 1883-1899 in Kürschner's *Deutsche Nationalliteratur*, complete with prefaces and commentaries. These prefaces alone comprise a large volume that was the first to be published in Rudolf Steiner's complete works. In it, Rudolf Steiner presents the Goethean research method, according to which we can speak of a 'Goethean optics' as distinct from the optics that still largely applies in physics to this day. This sketch of a theory of colour is divided into 6 sections. When we quote the text we shall quote only the figures of the particular section.

14

1 See Hermann von Baravalle Ph.D.: *Physick als eine Phänomenologie* "Physics as pure phenomenology). Berne 1951 Volume 3: *Akustik und Optick*, P.179.
2 op cit
3 See "Themes from the human Realm" in part 2 of this book

15

1 "Characteristic Combinations" among other things. 816-832.
2 The painter Philipp Otto Runge (1777-1810) wrote to Goethe telling him of the observations he had arrived at independently of him. His letter was included as an addition to the draft of a theory of colour (after 920).
See also Ph.O.Runge *"Die Farbenkugel und andere Schriften zur Farbenlehre* (The colour globe and other articles on the theory of colour). Notes by Julius Hebing. (Denken Schauen Sinnen, no.7/8 Stuttgart 1959).

21

1 'The paint pots and brushes are there, and the children take up the brushes. You can then have the following experience, that the teacher is a long way from knowing which is a shining colour and which is not! He is already too old. But the children grasp it amazingly easily; they have a wonderful sensitivity for understanding the difference between a shining and a non-shining colour'. Arnhem, 24.6.1924, *Human Values in Education* R.S.P.

22

1 'In course of time the child becomes aware of blue as something that moves away from him and yellow as something that comes towards him. This awareness will develop strongly in a child as early as his seventh or eighth year if only it has not been driven out of him by a training in intellectual drawing and painting exercises. It will not do to let the children paint houses and trees as they look in reality. But if the child does as you tell him, he will get the feeling that the colour appears through the movements of his hand and fingers and wants to go further – If you achieve this, something very meaningful arises in the soul of the child; colour perspective. The child acquires flexible ideas, flexible feelings and flexible actions just through these feelings for colour. His whole soul becomes more flexible . . ' Dornach 19.4.1923, *The Child's Changing Consciousness*. A.P.

24

1 See W. Aeppli: *The Care and Development of the Human Senses*. S.S.F.P.
2 *Study of Man* lectures 3, 4 and 8 and a great many other statements in Rudolf Steiner's works.

25

1 For our painting boards we use 6mm thick hardboard 36x52cm, or depending on the size of the painting paper. It is advisable to varnish them with matt varnish.

We recommend the use of either an inexpensive water colour paper or a good white sugar paper, not cream. If you use drawing paper it also needs stretching on a board, otherwise it creases badly. Water colour paper comes in large sheets and has to be cut down to size.

For paint pots we use either palettes or glass jars. Plastic containers are clumsy and easily upset.

We use synthetic sponges for damping and smoothing the paper. Real sponges are better but dearer.

For veil painting we fasten the damp papers to the boards with sticky tape. For wet-on-wet painting damping the paper is sufficient. The six basic colours are best obtained from Winsor and Newton or Stockmar. Wide, flat paint brushes can be obtained from Amarranta, Nailsworth, Glos. tel. 0453 833985. Store the liquid colours in sealed jam jars.

2 *Rudolf Steiner in der Waldorfschule* by C.V. Heydebrand, Stuttgart 1927, P.89. Wilhelm Ruhtenberg, *Etwas vom Malen und Zeichnen* (A bit about painting and drawing).

26

1 Stuttgart, 25.8.1924 *Practical Advice to Teachers*.

27

1 On the development of good taste, see e.g. the Conferences of 15.11.20 and 16.11.1921. S.S.F.P.

28

1 "We should introduce children to colours as early as possible, and it is good to let them use coloured paints on coloured as well as white surfaces. And we should endeavour to awaken in the child the kind of feelings that can arise only out of a spiritual scientific view of the world of colour". Stuttgart, 23.8.1919 *Practical Advice to Teachers*, P.43.

Conference held on 16.11.1921 on painting with pupils of the Friedwart School in Dornach; *Soul Economy and Waldorf Education*, Dornach, 3.1.1922. A.P.

Kingdom of Childhood, Torquay, 15.8.1924. R.S.P. 'It is not only that it cultivates the child's aesthetic sense but above all this kind of activity works to harmonize the element of will, in which case it is also working directly with child nature.'

Conference held on 15.11.1920. Also special edition of *Erziehungskunst* 1966, number 5, M. Jünemann, *Fragen aus der Oeffentlichkeit. Zum Methodischen des Malunterrichts* (Questions asked by the public. Concerning the method of teaching painting).

29

1 Goethe: 'This colour, though so pleasing and happy when it is pure and light, and so vigorous and noble in its full strength, is nevertheless intensely sensitive and works upon us disagreeably when it is dirty or in some way drawn towards the minus side. Thus the yellow of sulphur, which is greenish, is disagreeable.'
2 Max Lüthi: *Es war einmal. Vom Wesen des Volksmärchens*. (Once upon a time. The nature of folk tales). Göttingen 1968, among other writings by the same author.

30

1 M. Jünemann, see note to P.44.
2 Stuttgart, 25.3.1923, *Pädagogik und Kunst* GA 304.

32

1 Conference held on 28.4.1922. S.S.F.P.
2 E. Dühnfort und E.M.Kranich: *Der Anfangsunterricht im Schreiben und Lesen*. (The beginning of learning to write and read) third edition Stuttgart 1984. *Menschenkunde und Erziehung* Volume 27. Also see *Die Drei* 1971/4: M. Jünemann, *Das Künstlerische im Prinzip* (Art in principle).

33

1 See Stuttgart, 23.8.1919 *Practical Advice to Teachers*.

34

1 Dornach, 2.6.1923, in *Rhythmen im Kosmos und im Menschenwesen. Wie kommt man zum Schauen der geistigen Welt*, lectures to the workers at the Goetheanum, GA 350. Lectures 8 to 11 translated as *Learning to see into the Spiritual World* A.P.1990.

38

1 The Hague, 27.2.1921(GA 304) not in translation. See also C.v. Heydebrand *Vom Spielen des Kindes. Das Kind beim Malen* (Children at play. Painting with children), fourth edition, Stuttgart 1966; and Herbert Hahn *Vom Ernst des Spielens* (The absorbing nature of play), new edition 1966.

2 Michaela Strauss *Understanding Children's Drawings*. With 25 coloured and 60 plain illustrations. R.S.P.

41

1 See in particular: Stuttgart 21.8.1919 and 4.9.1919 *Practical Advice to Teachers*; Ilkley, 14.8.1923, in *A Modern Art of Education*, R.S.P. and Torquay, 15.8.1924 in *Kingdom of Childhood R.S.P.*

42

1 H.R.Niederhäuser and Margaret Fröhlich: *Form Drawing*, New York, Rudolf Steiner School 1974. – Hermann Kirchner has worked out several series of drawings from the aspect of curative education which have been published under the title *Dynamic Drawing*.

2 Hermann von Baravalle Ph.D.: *Introduction to Physics in Waldorf Schools. The Balance Between Art and Science.* The introduction of physics in the sixth class of a Waldorf School. Second enlarged edition 1967.

43

1 Detailed specifications in Stockmeyer, see note 12/3, P.153; and H. Hauck. note P.12/1.

2 Berne, 17.4.1924 *The Roots of Education*; Arnhem, 22.71924 *Human Values in Education* R.S.P. and Oxford 22.81922 *Spiritual Ground of Educaton* R.S.P.
There is also a detailed account of this age group in Hans Müller Wiedemann: *Mitte der Kindheit - Das nuente bis zwölfte Lebensjahr. Eine biographische Phänomenologie der kindlichen Entwicklung* (The middle of childhood - the ninth to the twelfth year. A biographical phenomenology of child development) Stuttgart 1973. Also containing detailed references to Rudolf Steiner.

44

Dornach, 20.1.1923, *Lebendiges Naturerkennen, intellektuelle Sündenfall und spirituelle Sündenerhebung* (a living knowledge of nature, the intellectual fall and its spiritual overcoming) GA 220: "I learn to realize that the headlike bird is a creature of the air, the air that is inwardly warmed through and irradiated by the sun. I recognize what a tremendous difference there is between the warm and light-filled water with its creative fish forces and the warm and light filled air that is filled with creative bird forces. I realize that the whole element in which these creatures live is different. It is the water element that gives fish fins their simple, straight form, and the feathers of the birds are shaped as they are by the forces of the air that are impregnated with the sun's light and warmth. A new approach to nature must enter actively into human consciousness.

46

1 'But the worst thing you can do is to teach the child to *draw* a horse or a dog with lines. He should take a paint brush and do a painting of the dog, but never a drawing. The outline of the dog does not exist at all; where is it? It is, of course, produced of itself if we put on paper what is really there!' In *Questions and Answers*, 20.8.1924, in the Torquay course 'Kingdom of Childhood'. R.S.P.

49

1 See in particular Oxford, 22.8.1922 *Spiritual Ground of Education* R.S.P.

52

1 For exercises in black and white drawing we recommend the use of charcoal sticks in medium strength. Other material would be black crayons or four-sided Conté sticks. For erasing you can use chamois leather or a special charcoal rubber. When the pupils have finished their drawings you have to spray the papers with fixative.

2 'In class 6 you should make a simple study of projections and shadows, doing both free hand drawings and drawings with a ruler and compass. Show them for instance a cylinder and a globe and see that they understand and can draw what the shadow will look like if the globe is illuminated and its shadow falls onto the cylinder. General knowledge of how shadows are thrown!' Stuttgart, 6.9.1919. *Erziehungskunst, Seminarbesprechungen und Lehrplanvortrage* (The Art of Education. Discussions with Teachers and Curriculum Lectures). This passage in not in the English edition.

53

1 This year the children must be given a good idea of perspective. Do simple perspective drawing, foreshortening in the distance and lengthening in the foreground, overlapping, etc ... Also combine technology with beauty so that you awaken in the children a feeling for whether it is beautiful or ugly if a projection on a house overlaps a wall. A projection can overlap a wall in a beautiful or an ugly way. Things of this kind have a tremendous effect when they are brought just at the age of thirteen and fourteen, i.e. in class 7. Stuttgart, 6.9.1919 *Erziehungskunst, Seminarbesprechungen und Lehrplanvorträge* (the Art of Education. Discussions with Teachers and Curriculum Lectures). This passage is not in the English edition.

2 Stuttgart, 2.9.1919. *Practical Advice to Teachers* deals in detail with geography lessons which were to become 'a kind of summary of everything else we do with the children. In the end a wonderful interplay between geography and history will be possible. Having put a great many things into your geography lessons you will then also be able to draw on them for a great many things. This will of course tax your imaginative abilities and your inventiveness.'

56

1 Stuttgart, 2.9.1919 *Practical Advice to Teachers* Stuttgart, 14.6.1921 "Waldorf Education for Adolescents"; Oxford, 23.8.1922 "Spiritual Ground of Education".

57

1 See also *Erziehungskunst* 1972, volume 10. M. Jünemann: *Über das Zeichnen und Malen von Landkarten* (The drawing and painting of maps).

2 Three lectures on comprehensive Waldorf education in *A social Basis for Primary and Secondary Education.*

60

1 Karl Helbig: *Zu Mahamerus Füssen. Wanderungen auf Java* (At the foot of Mahamerus. Excursions on Java) Leipzig 1924.
See *Pädagogik heute* 1969, special edition on Waldorf education,
Regarding F. Weitmann: *Lessons in making things that are both practical and artistic from classes nine to twelve.*
This is a detailed extract of work covering a wide range.

67

1 "The specialized teaching of art". Exhibitions of this kind are often shown at the "Public educational Workshop weeks of the German Steiner Schools Fellowship" in Stuttgart and come from various Waldorf Schools. They are also put on by individual schools on Open Days and suchlike, and on an even larger scale on anniversary celebrations and other festive occasions. During the past few years there has also been detailed information both about Waldorf and Rudolf Steiner schools within the *Didacta* (Basle, Hannover, Nürnberg) which has been welcomed by many teachers as a useful source of orientation.
Lucid information is also to be had from the large book *Education Towards Freedom*, Lanthorn Press.
In Canton Berne in Switzerland there is enough freedom with regard to the shaping of the curriculum that for more than 30 years teachers have been sampling Waldorf education in State schools.

68

1 Gunter Otto: "Kunst als prozess im Unterricht" (art as a process in teaching). Braunschweig 1969.
2 Gert Weber: *Kunsterziehung gestern, heute, morgen auch* (art education yesterday, today, and even tomorrow). Ravensburg 1964.

69

See Niederhäuser: *Form Drawing*.

70

1 '...You will find for instance that if you take a plane and curve it and then curve it twice over, you have the simplest archetypal phenomenon of inner life. A plane that has a curve and another curve within that can be made use of in innumerable ways. This of course needs to be further developed, but the inner life of the nature of a plane will come to light through this process'. Munich, 17.2.1918 in *Kunst und Kunsterkenntnis* (Art and its study); see also The Hague, 9.4.1922, in *Die Bedeutung der Anthroposophie im Geistesleben der Gegenwart* (The significance of anthroposophy in the cultural life of today), Dornach 1957 (Proposed GA 82).
2 Wassily Kandinsky: Rückblick (In retrospect) Baden-Baden, 1955.

72

1 An especially detailed description of this age group was included in a Christmas Course given to teachers in Dornach on 4.1.1922 *"Soul Economy and Waldorf Education"* A.P.

73

1 See Kristiania, 20.5.1923, in *The Arts and their Mission*. A.P. Stuttgart, 16.6.1921. This series of lectures was given to the teachers of the first Waldorf School as a continuation of the "Study of Man" lectures of 1919, therefore it is often called The Supplementary Course. It is fundamental for teaching in the transitional time between the second and third seven-year period. "Waldorf Education for Adolescents". See also Stuttgart 21.6.1922 "Erziehungsfragen im Reifealter" (Educational questions in adolescence) GA 3021.

74

1 See the following essays in *Erziehungskunst*, a periodical on Rudolf Steiner education published by the German Waldorf School Fellowship, Stuttgart: F. Weitmann *Handwerk als Erziehungsfaktor* (the educational value of handicrafts). No.9/1957. K. J. Fintelmann *Waldorfpädagogik und Berufserziehung* (Waldorf education and vocational training). No. 10 and 11/1957. B. Galsterer *Erweiterung des praktischen Unterrichts für die Oberstufe* (expanding the lessons in practical skills in the Upper School). No.3/1958. M. Tittmann Die Schmiede in der Schule (a forge in the school). No.1961.

75

1 See Erich Schwebsch: Erziehungskunst aus Gegenwart des Geistes, the art of education as a spiritual deed), 1953, and *Zur ästhetischen Erziehung* (on aesthetic education) 1954, both published in Stuttgart in "Menschenbildung und Erziehung", volume 4 and 5. Hildegard Gerbert: *Menschenbildung aus Kunstverständnis* (Educating people out of an understanding of art). *Beiträge zur ästhetischen Erziehung* (Contributions to aesthetic education) second edition, Stuttgart 1983 (volume 21). Ernst Uhli: *Bildgestalten und Gestaltenbilder*. Zur Begründung des Kustunterrichts in den Freien Waldorfschulen (Images and forms. On the founding of art education in Waldorf schools), Stuttgart 1975 (volume 32).
2 See lectures: Ilkley, 16.8.1923 "A Modern Art of Education" and Torquay, 17.8.1924 *Kingdom of Childhood* R.S.P.

77

1 Stuttgart, 28.8.1919, "Practical Advice to Teachers" and Stuttgart 1.9.1919", Study of Man"

78

1 Stuttgart, "Discussions with Teachers" 6.9.1919 in the morning. "When we guide children into the realm of what can be modelled, we must as far as possible see to it that they follow the plastic forms with their hands. By feeling the way they make their own forms, by moving their hand and making a drawing, children can be brought to follow the forms with their eyes but also with their will emerging through their eyes." Stuttgart 21.8.1919 "Practical Advice to Teachers".

79

1 Munich, 15 and 17.2.1918 "Kunst und Kunsterkenntnis" (art and its study).

80

1 "The plant is a sculptural work of art by nature, and one cannot change it. Any attempt at sculpturing a plant would be bungled compared to what nature itself produces in the plant's physical and etheric body. We must simply leave the plant as it is, or observe it in a sculptural frame of mind, the way Goethe did in his morphology of plants . . . We cannot reproduce plants, we can only copy the gesture of the plant's movements." The Hague, 8.4.1922 in "Die Bedeutung der Anthroposophie im Geistesleben der Gegenwart" (the significance of anthroposophy in the cultural life of today). To appear as GA 82.

82

1 From the same lecture of 9.4.1922 in The Hague: "An animal *can* be sculptured, though, of course, the artistic creation of animal sculpture is different from sculpturing human beings. What you need to know is that an animal is basically either a creature governed by its breathing process; which is the case if we are creating beasts of prey . . . We must look at the creature as a breathing being and build everything around that, so to speak. If we want to sculpture a camel or a cow we have to take our lead from the digestive process and shape the rest of the animal accordingly. In short, you have to look with an artistic sense at what predominates in the animal's inner nature. Then if you make further distinctions, you will easily find the way to sculpture any animal form."
2 In this same lecture Rudolf Steiner also spoke about the sculpturing of the human form (see note 1).

1 Conference held on 15.11.1920. See Part 1: "Black and White Drawing and Perspective from Classes Six to Eight".
Also see conferences held on 12.7.23 and 5.2.1924.
". . . The light is telling you something all the time, for you can compare every single nuance of shading with the corresponding aspect of the figures of the polyhedron and the globe. With this picture Dürer has at one and the same time created something particularly pedagogical. If you want to teach someone to shade you can use nothing more pedagogical than this picture . . ." Dornach, 8.11.1916 in "Kunstgeschichte als Abbild innerer geistiger Impulse" (History of art as an image of inner spiritual impulses) GA 292.
Hedwig Hauck "Handwork Book", see note to P.12/1.
There is a report by Max Wolffhügel about the early years of the Stuttgart Waldorf School in "Erziehungskunst volume XVI no.5/6 1952: "Rudolf Steiner und der Künstlerische Handfertigkeitsunterricht in der Waldorfschule" (Rudolf Steiner and the arts and crafts in the Waldorf School) where he says that Rudolf Steiner recommended for 14 to 16 year olds that they both draw in a shading technique in black and white the Dürer pictures "Melancholia" and "Jerome" and also transpose them into a fantasy in colour.

93

1 The diagonal shading meant here, which is especially effective for objectless creations for the purpose of experiencing light and dark is, however, not generally used in teaching children below classes 10 or 11. When they work on the relations of light and shadow to objects in class 9 preference is given to working with surfaces with broad pieces of charcoal.

95

1 Max Wolffhügel: *Rudolf Steiner und der Künstlerische Handfertigkeitsunterricht in der Waldorfschule* (Rudolf Steiner and the arts and crafts in the Waldorf School). Also see: *Rudolf Steiners Entwürf für die Glasfenster des Goetheanum* (Rudolf Steiner's sketches for the stained glass windows of the Goetheanum). With an introduction by Assia Turgenieff, reminiscences of working on the glass windows and references of Rudolf Steiner's to the subject of black and white. 30 plates and 14 illustrations in the text. Dornach 1961.

96

1 Ake Fant, Arne Klingborg, A. John Wilkes: "Rudolf Steiner's Sculpture in Dornach". With an introduction by Hagen Biesantz. R.S.P.

97

1 In his lectures on colour Rudolf Steiner called black the '*spiritual image of the lifeless*, white the '*soul image of the spirit*'. See Dornach 6 and 7 May 1921 *Colour*. R.S.P. Also see section on "A Basis for artistic Creation from out of Rudolf Steiner's Approach to Colour". Also see Heinrich Wölfflin *Die Kunst Albrecht Dürers* (Albrecht Dürer's Art) Munich 1920.

99

1 Details in a lecture of Rudolf Steiner's "Der Akanthusblatt" (The acanthus leaf). Dornach, 7.6.1914 in *Wege zu einem neuen Baustil* (Ways to a new style in architecture) GA 286.

103

1 Stuttgart, 21.6.1922, *Erziehungsfragen im Reifealter** (Educational questions in adolescence). GA 302a.

106

On the painting of minerals, see Dornach, 8.5.1921 "*The Nature of Colour*".
2 See Part 3 *A Basis for artistic Creation from out of Rudolf Steiner's Approach to Colour.*
3 See K. E. Maison: *Bild und Abbild. Meisterwerke von Meistern kopiert und umgeschaffen.* (Pictures and copies. Masterpieces copied and transformed by masters). Munich 1960.
4 Goethe's Approach to Colour. Part I *Physiological Colours* (69).

107

1 "We must come to be very sure in ourselves that plain drawing has something untrue about it. The truest of all is the feeling that comes from the colour itself, somewhat untrue is the feeling that comes from light and dark, and the least true of all is drawing. Drawing as such does indeed approach the abstract element that is present in nature as something dying. We should really draw only in a way that makes us aware that we are drawing essentially what is dead. And painting with colours we should do in a way that makes us aware that we are calling forth the living out of the dead." Stuttgart 23.8.1919 in *Practical Advice to Teachers*. P.44.
2 There is a report on the motif of "Melancholia" and its portrayal in colour in Marie Strakosch-Giesler: "Die erlöste Sphinx" (the redeemed sphinx), Freiburg iBr., 1955, P.14/15. The lecture of Rudolf Steiner's reviewed there was not taken down.

109

1 See Clemens Weiler: Alexei Jawlensky. Cologne 1959.

110

1 On the subject of painting a tree: Conference held on 5.2.1924.

111

1 Goethe's prose aphorisms. In *Kürschners Deutsche National-Literatur* Volume 117,2 (Goethe's Works, volume 36,2) section 11. Reprinted with introduction and commentaries in Rudolf Steiner's pocket book editions volume 14, Stuttgart 1967.
2 *Goethe as Founder of a new Science of Aesthetics.*
3 The Curriculum of the first Waldorf School.
4 Munich, 15 and 17.2.1918: "Das Sinnliche-Übersinnliche in seiner Verwirklichung durch die Kunst" (art as a realisation of the sensible-supersensible), Munich, 5 and 6.5.1918: "Die Quellen der künstlerischen Phantasie und die Quellen der übersinnlichen Erkenntnis" (The source of artistic imagination and the source of supersensible knowledge). both in GA 271.

112

1 Seven School Sketches (Friedwart sketches) given as painting lessons at the Friedwart School: Sunrise, sunset, trees in the sun-filled air, trees in a gale, a tree in the sun growing beside a waterfall, head study, Madonna, with a supplement by Marie Groddeck: "Die Schulskizzen von Rudolf Steiner", containing statements by Rudolf Steiner on the teaching of painting in the upper classes (Dornach 1959).
In a later educational lecture Rudolf Steiner says in this regard: "In the Waldorf School and in Dornach what the children paint is their experience of colour . . . In this way the child enters right into colour, and little by little, of his own accord, he comes to produce form from out of colour . . . " He showed some drawings he had brought along: "Here, what is attempted is not to paint 'something' but to paint experience of colour. the painting of 'something' can come much later on. If the painting of 'something' is begun too soon a sense for living reality is lost and gives way to a sense for what is dead. If you proceed in this way, when you come to the treatment of any particular object in the world it will be far livelier than it would be without such a foundation. You see, children who have previously learnt to live in the element of colour can paint the island of Sicily, for instance, in connection with their geography lesson, and the map looks like this. (It had been done by a 17 year old girl in Dornach). In this way artistic work is even combined with geography teaching". Oxford, 23.8.1922, in "Spiritual Ground of Education."
2 On the painting of plants see also Dornach 8.5.1921 *Colour and Matter – Painting out of Colour* in *The Nature of Colour*. R.S.P.
3 Rudolf Steiner's school sketches, see note 1 to P.145.
4 There was a note on this in one of Rudolf Steiner's note books: "To paint a morning sky: yellow-red (vermilion): it is growing light, to paint an evening sky: red-yellow (orange): it is growing dark." Printed in the appendix to *The Nature of Colour* the German edition of which (Stuttgart 1959) was edited by Julius Hebing, and "Rudolf Steiners Farbenerkenntnis" (Rudolf Steiner's Knowledge of Colour) G.A.291a. Compare this with Goethe's: Red-yellow really gives the feeling of warmth and delight to the eye, as it represents the colour of the intense glow as well as the milder reflection of the setting sun", and he says of yellow-red (vermilion): "The agreeable, cheering feeling aroused by red-yellow (orange) can increase till it becomes unbearably powerful in intense yellow-red. The active side manifests here in its greatest power . . ." (Theory of Colour, 773-775).

115

1 See *Neun Schulungsskizzen für Maler. Naturstimmungen* (nine school sketches for painters. Nature moods). With an introduction by Hilde Boos-Hamburger, Dornach 1962. – Nine individual coloured sheets in the original format of the pastel sketches Rudolf Steiner gave, at the request of Henny Geck, to be the beginning of a path of training in painting.

122

1 24.9.1921 *Cosmosophy* volume I
With regard to *themes from the human realm* see in particular: Munich, 15 and 17.2.1918 *Das Sinnlich-Übersinnliche in seiner Verwirklichung durch die Kunst* (the sensible-supersensible. Spiritual knowledge and artistic creativity) both lectures in GA 271.
2 Berlin, 13.2.1913 *Leonardos geistige Grösse am Wendepunkt zur neueren Zeit* (Leonardo's significance at the beginning of modern times) in *Ergebnisse der Geistesforschung* (Results of spiritual research) GA 62.

123

1 Diderot's endeavours regarding painting. In *Kürschner* volume 110, (Goethe's Works volume 29).
2 These statements and the following refer to one of the three colour lectures given in Dornach 8.5.1921 *Colour*. These concepts are dealt with in detail in the next chapter on the theory of colour.

132

1 *Das Höchste*. Poems of the third period.
2 *The Course of my Life*, chapter V.

137

1 *Goethe's Natural Scientific Writings*, volume I.
2 In *The Course of my Life* Rudolf Steiner says the following in this regard: "I soon thought I could recognize that the hitherto unpublished material afforded an important contribution especially toward more exact insight into Goethe's mode of cognition.
In my writings published up to that time I had conceived this mode of cognition as consisting in the fact that Goethe was permeated by the conception that, in the ordinary state of consciousness, man is at first a stranger to the true nature of the world by which he is surrounded. Out of this remoteness arises the impulse first to develop, *before* cognizing the world, powers of knowledge which are not present in ordinary consciousness.
From this point of view it was highly significant for me to come upon such a statement as the following among Goethe's papers:
'In order to get our bearings to some extent in these different kinds (Goethe is referring to the different kinds of knowledge in man and his different relations to the outer world) we may classify these as utilizing, knowing, perceiving and all -encompassing.
1 Utilizing, profit-seeking, demanding persons are the first who, so to speak, outline the field of science and seize upon the practical. Consciousness gives them certitude through experience, and their requirements give them a certain breadth.
2 Knowledge-craving persons require a serene look, free from personal objectives, a restless curiosity, a clear intellect, and they stand always in relation with the former. They likewise elaborate what already exists, only in a scientific sense.
3 The perceptive are even in their attitude productive; and cognizing, as it ascends, calls for perception without being conscious of this, and passes over into perception; and, no matter how much the knowers may cross themselves as a shield against imagination, yet they must none the less – even before they are aware of this – call in the aid of productive imagination.

4 The all-encompassing, whom one might call in a proud sense the creative, are in their attitude in the highest sense productive; beginning as they do with the idea, they already express thereby the unity of the whole, and it is the business of nature, as it were, thereupon to conform with this idea.'

It becomes clear from such comments that Goethe considered man in his ordinary consciousness as standing *outside* the being of the external world. He must pass over into another form of consciousness if he desires to unite in cognition with this being. During my sojourn in Weimar the question arose within me in more and more decisive form: How must one build further upon the foundations of knowledge laid by Goethe in order to lead over in thinking from Goethe's mode of perception to that mode which can take up into itself *spiritual experience* as this had resulted for me?"

"To experience knowingly in the spirit is, to be sure, not yet achieved in this way; but the road to this is pointed out from *one side* – from that side which results from man's relation to the outer world. It was clear to my mind that satisfaction could come only with a grasp upon the other side, which arises from man's relation with himself."

". . . Human consciousness must first effect an understanding with itself; then can man find a confirmation of what is experienced purely spiritually. Such were the paths taken by my thoughts, repeating in clearer manner their earlier form, as I pored over Goethe's papers in Weimar."

138

1 Letter written 18.7.1891 to Richard Specht. Letters volume I from the years 1881-1891. Not published in English (GA38).
2 Conversation with Eckermann on 19.2.1829. Eckermann *Gespräche mit Goethe* (Conversations with Goethe).

139

1 Conversation with Eckermann on 18.3.1831.

141

1 A survey of corresponding lectures by Rudolf Steiner is on p.244 *Light Course*. S.S.F.P. *Warmth Course*. Mercury Press.

145

1 Hermann Diels *Die Fragmente der Vorsokratiker* (fragments of the pre-Socrateans) Volume I.
Friedrich Hiebel *The Gospel of Hellas*. There are further references to literature in Hiebel. According to him, the first person to draw attention to the Greeks' different colour perception was Gladstone in 1858.
2 Edm. Veckenstedt *Geschichte der Griechischen Farbenlehre* (history of Greek theory of colour). In this book Veckenstedt is endeavouring to refute the idea prevalent among the scholars of his time, that the Greeks may have had a blindness for blue. However, the material he brings is more likely to support the opposite view.
3 Dornach, 20.3.1920 *Heilfaktoren für den sozialen Organismus* (healing factors for the social organism) GA 198

148

1 Dornach, 6.7. and 8 May 1921 *Colour*.

155

1 Ph.O.Runge *Die Farbenkugel und andere Schriften zur Farbenlehre* (the colour circle and other writings on the theory of colour), with a postscript by J. Hebing, Stuttgart 1959.

156

1 Further details about the painting of the mineral, plant, animal and human kingdom in "Bild- und Glanzfarben – ein Ausblick" (the image and lustre quality of colours – a survey). An article by the author, including 8 coloured illustrations, is contained in "Welt, Farbe und Mensch" (the universe, colour and the human being) by Julius Hebing. Also see note to P.1V.

157

1 Dornach, 5. and 26.7.14 in *Wege zu einem neuen Baustil* (ways to a new style in architecture) GA 286.

161

1 *Bilder okkulter Siegel und Säulen. Der Münchner Kongress Pfingsten 1907 und seine Auswirkungen* (Picture of occult seals and pillars. The Munich Congress at Whitsun 1907 and its consequences). Portfolio with text, reproductions and plates. 1977 GA 284/285.
2 *The Four Mystery Plays* R.S.P.
3 Berne, 29.6.1921 *The Architectural Conception of the Goetheanum* for use in conjunction with *Der Baugedanke des Goetheanum* GA 290.
4 See above. Also The Hague, 9.4.1922 in *Die Bedeutung der Anthroposophie im Geistesleben der Gegenwart* (The significance of anthroposophy in the cultural life of today).

162

1 A lot of biographical accounts contain recollections of this period. Of particular relevance are the descriptions of two important artists:
Margarita Woloschin *Die Grüne Schlange* (The green snake). Reminiscences. 6th edition. Stuttgart 1982.
Assia Turgenieff: *Erinnerungen an Rudolf Steiner und die Arbeit am ersten Goetheanum* (reminiscences of Rudolf Steiner and the work on the first Goetheanum), 3rd edition Stuttgart 1982. Assia Bugajeff née Turgenieff was married to the poet Andrej Belyj (Boris Bugajeff) whose recollections of Rudolf Steiner were written in 1929 but have only just been published. These also contain very vivid descriptions of the days of the first Goetheanum. Andrej Belyj: *Verwandeln des Lebens – Erinnerungen an Rudolf Steiner* (transforming life – recollections of Rudolf Steiner) Basle 1975.
2 Rudolf Steiner: *Zwölf Entwürfe für die Malerei der grossen Kuppel des ersten Goetheanum* (twelve sketches for the painting of the large cupola of the first Goetheanum), edited by Marie Steiner, Dornach 1930. *Rudolf Steiners Entwürfe für die Malerei der kleinen Kuppel des ersten Goetheanum* (sketches for the painting of the small cupola of the first Goetheanum) edited and prefaced by Assia Turgenieff. Dornach 1962.
3 Ake Fant, Arne Klingborg, A.John Wilkes: *Rudolf Steiner's sculpture in Dornach*. R.S.P.
4 See Berne, 29.6.1921 *The Architectural Conception of the Goetheanum*.
Dornach, 25.1.1920 *Architectur, Plastik und Malerei des ersten Goetheanum* (the architecture, sculpture and painting in the first Goetheanum) - three lectures, Dornach, 23.24 and 25.1.1920. Separate edition Dornach 1982.

163

1 Berne, 29.6.1921 *The Architectural Conception of the Goetheanum*.
2 D. van Bemmelen: *Rudolf Steiner's new Approach to Colour* St. George's Publications, New York.

164

1 In another connection a pastel sketch arose called "Elemental Beings" reproduced in its original size as a single sheet. Dornach 1961.

165

1 Dornach, 25.1.1920, Dornach 1982.

166

1 Taken from Strakosch-Giesler: *Die erlöste Sphinx* (The redeemed sphinx). Freiburg i.Br. 1955.

167

1 By Louise v. Blommestein: *Wie Rudolf Steiner uns vormalte* (Demonstration lessons by Rudolf Steiner) in the German edition of the Hauck handwork book, *Handarbeit und Kunstgewerbe*.

168

1 See *Rudolf Steiners malerischer Impuls. Ein Werkzeichnis* (Rudolf Steiner's painting impulse. An inventory). Dornach 1971.

172

1 Dornach, 26.7.1914 in *Wege zu einem neuen Baustil* (ways to a new style of architecture) GA 286.
2 Berne, 29.6.1921 *The architectural Conception of the Goetheanum.*

173

1 Reproduced in the catalogue *50 Jahre Bauhaus (50 years' Bauhaus).* Stuttgart, Württemberg Society of Art 1968.

175

1 Rex Raab: *Eloquent Concrete. How Rudolf Steiner employed reinforced Concrete* R.S.P.

176

1 Dornach, 26.7.1914 GA 286.
2 Dornach 17.6.1914 GA 286.

177

1 *Goethe as Founder of a new Aesthetics.* (GA 271).
2 Goethe *Dichtung und Wahrheit* (Poetry and Truth) IV, book 18, vol. 20. P.95 in Kürschner's *Deutsche Nationalliteratur.*

180

1 *Goethe as Founder of a new Aesthetics*
2 Munich, 15. and 17.2.1918 GA 271.
3 Munich, 17.2.1918 GA 271.

Bibliography

Statements on the teaching of painting and drawing contained in educational lectures by Rudolf Steiner and in the conference meetings he had with the teachers of the independent Waldorf School in Stuttgart 1919-1924.

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   Lecture 3. (The two artistic streams: the sculptural, pictorial stream and the musical, poetic stream. Reference to the cupola paintings. Colour, black and white and the line).
   Lecture 4 (The first lesson: manual skill, drawing and painting. Distinction between what is beautiful and less beautiful when painting).

2. Discussions with Teachers nos. 2, 3. and 4. (Drawing motifs). Curriculum lecture 2 (Form drawing, modelling and the study of shadows). This is not included in the English edition.

3. Meditatively Acquired Knowledge of Man.
   Lectures 2 and 3 (The sculptural, pictorial stream and the music and speech stream).

4. Soul Economy and Waldorf Education.
   Lecture 12 (The child from the tenth to the fourteenth year – education and didactics. Painting with colour that is dissolved in the paintpot. Exercises in exchanging and altering colours).
   Lecture 14 (Aesthetic education in particular).

5. Spiritual Ground of Education. Out of print.
   Lecture 6 (Children with poor or good memories and the dealing with this in painting lessons).
   Lecture 7 (On colour experience and painting lessons. The painting of maps).

6. The Child's Changing Consciousness and Waldorf Education.
   Lecture 4 (Learning to write out of the activity of painting and drawing).
   Lecture 5 (Colour perspective – flexible ideas, feelings and will activity gained through a feeling for colour).

7. A Modern Art of Education.
   Lecture 11 (The teaching of painting and drawing. Sculpture as a means of enlivening sight. Art teaching).
   Lecture 12 (Lessons in manual skill and free creativity. Reference to a living art of painting).

8. Kingdom of Childhood.
   Lecture 4 (Form drawing and symmetry exercises. Reference to colour harmony in children. Exercises in changing the colours round).
   Questions and Answers (Detailed account of drawing and painting lessons - example of painting a tree).

9. Rudolf Steiner's Conferences with the Teachers of the Waldorf School in Stuttgart 1919-1924.

22 Dec. 1919	(Painting with water colour, not working with chalks).
15 Nov. 1920	(References to the building up of colour experience. Colour stories. Painting posters).
17 June 1921	(Alternating between modelling and painting).
16 Nov. 1921	(Exercises in changing the colours round. Artistic block teaching).
28 April 1922	(Prof. Cizek of Vienna's painting lessons. Art teaching in a class 8: the motifs of Albrecht Dürer).
15 Oct. 1922	(Colour and comparative anatomy).
9 Dec. 1922	(Art teaching in a class 9 – the black and white of Dürer and Rembrandt).
25 April 1923	(Reference to the paintings of the pupils at the Continuation School in Dornach – sunrise and sunset – a rain mood in a wood).
3 July 1923	(Painting on stretched paper).
12 July 1923	(Reference to Dürer's engraving "Melancholia").
18 Dec. 1923	(Painting exercise for a pupil).
25 Feb. 1924	(Important references to painting in the upper classes – example of the painting of a tree – the transposing of black and white into colour imagination).

Rudolf Steiner's statements on colour and painting

1. At the Gates of Spiritual Science.
Lectures 1 and 2 (Colour of the etheric body, astral body and ego. Astral world – the world of colour).

2. The World of the Senses and the World of the Spirit.
Lecture 2 (The experience of green. Plant leaf – bark. A ruddy complexion. Growth and decay).

3. The Spiritual Beings in the Heavenly Bodies and in the Kingdoms of Nature.
Lecture 1 (The moral experience of colours, blue, green and white).

4. Wege zu einem neuen Baustil (Ways to a new style in architecture) GA 286,
Not in translation.
Lecture 4 (The true aesthetic laws of form (colour in connection with animal and man).
Lecture 5 The creative world of colour (animal colouring, colour dynamics: the experience of red and blue – colour movement).

5. Der Dornacher Bau als Wahrzeichen geschichtlichen Werdens und künstlerischer Umwandlungsimpulse (The building in Dornach as a manifestation of artistic impulses of transformation) GA 287. Not in translation.
Lecture 5 (Painting in its two extremes, drawing and colouring. The painting of illuminated clouds. The flowing nature of the world of colour).

6. Art as seen in the Light of Mystery Wisdom.
Lecture 2 "Impulses of Transformation for Man's artistic Evolution I" (The arts and the members of man's being).
Lecture 3 "Impulses of Transformation for Man's artistic Evolution II" (The realm of painting – projection of astral inwardness).
Lecture 5 "Moral Experience of the Worlds of Colour and Tone". (Experiencing red, orange, yellow, green, blue. The experience of red: Divine wrath and Divine mercy).
Lecture 6 "Working with Sculptural Architecture I" (The red of dawn – the weaving of the Elohim).

7. Die Verbindung zwischen Lebenden und Toten. (The connection between the living and the dead) GA 168. Not in translation. Lecture 1 (Experiencing the colours red, blue, green).

8. Earthly Death and Cosmic Life.
Lecture 9 (Colours of the earth, seen from the spiritual aspect).
Lecture 16 (The building in Dornach. Painting. Coloured auras – objects that shine).

9. Kunst and Kunsterkenntnis (Art and its study) GA 271. Not in translation.
Lecture 2 Art as a realization of the sensible-supersensible (Two sources of art, impressionism. The painting of human beings, portraits. A living experience of red-yellow, and blue-violet).
Lecture on the sources of artistic phantasy and the sources of supersensible knowledge (artists and seers, skin colour).
Lecture on the sensible-supersensible, spiritual knowledge and artistic creativity.
Lecture on the supersensible origin of the artistic impulse (Painting. Colour is experienced in the astral world).

10. Architektur, Plastik and Malerei des ersten Goetheanum. (Architecture, sculpture and painting of the first Goetheanum) three lectures Dornach 23.24. and 25.1.1920 (Dornach 1972) not in translation.
Lecture 3 The cupola paintings. The Goetheanum as a manifestation of anthroposophy (The nature of colour).

11. Der Baugedanke von Dornach (The architectural conception of Dornach). Three lectures Dornach 2.9. and 16.10.1920 (Dornach 1942).
Not in translation.
Lecture 2 (Dürer's Melancholia. The horizon – the experience of mutually restricting colours).

12. The Nature of Colour
A lecture on "Light and Darkness – two World Entities" (Developing the colour perception of red as pointing to the past and blue to the future).
Lecture on "Human Life in the Realms of Light and Weight".
A lecture on "Measure, Number and Weight" (Freely hovering sense impressions, freely hovering colour. Icon and Madonna. Gold background. Cimabue - Giotto - Raphael. Painting endeavours in Dornach). A lecture on "The Hierarachies and the Nature of the Rainbow".

13. Three lectures from the above cycle published as "Colour".
Lecture 1 "The experience of colour – th four image colours".
Lecture 2 "The image character and lustre character of colours".
Lecture 3 "Colour and matter – painting out of colour".

14. Der Baugedanke des Goetheanum (the architectural conception of the Goetheanum) GA 290. Not in translation.
(Paintings in the small cupola – the dynamic of colours). Motif of Faust and the child: blue – orange)

15. Cosmosophy Volume I.
Lecture 2 (the rainbow and human skin colour. The source of colour within man).

16. Stilformen des Organisch-Lebendigen (typical forms of organic life).
Two lectures, Dornach, 28 and 30.12.1921 (Dornach 1933). Not in translation.
Lecture 1 "The forms of creative forces in nature" (connection with the cosmos seen in the

cupola paintings. One should be able to see through paintings).
Lecture 2 "Art – a revelation of secret laws of nature" (The paintings and the motifs of the large and small cupola).

17. Vom Leben des Menschen und der Erde (The life of man and of the earth) GA 349. Not in translation.
Lecture 2 The nature of colour (The colours of sunrise and sunset. Plant colours – red, blue and yellow).
Lecture 3 Colour and human races.

18. The Arts and their Mission.
Lecture 3 (On painting. Colour in the mineral and plant world. Colour of jewels. Colour perspective).
Lecture 5 (Raphael's Sistine Madonna – comparison between eternity and the moment. Stifter's grandmother: sunset colours – the Madonna's clothing).
Lecture 6 (metals and planets. The colour gold, painting motifs: the painting of trees, and the painting of human beings. The colour of illumination and the colour of the skin. Madonna. Titian's "Ascension of Mary". Impressionism and expressionism. Art and non-art).
Lecture 7. "Anthroposophy and Art" (Colour as the revelation of soul in the world. The image colours green, peach blossom, white and black).
Lecture 8. "Anthroposophy and Poetry" (Image and lustre colours. Painting a figure in yellow or blue. Renaissance painters - living in the soul-spiritual quality of colour. The nature of painting).

19. (21) Karmic Relations, esoteric studies volume III.
Lecture 2 (Colours of the ether and astral atmosphere).
Lecture 5 (Auric colours around the world of the plants and the animals).

20. (22) Notes made after 2 unrecorded lectures given by Rudolf Steiner on paintings during the Youth course of 1922 in Stuttgart (The Younger Generation) are to be found in "Die erlöste Sphinx" (the redeemed sphinx) by M. Strakosch-Giesler. Freiburg/Br. 1955. Not in translation.
Lecture 1 (Painting motifs: sunrise, moon scene, profile of a face, devils and angels).
Lecture 2 (On plant colours and plant nature. Colour perspective. Transposing Dürer's "Melancholia" into colour. The human face).