COLOUR EXERCISES FOR BEGINNERS IN THE DIPLOMA ART EDUCATION PROGRAMME, UNIVERSITY COLLEGE OF EDUCATION AT WINNEBA

A Long Essay presented to the Board of Post-graduate Studies in partial fulfillment of the requirements for the Post-graduate Diploma in Art Education

By

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CERTIFICATION

Certified that this Long Essay is the candidate's own account of her research

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(Supervisor)

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First and foremost, I give all thanks to the Almighty God without whose guidance and blessing I would never have reached this far in life.

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D.D.O.

August 1993,

PREFACE

Beginners of the Diploma Art programme at the University College of Education at Winneba (U.C.E.W.) are very apprehensive and frightened when the topic on colour is raised. Students throughout the years have been struggling in vain to solve problems of colour schemes and colour harmonies. Colour work is shrouded in a lot of theories and concepts which do not help the beginner develop a good colour sense.

Knowledge of colour theories and concepts by itself cannot develop one's sensitivity for colour, nature provides the true source of colour and inspiration for the artist. It has a store-house of discoveries which can only be learnt by sharpening one's perceptual awareness to the environment. Sensitivity to nature provides one with first hand information on colours and their relationship with one another.

Thus a series of colour exercises have been proposed to help the student learn the qualities and properties of colour and how they relate to nature. This approach to colour-work will help the student to understand the theories and concepts of colour better. It is hoped that as students acquire knowledge on the qualities of pigment itself and the manner they mix together this will help create an infinite number of colours. Also after learning the funda-

mentals the student will be able to stretch, expand and explore colour potentialities in painting.

As well as constantly analysing the results and variations and adding the findings to their store-house of knowledge and skill in the medium.

Therefore this essay is prepared to act as an instructional guide to students handling colour and it is hoped it will help students to become confident and bold in their use of colour.

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ABSTRACT

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TITLE : COLOUR EXERCISES FOR BEGINNERS IN THE DIPLOMA ART EDUCATION PROGRAMME, UNIVERSITY COLLEGE OF EDUCATION AT WINNEBA.

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The study of colour begins by sensitizing the student to aesthetic relationship in nature through the process of practical training with the medium relating this to colour as it appears in nature. The usual approach to colour primarily based on theories and concepts is frustrating and disheartening for the beginner.

Colour is the most relative medium in art and it does not appear as visually perceived. Most students are compounded with the problem of utilizing colour efficiently especially when concepts and theories in colour are not of much help to them.

Therefore an in-depth programme on how to use the pigment is broached in this essay to aid the student. Students need to perceive colour and become sensitive and be in tune with their environment. The study of colour in nature will thus help the student gradually to come to terms

with colour qualities. Nature provides an awareness and appreciation, intelluctual stimulation and personal involvement. It encourages sensitivity and helps to develop ideas and form.

Thus, this essay introduces a series of colour exercises that will help the student learn to use the pigment and relate it to colour as it exists in nature. It also acts as a source of encouragement for the study of colour. It will develop in the student colour sensitivity to the uncountable varieties of tones in nature, thus it will play a positive role in helping students to paint. It is also hoped to provide the stepping stone for further analysis and exploration of the medium.

CHAPTER ONE

INTRODUCTION

Background

The Art Education programme at Winneba started in 1959 as a two year certificate course. The programme has changed over the years and in 1975 it was reduced from four year Diploma to the present three year Diploma programme. There are five departments namely Graphic Design, Painting, Sculpture, Ceramic and Textiles. The entry requirements include Teacher 'A' Certificate with a minimum of two years post-graduation teaching with four credit passes at the General Certificate level which should include English Language and Art. Students can also enter as mature students with ten years teaching experience.

The main objective is to produce competent professional and creative teachers in Art Education for pre-university institutions.

The Problem

Studies from interviews and questionaires indicate that new entrants in the Diploma Art Programme at the

University College of Education at Winneba over the years have been afraid of the application of colour. After interviewing eighty out of the eighty-eight continuing students it came to light that the approach to teaching colour over the years has not enabled students to have a proper understanding of colour and it's application. These problems prevented some potential prospective painting students from pursuing the subject. Yet the use of colour is necessary and essential for every student as it runs throughout all the fields in art.

Objectives

1. To conduct colour exercises based on colour application using plants.

2. To propose a programme using colour exercises to develop control of the use of the medium.

Hypothesis

Students do not have the proper understanding of colour and it's application. It is possible to use colour properly and creatively with practice given the right approach.

Delimitation

This study is restricted to the identification, study, analysis of colour in selected plants and the application of colour in painting. It also covers the identification of concepts, qualities and characteristics of colour.

Definition of Terms

Hue:

The genetic name of a colour.

Colour Intensity:

Refers to the relative purity of a colour.

Tone:

The change in colour quality due to the combination of light and shade or with other hues.

Triad:

They consist of colours positioned on the colour wheel to form an equilaterial triangle.

Pigments:

Chemical compounds or dyes that are mixed in a medium to make paint.

Complementary Colours:

Colours that are opposite to each other on the colour wheel.

Split Complementary:

Consists of the hues that fall to the left and right of a complementary colour.

Shade:

A lower value of a hue obtained by mixing the hue with black.

Warm Colours:

These are colours that contain red or yellow.

Cool Colours:

These colours have blue or violet in them and have a cooling effect.

Analogous Colours:

A selection of colours centred upon one of the primary colours.

Colour Wheel:

This is a gadget used in the arrangement of colours of the solar spectrum visible to the eye.

Value:

Amount of lightness or darkness in any given hue.

Spectrum:

The band of colours formed when a ray of light has been broken up by being passed through a prism or rain drop.

Tint:

This is a mixture of a pure hue with white.

Maroon:

A dark brownish-red colour.

Verimilon:

A dark green colour.

Chalky:

When too much white is added to a colour in a painting.

Gaudy:

When overly bright colours are used.

Importance of Study

The study of colour is best done by observing it first hand from nature and this study will enable begin-

ners to observe, analyse and develop a good colour sense. It will also enable students to overcome their fear of colour and to become confident and creative in the use of colour. Teachers and other students of art will have a clear understanding of the application of most of the principles on colour. This will further make teaching of colour more meaningful and easier in schools.

Abbreviations

E.g. : latin, exempli gratia, for example

Etc. : et cetera, meaning, and so on

Ibid. : Ibidem, meaning, in the same place (e.g. the same book, chapter, etc. previously quoted).

U.C.E.W.: University College of Education at Winneba

U.S.T. : University of Science and Technology.

Limitation

Selected leaves and flowers were used due to the limited duration of the long Essay and this could not permit the analysis of more plants. The use of pigment is restricted to poster colour. Although questionnaires and interviews were conducted with the sampling unit due to long distance between the residence of the researcher and the targeted population for the survey. The reseacher could not have more personal contact with the sampling unit as planned.

Order of Text

The main research method is analytical and descriptive. Information was collected from Primary and Secondary

sources. The scope of research convered the study and analysis of colour through colour exercises on the characteristics of colour and relating this to selected plant sources available in the environment.

Chapter one deals with a brief history of the Art Education Programme and the problem of beginners in the Art Education Diploma programme (U.C.E.W). Chapter two reviews related literature on colour, sources of colour and concepts of colour. Colour is not learnt through theories and concepts but through observation and experience. Thus a series of colour exercises have been proposed in Chapters three and four analysing and studying colour properties and qualities. Practical exercises on an approach to painting are also conducted using plants sources.

Chapter five deals with the summary, conclusion and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Many theories have been advanced to explain colour . Sir Isaac Newton made a series of experiments that provided the foundation for our modern knowledge in physics of colour. Upon this theory, colour has been defined differently by various authors.

The Chamber's Twentieth Century Dictionary defines colour as

> "A sensation of light induced in the eye by either waves of a certain frequency and the particular colour being determined by the frequency." (1)

It further states that colour is

> " property whereby bodies have different appearances to the eye through surface reflection or absorption of rays."(2)

The World Book Encyclopedia Volume 3, also defines colour as

"What the eye sees when light strikes."(3)

As the colour reflected is a vibration of a particular wave length from an object to the eye, most autho-

rities agree that objects themselves do not contain colour but the colour of an object is determined by its relative ability to absorb light rays.

> "If an object absorbs all colours except red, red rays are reflected to the eye and we call the object red. White light is a mixture of all colours. These colours may be seen when sunlight striking the curved surfaces of raindrops is spread into a rainbow". (4)

Chamber's English Dictionary also defines colour as:

> "A sensation of light induced in the eye by electromagnetic waves of a certain frequency - the colour being determined to the frequency: a property whereby bodies have different appearance to the eye through surface reflection of absorption of rays." (5)

Longman's Dictionary of English language describes colour as:

> "The visual sensation resulting from the interpretation by the brain of wave length of perceived light that enables one to differentiate between otherwise identical objects." (6)

Kofi Antubam (1963) is of the notion that colour is:

> "To Ghanaians as to most of the other people of the world, therefore, the beauty of colour cannot lie only in the visual value of it, but also in it's significant traditional meaning. Traditionally, however, the use of colour in Ghana has not been based on a scientific analysis of it with light considered in relation to the rainbow colours, but only a philosophical symbolism founded on a deep abstract and spiritual value." (7)

The new Oxford Illustrated Dictionary defines colour as:

> "Quality of wave length of light emitted from an object or reflecting surface and the quality of the incident light." (8)

A considerable amount of literature exists on colour theory but these are defined from the physicists perspective and thus are of little practical use to the amateur artist.

To the artist certain aspects of colour must be considered:

> "The appearance of colour for them depends on viewing conditions, the surrounding objects or areas, the sizes and relative positions of objects and the adaptive state of the viewer."(9)

Colour should not be viewed merely as reflection of light but as an entity by its self with its own properties.

Gottfried Tritten is of the view that:

> "The significance of the world of colour and of education through colour cannot be over emphasized. It aids visual perception, adds depth to the emotions, awakens the creative powers and is the source of rich imagery. It leads to the real experience of colour."(10)

He further expatiates,

> "In art colour opens up the possibility of creating illusions of space and light. It opens the door to a free personal view of colour harmony. The pupil discovers how colours influence each other and becomes aware of their respective expressive values. The pupil now begins to appreciate colour as a phenomenon. He experiences the radiant power of real colourfulness." (11)

<u>Source of Colour</u>

Colour awareness develops through experience and through deliberate attempt to cultivate colour - sensitivity. Nature provides the true source of colour and

inspiration for the artist. The study of colour proceeds through the eye and not the observation of fact nor the learning of theories.

> "In our journey along the path of understanding we discover which wavelengths correspond to red or blue that yellow and red are exciting colours and that blue has a cool, depressing effect. All this we experience directly; we do not learn it we live it! we respond with an inborn certainty to a situation that has been firmly established by the forces of nature." (12)

The Encyclopedia Americana (International edition) (1963) says:

> "There is considerable school of thought which holds nature as the true guide of colour harmony." (13)

The true source of colour is in nature and to learn original colour schemes one must learn to observe nature. Thus in the provision and instruction in handling colour it is necessary to train one's eye:

> "But what kind of training develops our inherent sensitivity to the visual art. To begin with we must learn how to see not look but see, looking and seeing are as different as bobbling and speaking. To look means that our eyes operate only to the extent that they keep us from being hit by a car, assist us in hearing the news or amuse through television." (14)

Most people only look and do not see as seeing is an act that occurs only with effort. Therefore there is the need to train oneself to see: Geoffrey Fletcher says:

"You cannot learn to use colour until you have disciplined your eye ..... colour effects vivid scarlets and oranges. For example have a clashing strident or irritating effect."(15)

Colour is a very important part of our lives and unescapably we are compelled to make decisions about colour. We are not only surrounded by it, but we select our cloths, automobiles, houses, paintings, food and even our spouses by it.

Colour not only helps us to identify objects, it affects our moods, temperature emotions and ideas. For instance people speak of looking through rose coloured glasses, feeling blue or green with envy or jealousy.

Concepts of Colour

The Ghanaian concept of colour is based on deep philosophical symbolism founded on spiritual values. Kofi Antubam points out:

"Traditionally, however, the use of colour in Ghana has not been based on a scientific analysis of it with light considered in relationship to the rainbow colours but only a philosophical symbolism founded on deep abstract and spiritual values"(16)

Colours are related directly with nature and based on purity of colour as found in nature:

"Colour traditionally known and used by Ghanaian in their customary rites are white silver, yellow, gold, red, brown, black, green, blue, grey and violet."(17)

Examples of these colours are seen in Plate 1.

Symbolism of Colours

Kofi Antubam further points out that:

"Colours are symbolic and utilized for a particular occasion in Ghanaian Society."(18)

colours are named according to their relationship to nature.

In Akan culture white is called "fitaa" and is associated with victory. This colour is used on ocassion such as child naming puberty rites, marriage, divorce ceremonies and funerals.

Yellow: is called "Amerewa". It is associated with gold which is the symbol of life wealth and the divine presence of God. This colour is used during festivals and gay ocassions. Gold is also used when building a house or a town.

Red: is associated with fire or blood and is called "Kokoo"

Green is called "Apobire" and is likened to growth, fertility and vitality.

Blue: is called "Hoa" and it is a shade of colour closer to indigo.

Grey: is associated with shame and is used in cases of accidental deaths. It is also associated with soot "Nso" in Akan Brown: This is also a funeral colour and called "dodome"

Violet: is called "Koomire" whilst the colour

Black: is called "Tumtum" and worn greatly for funerals.

Ghanaian concept of colours is filled with rich, bright hues and this is depicted in the beautifully woven Kente Cloth. Colour is considered as life and

strength and is used symbolically to reflect the beliefs values and activities of daily life.

Universal Concept

It is believed that colour originates basically from three primary colours. Namely red, blue, and yellow. These are mixed together to create secondary colours namely orange, green and puple.

Colours are related to one another on a colour wheel and colour schemes are derived in relationship to the placement of colours. For example, analogous colours are adjacent colours of any one of the three primary colours. Complementary colours are those that lie opposite one another on the colour wheel. The colour wheel can be seen in plate 2.

Symbolism of Colour

Colours are related to the emotional, physical social beliefs and psychological effect they have on most people. Colour symbolism is therefore not universal and colour means exactly what a society says it means.

The Encyclopedia Britannica Volume 16 (1989) says:

> "The colour of mourning is black in the west, yet other cultures used purple or yellow for the purpose." (19)

The artist though is concerned with other aspects of colour. Albert O. Halse states that:

> "The appearance of colour depends on viewing conditions, the surrounding objects or areas, the sizes and relative positions of objects and the adaptive state of the viewer". (20)

He further states the following colours have been universally accepted for the effect they have on one's emotion.

Blue: Is both cooling and sedative and believed to help one to concentrate.

Green: also acts as a sedative and believed to reduced blood pressure.

Yellow: is a warm sunny hue, it is stimulating and cheery. It is used in dangerous locations to mark impending hazards.

Red: is exciting, amorous, aggressive and associated with violence and excitment.

Purple: is also sedative and soothing.

Orange: is believed to have stimulating effect.

The various concepts and, theories of colour are not the criteria for studying colour. Rather emphasis is placed on knowing the characteristics of the medium through colour exercises. This practical skill is then applied to studying and painting colour as it appears in nature. As David Friend says "experience with colour is felt not learnt". (21)

The nature of colour can only be learnt by experience.

Plate:1 Colours commonly used in Ghana

Plate:2 Colour Wheels

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CHAPTER THREE

COLOUR EXERCISES I

Although students have some knowledge on colour they are unable to handle colour, effectively in their paintings. This is because their training has been based solely on concepts and theories and little or no practical work has been done on using the medium.

Colours are used straight from the tubes and students fail to see the various tones of colour when objects are placed before them. Thus, grass is often given one tone of brilliant green paint normally straight from the tube.

The Chapter tackles how to use the pigment by applying colour schemes from nature. Students aesthetic awareness of their environment is therefore awakened and they are encouraged to begin to "see" their environment the following are some useful exercises employed to help students to know colour qualities.

Exercise 1

Critical Observation of Nature

It is necessary to learn to improve one's perception

and senses to become alive to the rich store house of colour that exists in nature before developing technical skills.

Materials: Materials needed are the natural environment. This could be the beach, field, flower garden ecetera.

Approach: Begin simply by looking around and studying the objects that are in the environment. The eye and the mind must both work together if one is to begin to "see". It requires one critically examining, analysing, studying, probing and squinting one's eye. As one observes the environment, one will notice astonishing features. Plates 3 and 4 show the same scene taken at two different times in the day. Plate 3 depicts the afternoon's bright sunlight, with its deep shadows, high contrasts and explosive hues. The foliage reveal bright rich tones of greens in the left corner and darker tones on the right. The building and trees are seen in distinct outlines and unmistakable detail, create well defined forms whilst Plate 4 portrays shadows of the evening light. Tones are dark and foliage is not well defined. The building is covered in shade and the hues are dull and grayish.

Plate:3 Scene from the environment at midday

Plate:4 Scene from the environment at dusk

Exercise 2

Critical Observation of Nature

By using each of your six senses apply them to see aesthetically. As observing the environment relate it to the qualities below.

1. Using the sense of sight, observe the relationship between the following:

(i) shapes

(ii) lines

(iii) colour

(iv) texture (visual)

(v) patterns

(vi) light

(vii) shadows

2. Using the sense of hearing, listen and identify the sounds in your environment.

3. Using the sense, of smell, note the scents around and relate them to their sources.

4. Using the sense of touch, pick up different objects and feel for the following.

(i) texture (surface)

(ii) hotness or coldness

(iii) softness or hardness

5. Using kinestic energy pick up different objects and feel their weight.

The sense of taste has been obliterated because plants can contain harmful substances.

Result

The essence of learning to see is to build up students experience with visual forms. These experiences made up of continous renewed contacts with nature to help students to paint original rich tones in a painting. Plates 5 and 6 depict different scenes in nature.

Examine each and relate them to the above exercise.

Plate:5 scene from nature

Plate:6 Scene from nature

Exercise 3

Brush Control Exercise

Before one can begin to paint one must get acquainted with the medium.

Materials: A good set of poster colours, stable brushes (sizes range from 1 - 12), cartridge paper, palette, a jar of water and a rag. One must take note and buy quality materials for maximum effect. The materials stated above will be needed in all the remaining exercises

Approach:

Pick up one's brush and with it tansfer a drop of water to the palette and mix it with any colour from the tubes of paint.

• pick up your cartridge paper and fix it with drawing pins unto the table.

• Dip the brush loaded with colour unto the paper and practise various brush strokes, thick, thin, wavy, broken, curved, diagonal to enable the student to get acquainted with the pigment and get accustomed to getting the right consistency of paint.

• practise painting a dragged brush effect with an almost dry brush.

• vary the pressure placed on the brush and make a series of wavy lines.

• paint blobs in patterns, pressing the brush to the paper and lifting it.

• experiment with a combination of dry and full brush strokes.

• paint circular shapes and splashes.

Result:

Increased knowledge and experience with the medium will improve the level of confidence of the student.

Exercise 4

Creating Texture

This exercise will show contrast of texture.

Approach:

Paint is applied in various degrees of thickness. A combination of varying strokes, crisscrossing, jagged lines and multiple lines will all create different textures. Interesting effects can be created when textures are applied in a composition. They can be haphazardly placed or carefully arranged as seen in Plate:7

Result:

Student can use this experience in creating foliage, vegetation, fluffy fur, patterns designs ecetera. This experience will also help the student to appreciate surface quality of the pigment.

Plate:7 Colour Texture

Exercise 5

Colour Value

Colour in its full natural strength has a "normal value". When it is mixed with white it is called a tint or when mixed with black is called shade. Colour value designates the brightness of a colour, in relation to its darkness or lightness.

Approach:

Mix a primary colour and place a small square of it in the middle of a strip of cartridge paper.

Next to it make a series of squares mixed progressively with more and more white till the last square is almost pure white.

Working on the other half of the paper make a similar row of squares, this time mixing with black.

So that one has a colour gradation ranging from very pale to very dark, the unmixed or pure colour placed in the middle. The student should repeat this with other primary and secondary colours.

Result:

This exercise teaches the student to make an exact mixture on the palette. The student can also observe what actually happens to a colour when black and white are mixed with it. One notices, for example that yellow hardly changes in hue when mixed with white but rapidly changes into a greenish tone when mixed with black. Blue

and violet are noted to change rapidly when mixed with white pigment.

One can see also the great variety of very subtle mixtures possible with a limited palette. The student should compare tints and shades to colours seen in their environment.

Plate: 8 Colour value (tints and shades)

Exercise 6

Colour value using two complementary hues

Colour value can also be changed by using hues of other colours. A great variety of colours can be created by mixing two complementary colours together.

Approach:

In this exercise a number of one inch squares are drawn and in the middle square at each of the extreme tips two complementary colours are painted. These two hues are gradually mixed together till they meet in the center. Each of these hues are then mixed with white gradually till all the squares at the top are covered. This is repeated at the base with back gradually.

Result:

After this grading exercise the student should observe shades and tones in nature by comparing their scale in good light to the various tones in their environment.

This practice will help the student become more aware of values and their subtle differences and will be of immense value when the student starts to paint.

Plate:9

Colour value using complementary colours

Exercise 7

Monochromatic Painting

Monochromatic painting is painting done using tints and tones of one hue. Students will build upon knowledge acquired from the previous exercises on colour value.

Approach

Students are to draw and paint a composition of rectangular and cylindrical object.
Colours are graded in flat tone of colour mainly the darkest tone, middle tone and the light tone.
This exercise is to help students break down objects into graded areas of colour.

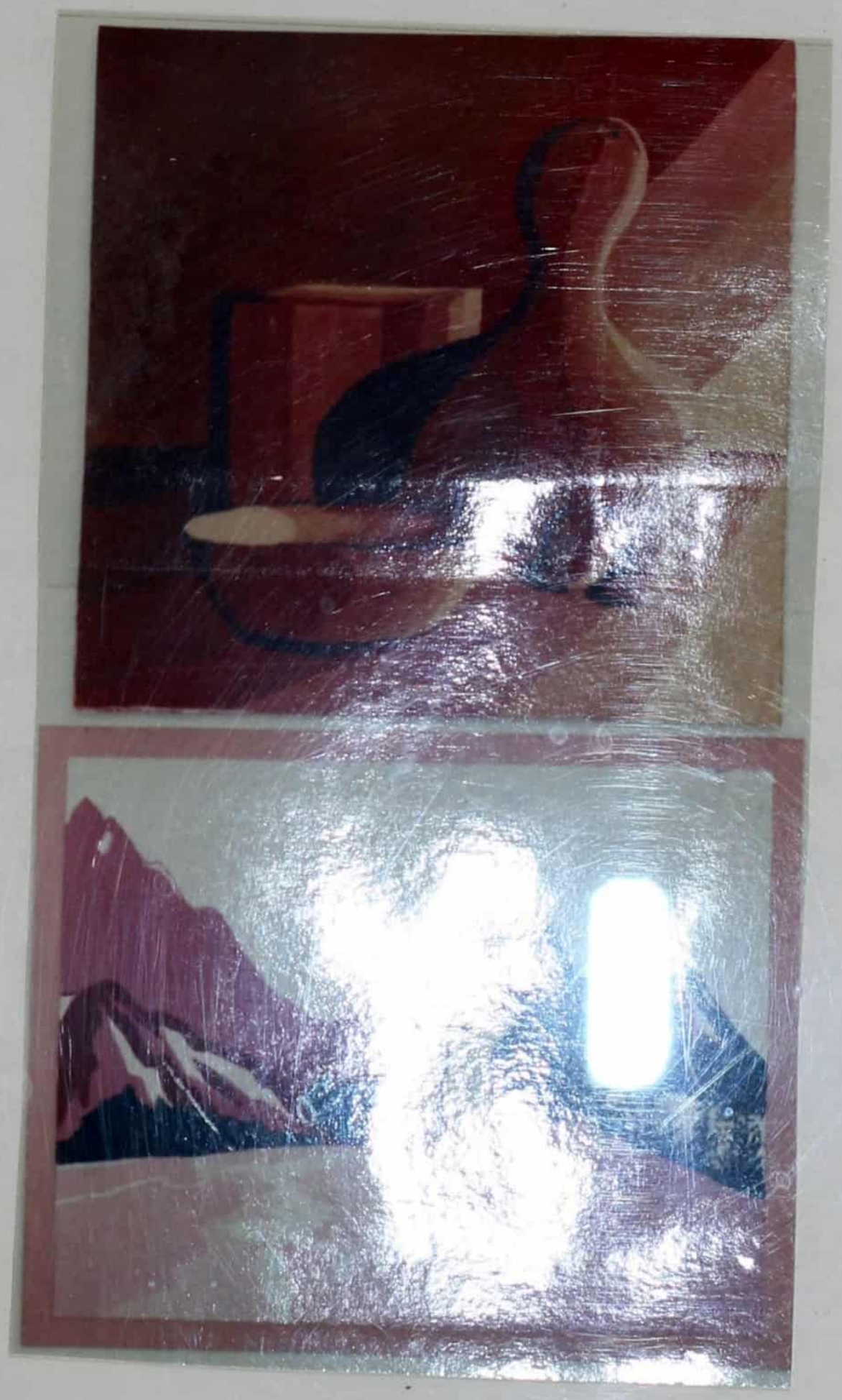

Plate:10 Monocromatic Painting

Exercise 8

On Mixing Colours

This exercise is to create endless variety of colours by mixing colours with one another.

Approach:

Draw a table of squares with a middle square at each extreme end, cross match all hues available from primary, secondary and tertiary colours.

Students should not be afraid in mixing colours. One should explore further and mix three or four colours at a go.

Result:

One will notice that an infinity number of colours can be created. Also being able to mix nature's hue comes from time spent studying and mixing hues. This exercise should be done mixing all available colours with one another. A great depth of knowledge on mixing different subtle tones of colour will be learnt and this information will be of great value when painting.

These tones should also be matched and compared with nature's hue.

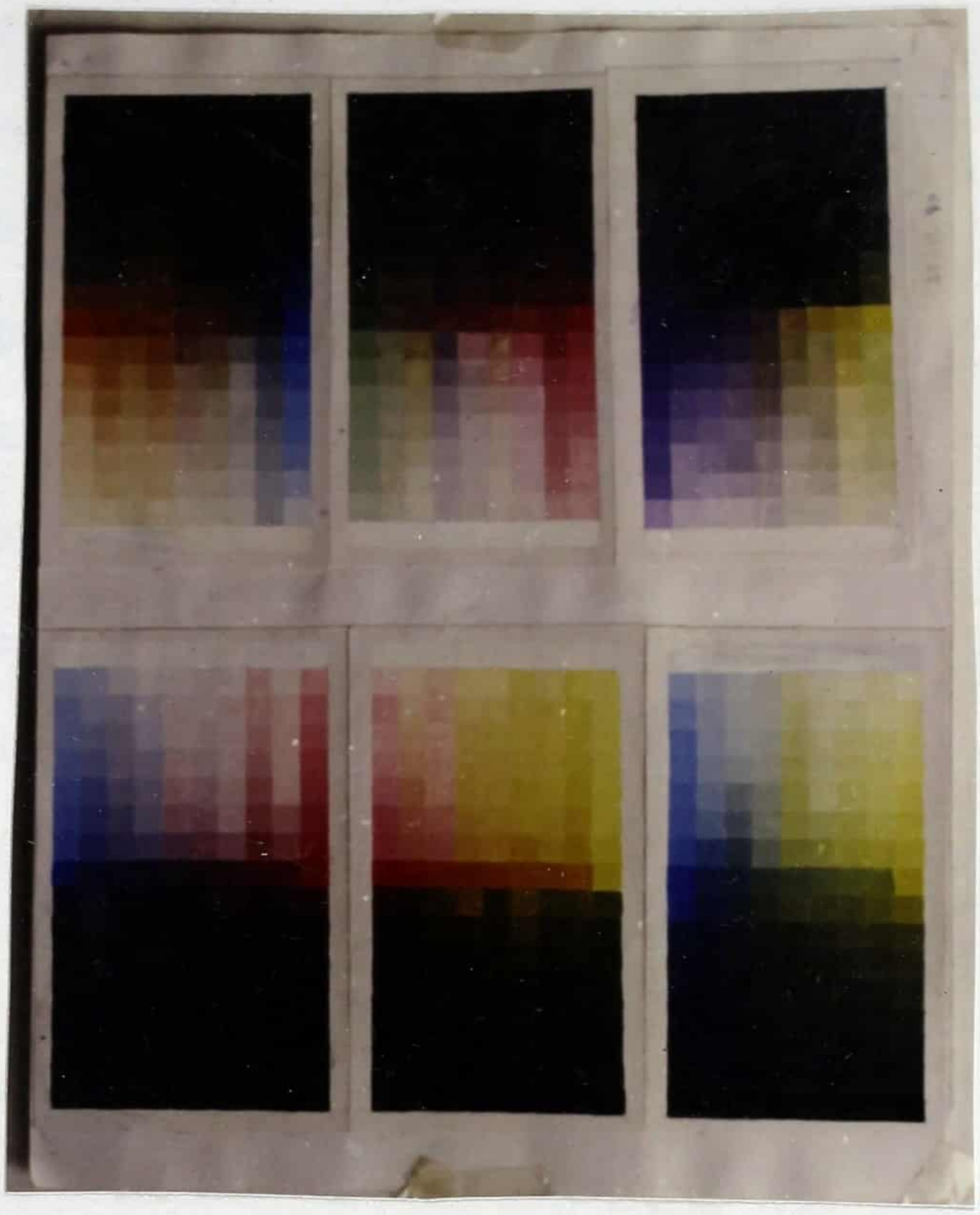

Plate:11 Mixing of Colours

Exercise 9

Colour Transparency

Colour can be very deceptive and colour can be mixed to give the illusion of transparency.

Approach:

The student should draw two overlapping squares. This is crossed over by a horizontal rectangle. Then draw diagonally another rectangle cutting across the shapes.

• select hues for every shape

• areas that over lap should have a mixture of the over-lapping and surbodinate colour, areas which do not over-lap any other colour should be identified with the hue chosen for that shape.

For instance the two overlapping squares are red and blue respectively. Where ever these two colour cross each other the mixture in those two areas should be a mixture of red and blue.

• Increase where three or more over lap, mix every colour that deserves to be in that portion. Plate 11 can be referred to get a clearer understanding.

Result:

As one notices and mixes these colour qualities one gets a clearer understanding of the behaviour of colour. As this happens one becomes more conversant with the medium and more confident when using it.

Exercise 10

Colour Illusion

Colour has many facets and one colour can be made to appear as two different colours.

Approach:

Two squares are drawn each five or six inches.

• These squares must be placed adjacent to one another.

◦ In the centre of these squares one small (one inch) square is cut away or any other conventional shape.

• Two grades of colour are painted on the larger square. Preferably one a dark hue and the other a lighter hue. For example blue and yellow could be used on the bigger squares and the mixture of yellow and blue placed in the small squares.

Result

One will notice that the green against the dark blue will seem lighter and the green hue against the yellow square will appear darker and slightly blue green.

• Not only will the two small green areas differ in apparent value and hue but the yellow square absorbs all that is yellow in the mixture and reflects what is left thus the blue green reflection.

• In the same way as the blue hue absorbs all that is blue in the green mixture and reflects a yellowish green tone.

Reference can be made to plate: 13 to understand this exercise better:

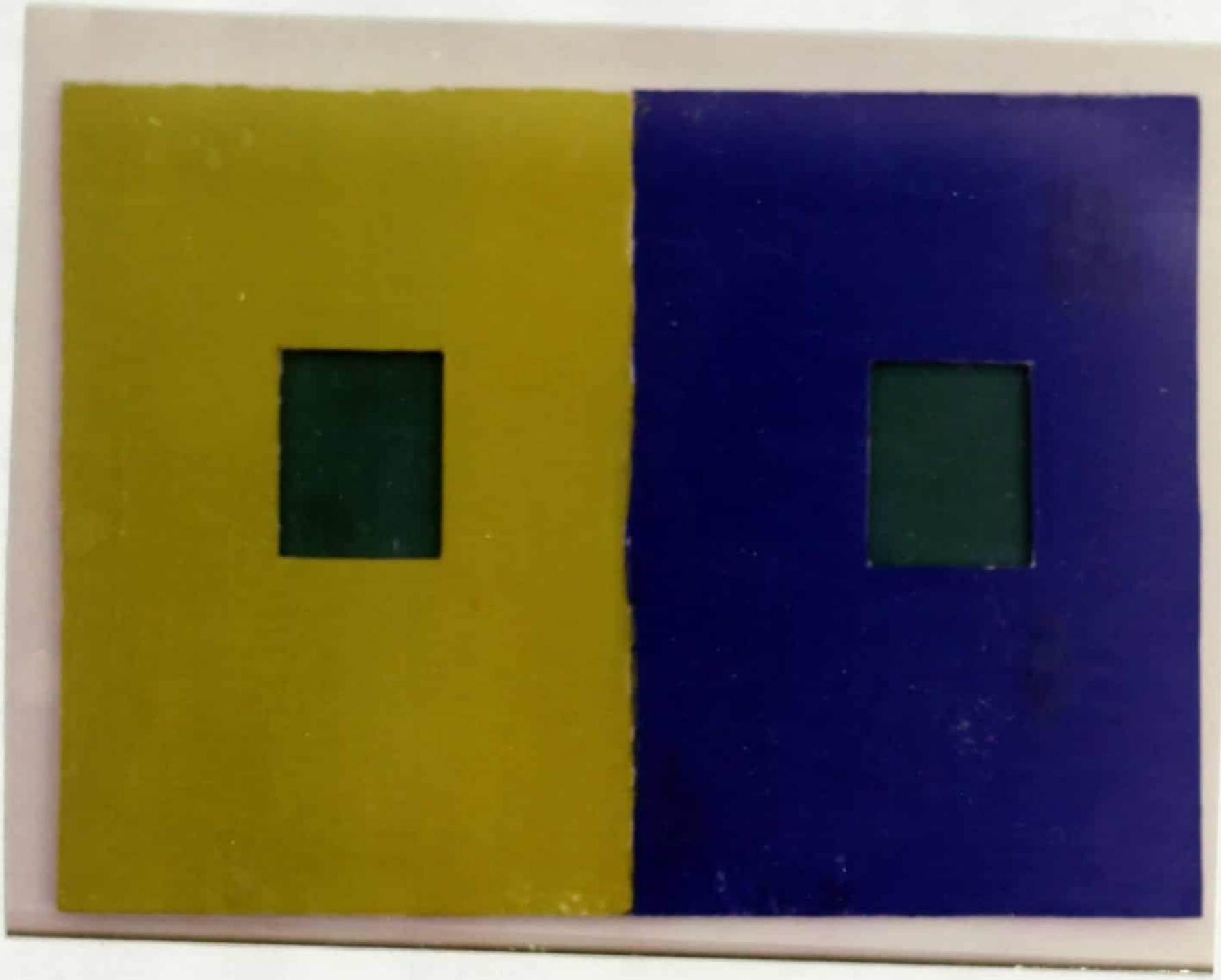

Plate:13 Colour Illusion

Exercise 11

After Image

This is also another illusion caused by optical mixtures. This involves gazing at one particular colour for a period of one minute and then glancing immediately at a white support one will see the complement of the hue. This can become quite complex and informative.

Approach:

Circles of yellow in equal size are drawn and painted with the edges just touching each other on a white square. To its right is an empty white square with a black dot at it's centre. Both of these squares are placed on a black ground, which helps to bring out the contrast between the colours. After gazing at the yellow circles on the left for about one minute focus to the right white square.

Results:

One will immediately see blue diamond shapes. This illusion is created by the left over shapes of the yellow circles. This illusion is in shapes as well as colour. Colour does not seem to be what it is that is why it is necessary for the student to know his or her medium well and to use its characteristies and properties to their advantage. The pigment should be utilized to explore new potentials.

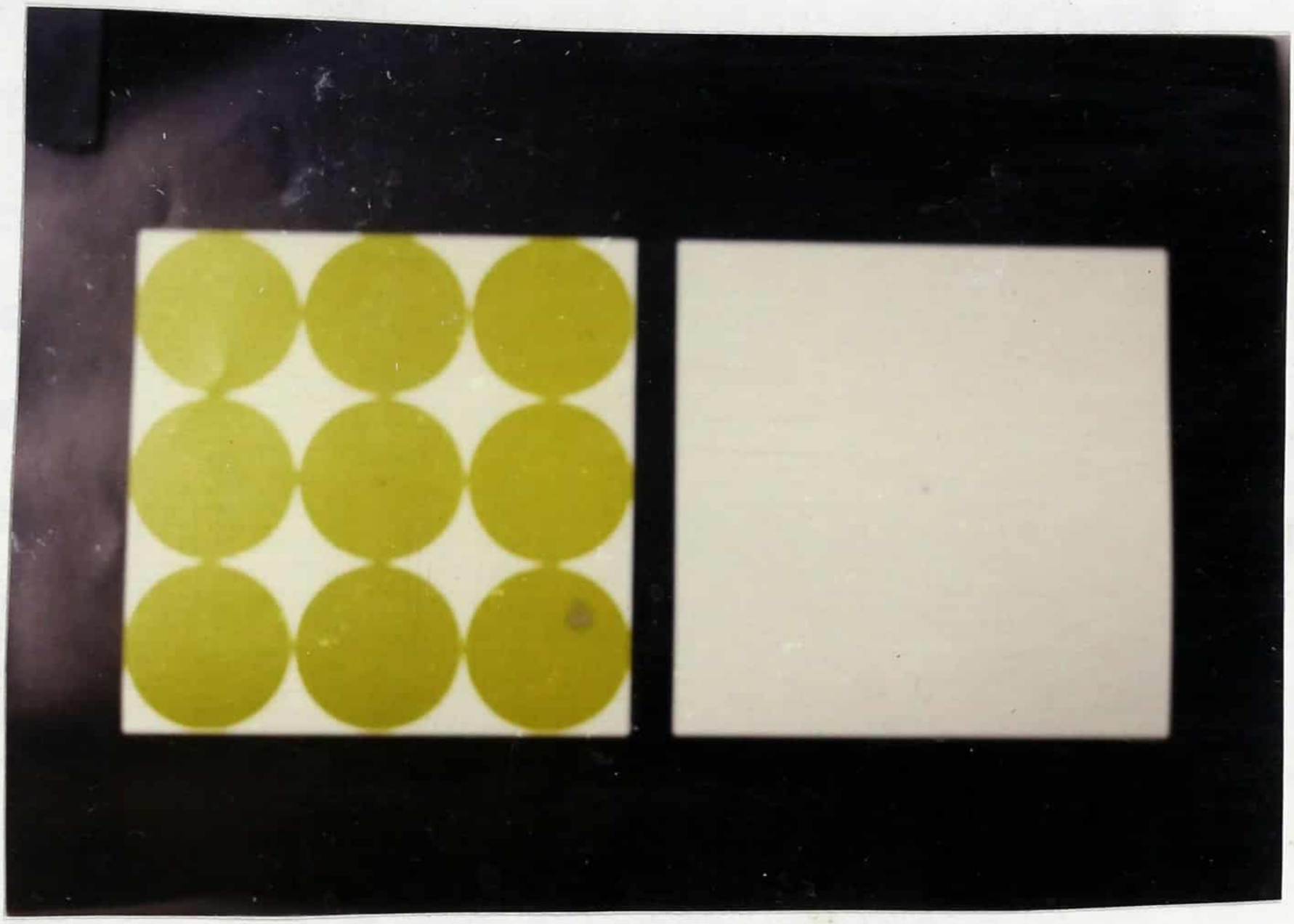

Plate:14 After Image

Exercise 12

Optical Illusion

Colours can deceive the eye because of the way in which they are arranged in relation to one another. This implies that whilst colours may harmorize in an arrangement they may clash in others.

Approach:

The student should paint two squares side by side each three or four square inches.

One area of bright blue and a similar area of bright orange on each of the two squares.

.In this combination each colour heightens the other through contrast.

.Repeat this exercise but paint in blue and orange stripes very close together alternating blue and orange hues as closely together as possible.

.The colours should not intermix or overlap.

.Next place these various areas a few centimeters apart (Areas of plain and stripped areas).

Result:

When one looks at the first pair of colours in Plate:15 the plain tones areas appear larger. The colours look brighter whilst the narrow stripes will run together and merge creating a neutral tone.

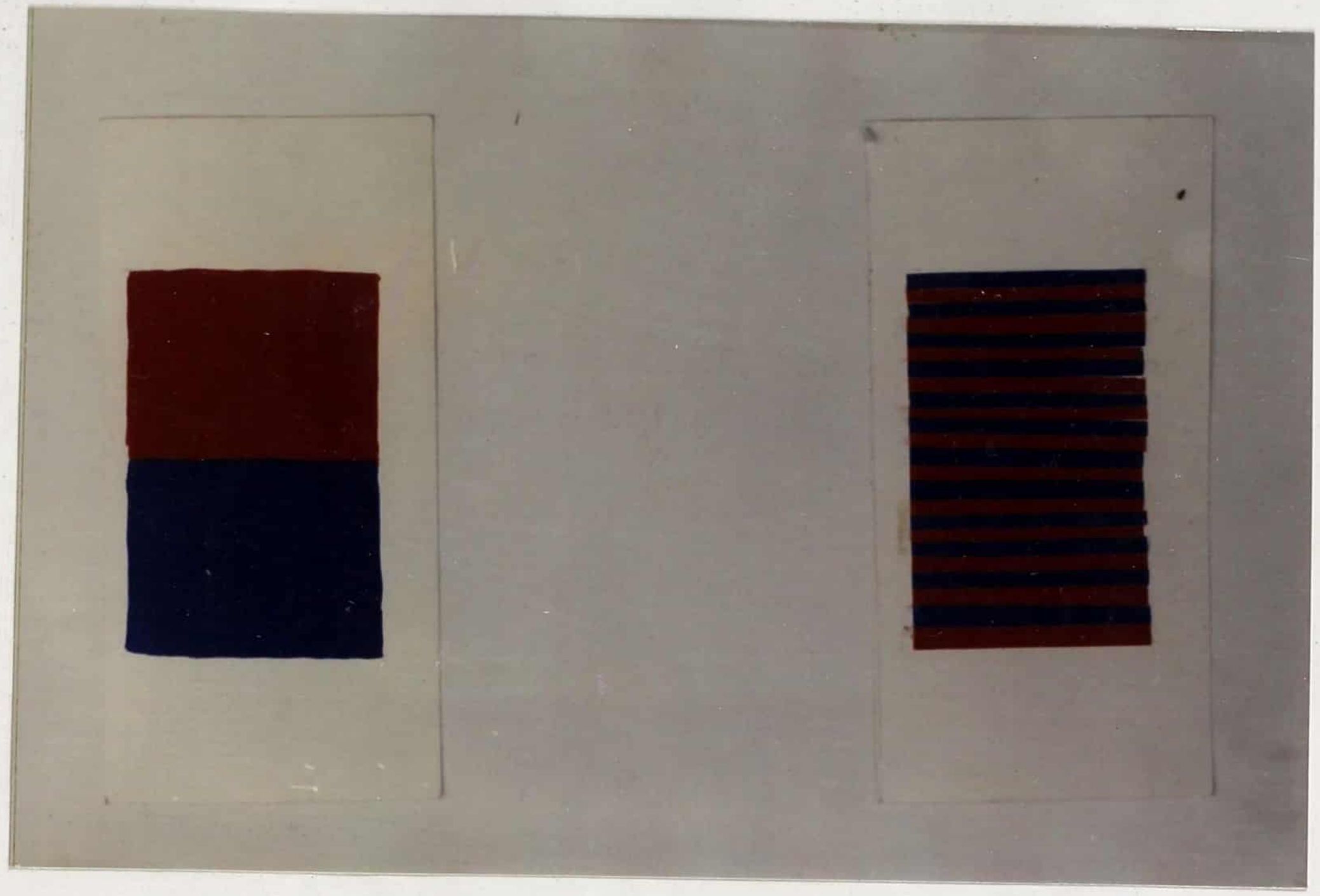

Plate:15 Optical Illusion

Discoveries

These exercises make one aware that large ,areas of opposite colours, when juxtaposed tend to intensify each other.

.Also smaller areas of opposite colour when juxtaposed are blended by the eye into neutral tones.
Each colour tending to annhilate the other.

.Colours also influence one another and one hue can look like two different hues. When placed beside other colours.

There is no end to the amount of discoveries one can make with colours.

One should not be satisfied with the information provided here but analyse and explore colour further to make personal discoveries.

As much as possible colour should become personalised to the student and with observation and diligence

will become a professional instead of an amateur.

Mastering the Medium Colour

What has been discussed has by no means covered the many facets of the subject of colour. This is just to show the student that colour is a complex thing and to emphasize the need for serious study and experimentation.

One should make a conscious effort to go through the various exercises and master them using the medium colour. Nothwithstanding one should paint compositions along side these exercises but it is important for the student to observe colour and discover how it relates to other objects in nature.

Developing a good colour sense is gradual and cannot be mastered in a day. Yet constant practise and perceptual awareness will help increase ones knowledge in colour. It is important to note that there is no better textbook that can teach one about colour than going out to observe and paint for oneself. That is why in the next Chapter a series of colour exercises and close study of plants are carried out.

CHAPTER FOUR

COLOUR EXERCISES II

Students are known to faulter when confronted with colours and some of the common faults include over working their supports, using too much black or white, gaudy effects and muddy works. Students also have little or no knowledge on grading their tones in a composition and are not perceptually aware of their environment. Thus paintings are done from preconceived notions about colour.

Observation in nature awakens one's perception and it heightens one's emotions. It follows that one cannot learn to use colour until one learns to discipline the eye. Thus, it is necessary for the student to study the different hues and tones in nature.

This is the more reason why this chapter deals with analysing selected plants, and colour exercises on learning how to paint some selected plants.

Colour from Plant Sources

There are a vast variety of colours observed in the

of homes as a fence and helps to decorate the surroundings. The flower is primarily yellow and has a variety of green tones on its stem. The flower has various tones of yellow, orange and browns. The buds have tints of green-brown and lemon green. The leaf shows different grades of colour on its front side, Consisting of rich tones of vermillion and sap green whilst behind the leaf are shades of light green hue. The flower stalk itself is darker and has tones of purple and blue-green.

The flower is in a tube like form and opens out into petals at the top of the tube. The colour scheme consists of closely related colours as well as colours which are variations of its complementary colour.

Plate:16 Allamanda Cathartica (Allamanda)

Plate 17. Hibiscus Rosa-Sinensis (Hibiscus/Rose of China). This is a shrub which is common in the environment. It is known for its characteristic red and green hues. The colour scheme is of the complementary vein and yet it exists harmoniously in nature. The petals are predominantly red and pink with faint purplish highlights. As the the plant tapers inward it turns into a deep maroon colour. Underneath the petals are pale shades of orange, pink and peach hues. On the stigma are yellow and orange hues juxtaposied with deep red over tones.

The leaves are also bright green hues tapering at the tip in a zigzag pattern. The veins of the leaves are a lemon yellow hue. Critically analysing one will realise that the hues are a combination of analogous and complementary colours.

Plate: 17 Hibiscus Rosa-Sinensis (Hibiscus)

Plate 18: Rhoeo Discolour (Lady in the boat). This is known for its boatlike shape with white and yellow flowers. It has shades of green on the top side of the leaf and violet shades behind. This scheme is perculiar and can be said to be split complementary as well as complementary. The plant is primarily purple and has jacket or boatlike slots on its stem which open out with flowers

Plate:18 Rhodeo Discolour (lady in the boat)

Plate:19 This is Acalypha Wikesiana (Acalypha tri-colour)。 This is a shurb grown around the home and acts

as a decorative piece in the environment. It consists of hues of brown, beige, dark red, green, pink, orange and peach. This colour scheme is of closely related hues with complementary tones. It is characterized by its gradulating ridges which taper at the tip of the leaf.

Plate:19 Acalypha Wikesiana (Acalyphatri-colour)

Plate:20 Plunerica Alba (Forget Me Not)

Plate:20 Plunerica Alba (Forget Me Not).

This is a popular flower that is admired by most people. It is characterized by it's white, pink, orange and yellow petals. It's stem has brown, maroon tones. The centre is of bright yellow and orange hues blending into pale tones of yellow and pink at the edges. The colour scheme is analogous.

Plate:21 Colens Blumei (Colens)

This is a plant with very colourful leaves. It is grown around homes and makes its surrounding very attractive.

red, green, yellow and brown tones. The centre is
nd progresses into a deep red hue, followed by a brown-
ue with green at the edges. Behind the leaf are shades
low, pink and peach tones. The veins are pinkish on
ntside and pale yellow behind. This colour scheme is
entary and yet all the hues harmonize in the leaf.
resting phenomena is that the green and red hues mix
borders of the leaf to create a brownish hue.

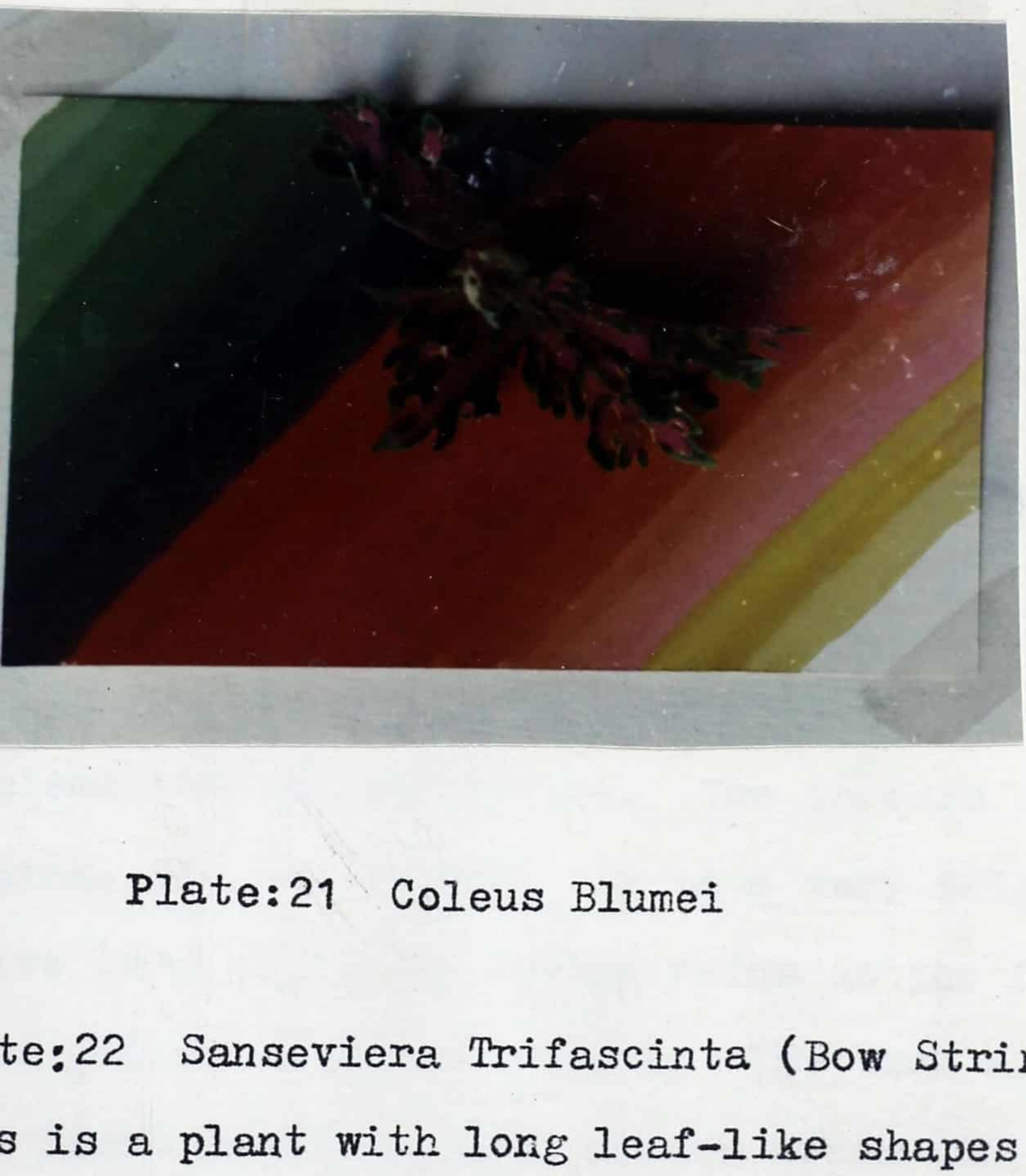

Plate:21 Coleus Blumei

te:22 Sanseviera Trifascinta (Bow String hemp).
s is a plant with long leaf-like shapes which taper
ip. The leaf has shades of lemon-green, to very
en tones. These are scattered in blotches across
with yellow tones out lining the leaf. It consists

of an analogous colour scheme.

Plate:22 Sanseviera Trifascinta

Plate: 23 Croton.

This is a shrub commonly grown around houses that adds beauty to the environment. This plant has an analogous and complementary colour scheme. The colours are green, orange,pink, red and yellow. It is a very bright and attractive leaf with deep orange veins on the front side with pale yellow veins underneath. The back also has grades of pink, light green and pale yellow which are lighter and more subtle in tones.

Plate:23 Croton

An Approach to Painting Plants

Plate:24 Hibiscus Rosa - Sinensis

Materials:

Quarter imperial cartridge paper, poster paints, brushes, pencil, jar of water, plain sheet, rag drawing pins and a drawing board. The materials used are the same in proceeding exercises.

Approach:

A specimen of the plant was critically analysed and four predominant tones were discovered. Reference can be made to plate 24. These tones represent the lighest, middle, and dark tones of red. The specimen was drawn and paint was applied in flat broad areas taking note of the main tone in the various areas.

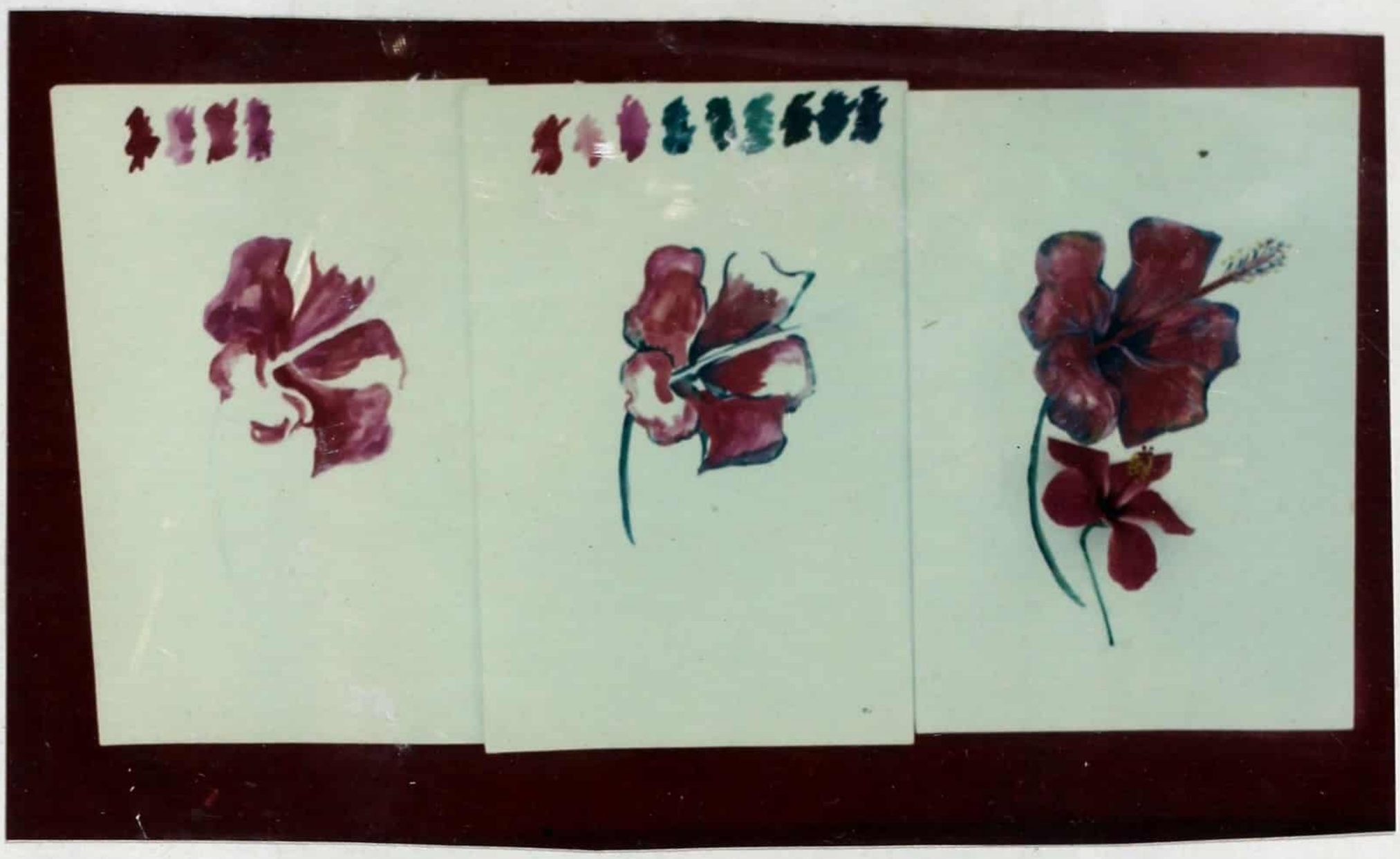

Plate:24 stages in painting Hibiscus Rosa.

After mixing the major hues the dark hues were mixed and this was remixed with shades of the middle tone. Each time the researcher referred to the specimen. Areas bordering the lightest and middle tone area has a mixture of these two tones to help the colours flow into one an other. Colours used were not limited to red but yellow and orange hues were mixed with red in lighter areas. Green and blue were also mixed to create darker tones. The lighter areas were painted in first before the darker areas were tackled as seen in the second painting in plate:24 The stem is tackled and the dark areas are worked into the surrounding tones.

Plate:25 Juxtaposition of specimen and painting.

The highlight areas are mixed by adding a small amount of blue and white to red. This creates a bluish, purplish hue. The specimen was critically observed and the highlight areas painted in the appropriate areas. This must be done carefully in order not to create a chalky effect.

An Approach to Painting

Plate:26 Allamanda Cathartica (Allamanda)

Approach:

A specimen of the plant was critically analysed and the main features, tones and direction of light were observed. The outline of the specimen was drawn and the primary colours with white were arranged on the palette. The predominant hue being yellow was broken down into light, middle and dark tones. Then after observing the specimen the lightest tone was painted followed by the middle tones. Areas where the two tones over lap the two tones were intermixed to create an intermediary tone. The light source was from the left thus the tones on the left were lighter than those on the right. Gradually the darker tones were worked in and the stem tackled. The researcher used a plain sheet of paper to test the paint before applying it to the painting in order to obtain the right tone. The composition was worked as a whole and not concentrating too much on any particular area. Other hues such as blue, green red, orange and brown were used to help project the specimen and this can be seen in plate:26. The Allamanda Cathartica has characteristic lines on its tube like flower and this texture is painted by using slightly dry brush over the area.

Finally the highlight areas were mixed using white and yellow and applying to the painting. The left side

receiving more highlight since it is nearest to the light source. The painting is then compared with the specimen.

An Approach to Painting

Plate:27 Plunerica Alba (forget me not)

Approach:

The specimen of the plant was observed and analysed. Then the specimen was drawn. The major hues pale yellow pale orange and pink were mixed and applied in broad areas on to the drawing. The light source was from the left and thus the left side of the painting received lighter tones. Reference may be made to plate:17 which shows the range of tones that can be found in the specimen. The tones are worked in from the light tones to the darkest tones. The center of the flower has a yellow hue which gradually blends into orange and then pink. A plain sheet was used as a trial sheet to help mix the true tones in the specimen. The highlight was the final thing added to painting and this was a mixture of pink and purple.

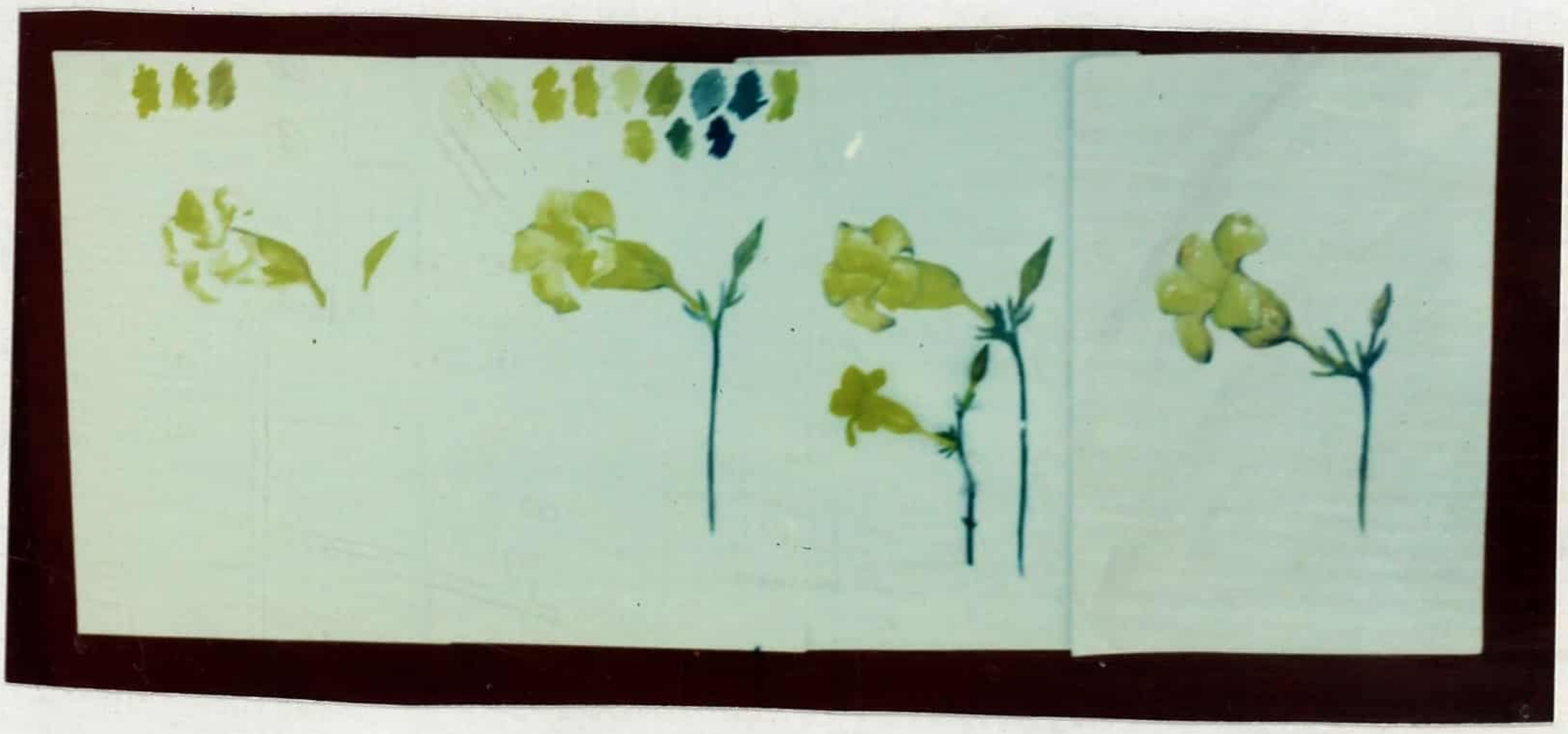

Plate:26 Stages in Painting Allamanda

Plate:27 Stages in Painting

Plunerica Alba

An Approach to Painting

Plate :28 Heliconia Pstittacorum

Approach:

The specimen was analysed and observed. Then the outline of the specimen was drawn on the support. The predominant colour was orange and this was divided into three major tones. As seen on the extreme right of plate:28. The direction of light was central and the ligher areas were painted in first. Then the stem was also painted each time the researcher observed the specimen. Gradually the dark areas were worked in till the painting was completed. A sample of the specimen was juxtaposed with the final painting this was to help access how successful the painting was rendered.

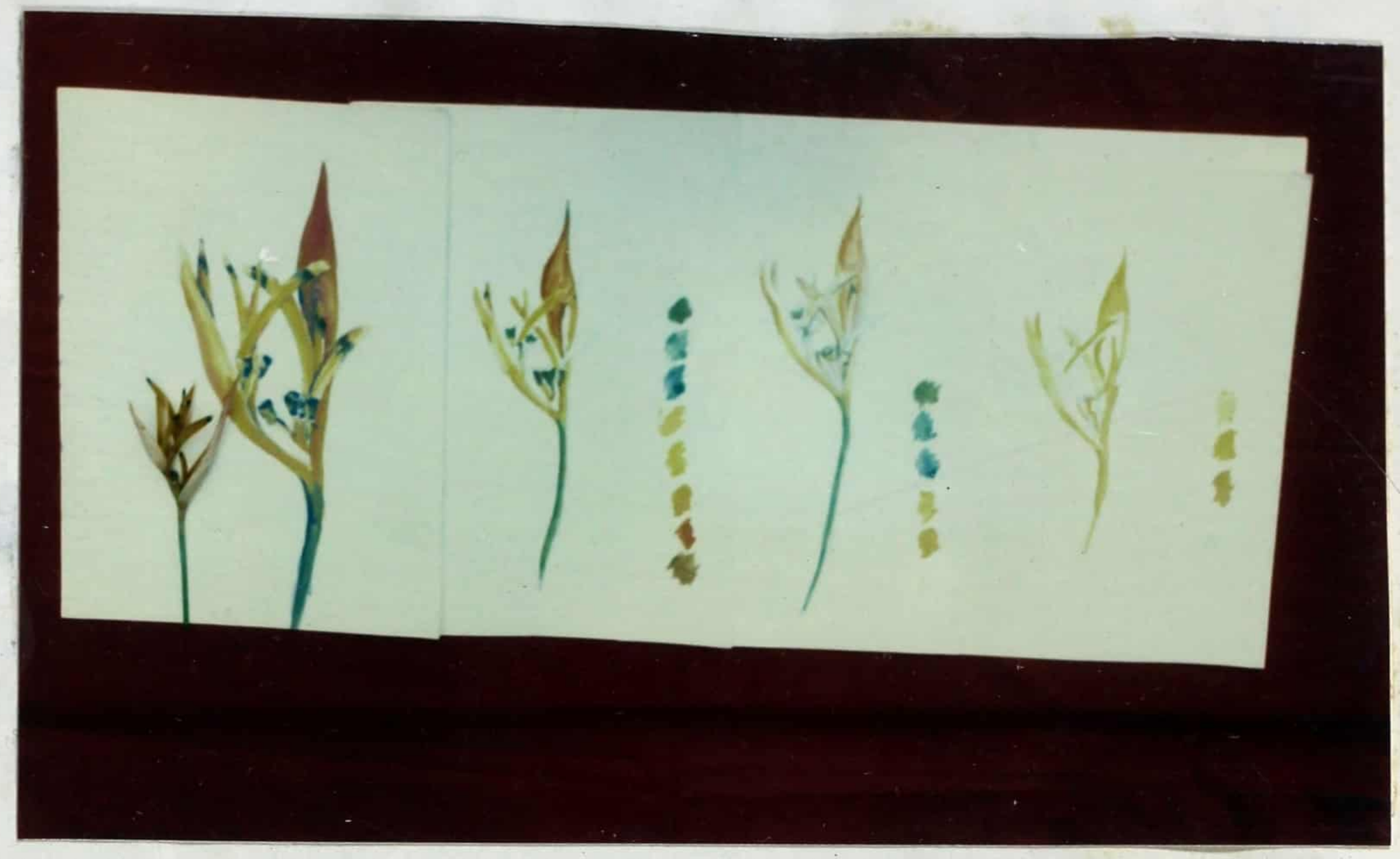

Plate:28 Stages in Painting Heliconia

After going through these exercises it is hoped that the students' perceptual awareness has been awakened towards the beauty of nature. The exercises will help them to strive to express pictorially nature's infinite variety of colours students must be determined to master the art of painting and take seriously each exercise as knowing colour can only be achieved by experience with the medium. Getting to know the nature and learning the fundamentals of colour pigment will lead the student to discover so many fascinating facts. Examples are learning how to create transparency, texture, roughness, weight, colour illusion which tricks the spectator's eye into seeing what is not real are to mention a few: Below are

finished paintings with their specimens. Locally available plants which are common in the environment were chosen to help students to obtain specimens to execute their own paintings.

Plate:29 Paintings with their Speciemens.

Test of Hypothesis

The hypothesis as stated in Chapter One is to help new entrants in the Diploma Art Programme in the University College of Education at Winneba to overcome their fear of colour. It also states that it is possible to overcome students' fear of using colour if they are given the right understanding of colour and its application. Secondly it is possible to use colour properly and creatively with practice given the right approach.

Unfortunately due to financial constraints and the long distance between the sampling unit and the researcher, the first year students in the foundation unit of the College of Art University of Science and Technology were used. W. Akwamoah Boateng after making a comparative study of these two institutions observed that the foundation year were basically the same and over all had similiar aims.

"The courses provide opportunity for experimenting and exploring with various media and techniques and artistic expression".(1)

The researcher discovered similiar prevailing conditions between the first year students of both universities. After the students had gone through the proposed exercises the hypothesis was proven right, students when given the right approach were able to master the medium colour.

Reference

1. Wilson A. Akwamoah-Boateng, (1987), Teacher's Evaluation of Student's Art Works, University of Science and Technology, Kumasi, P. 85.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary

Nature provides the true source of colour and inspiration for the artist. Simple observation trains the eye better than any other exercises in understanding the various qualities in colour.

This essay aims at helping new entrants in the Art Education Diploma Programme at U.C.E.W to cultivate the habit of becoming perceptually aware of their environment and to learn how to master the medium colour.

A colour is not only influenced by surrounding colours but atmosphere, mood, the different areas of colour and relative positions of objects. The student is thus directed to look closely at colour in plants it's remarkable infinite hues, variety in line, structure, design and patterns.

The learning of concepts and theories is not a prerequiste to learning to use colour but rather it requires the discipline of one's eye. Thus, a series of colour exercises have been proposed to help the student to develop and master the use of colour. Chapters three and four

dealt with studying various colour exercises, analysing minute differences in selected plants and learning how to approach painting in selected flowers. Students are also introduced to the various qualities of colour and how they vary in appearance under different conditions. The student is directed to look closer at nature as a source for colour schemes and colour harmony in painting.

Conclusion

The study and mastery of colour are of great value to the student as it is through colour that society observes the environment and every other thing that one sees. The study of colour is not necessarily through terminologies or theories but it proceeds through the eye and not the intelluct. It has been discovered that the assumption that it proceeds entirely on facts and figures is totally false.

Colour can be deceptive and one particular hue for example green can appear differently depending on the colours surrounding it. Colour can also mix optically, for instance when blue and red are placed at a distance they appear as purple to the observer. One colour can be made to look like two different colours. One can create transparency in colour, texture. After images, and an infinite variety of hues.

The true colour of an object is affected by atmosphere, quality of light and proximity of other coloured surfaces.

Thus, one cannot conclude an object has one true colour as the object will continually change depending on the surrounding objects. For instance the sea or the sky.

Complementary colours exist when dealing with colours in the tubes but in nature they harmonize. Colours such as "Shocking pink" no longer are "Shocking" and to a great extent colour awarenes has been cultivated. Complementary colour schemes can be used as well analogous, split complementary in colour schemes. This was discovered from critically analysing plant specimens.

Although the study is based on a case study of new entrants in the Diploma Art programme at U.C.E.W. due to financial constraints and the long distance between the researcher and the samplying unit, the first year foundation unit was used. It was discovered that similar aims and objectives exist in the first year course of the Diploma Art programme and the Degree Art programme in the College of Art.

The researcher discovered that similar problems face the first year students in the College of Art Degree programme. Student had little or no knowledge of colour and much of what they already knew was of primary colours. After undergoing the proposed colour exercises students were able to do the following:

i. Use any range of colour scheme other than the natural scheme of objects.

ii. Wide range and diversity of hues.

iii. Use of complex mixtures of grey and tertiary tones in painting.

iv. Great interpretation sense of colour concept and colour psychology.

v. Students had a free spontaneous expression through colour and had become extremely versatile with the meduim.

The emphasis has been on studying colour from nature and knowing the qualities of the pigment colour. Different colour schemes have been also identified from plant sources and colours appear bright and bold in nature. Colour can be manipulated to portray almost anything one wants to represent.

Recommendations

1. It is recommended that, the information on colour exercises in this essay should be made available to the University College of Education at Winneba.

2. It is also recommended to teachers and students to help develop a good colour sense and colour schemes and to analyse colours in their natural environment.

3. Beginner's in colour should be encouraged and motivated in approaching colour through discussions and practical exercises from nature.

4. The idea of colour observation in nature should be encouraged in our schools to enable the student to become perceptually aware of their environment.

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