WAYS OF ARTICULATING PICTURE SPACE: A BOOKLET FOR THE JUNIOR HIGH STUDENT

by

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It would have been impossible to embark on this booklet without the illustrations of some of my extremly receptive students. Their enthusiasm and innovative creations provide inspiration for future young artists. The illustrations clarify the text. After a thousand words of instructions they decided their pictures "say it all."

I am indepted to Dr. Edward Sturr for his special assistance, guidance and his sacrifice of personal time during this study. A special thanks goes to Gloria Bettis, a fellow art teacher, for her advice and encouragement during the construction of this booklet.

CONTENTS

																					Pa	ege
LI	T OF ILLUS!	TRATOR:	s.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	ii
IN	RODUCTION			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1
BAS	SIC PRINCIP	LES:																				
1.	AERIAL PERS	SPECTI	VE.	. • `	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	2
2.	COLOR .			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	2
3.	DIMINISHIN	C DETA	IL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	3
4.	FORESHORTE	NING		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	4
5.	CRADIENTS			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	5
6.	LINE AND S	PACE				•	٠	•		•	•	•	•	•	•	•	•	•	•		•	6
7.	LINEAR PER	SPECTI	VΕ	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	8
	*ONE POINT	PERSP	ecti	[VE	}	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	8
	*TWO POINT	PERSP:	ECT1	VE	}	•	•	•	•	•	•	•	•	ŭ.	•	•	•	•	•	•	•	9
	*THREE POI	NT PER	SPEC	TI	V.	3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	10
	*AERIAL PE	RSPECT:	IVE	ΔI	H]q	I	•	•	•	•	•	•	•	•			•	•	•	•	•	11
8.	OVERLAPPING	g		•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•	12
9.	PLACEMENT (ON THE	PAC	Æ	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	14
10.	SHADOWS AND	D SHAD	ES		•	•		•	•		•		•	•	•		٠	•	•	•	•	15
11.	SIZE			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		17
12.	DEFINITION	OF TE	RMS	•	•	•	•			•	•	•	•	•		•	•	•	•		•	18
13.	SELECTED B	IBLIOG	RAPI	ΥE	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	19

LIST OF ILLUSTRATORS

			I	Page
DIMINISHING DETAIL				
RANDY GASTON	•	•	•	3
FORESHORTENING				
RANDY GASTON	•	•	•	4
GRADIENTS				
EVAN CINDRICH	•	•	•	5
HENRY BACKES	•	•	•	5
LINE AND SHADE				
RANDY GASTON	•	•	•	6
ARLEN WICHSTRUM	•	•	•	7
STEVE MINGLE	•	•	•	7
RANDY GASTON	•	•	•	7
ONE POINT PERSPECTIVE				
COLTON McARTHUR	•	•	•	8
TWO POINT PERSPECTIVE				
ARLEN WICHSTRUM	•	•	•	9
THREE POINT PERSPECTIVE				
EVAN CINDRICH		•	•	10
AERIAL PERSPECTIVE VIEW				
TODD GOODMEN	•	•	•	11
OVERLAPPING				
PHIL ENDICOTT	٠	•	•	.12
LUCY STNNETT				13

PLACE	CMENT	I NO	HE :	PA	GE	2																		Page
	DOUG	SCHE	LL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	14
	SUZAI	NNE D	eWE	ES:	£	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	14
SHADO	OWS AI	ND SH	ADE	<u>s</u>																				
	KAY I	FISCH	ER		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	16
	STEV	e min	GLE		• .	•	•		•	•	•	: •	•		•	ě	•	•	•	•	•	•	•	16
	SALL	Y WOO	LRI	DG:	E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	16
	EVAN	CIMD	RIC	H	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	16
	DOUG	SCHE	LL	•	•	•	•	•	•		•	٠	•		•	•	•	•	•	•	•		•	16
SIZE																								
	TOHN	BARC	OCK														_					_		. 17

WAYS OF ARTICULATING PICTURE SPACE: A BOOKLET FOR THE JUNIOR HIGH STUDENT

The art of representing three-dimensional objects and achieving a sense of space and depth on a two-dimensional surface is called perspective. Articulation of space on a flat surface is required of anyone rendering illustrations in architecture, interior design, advertising or the fine arts.

The purpose of this booklet is to futfill a basic need for the junior high school students. They are taking early steps into adult art through the deliberate study of proportions and the space they occupy. To my knowledge, there is not a junior high booklet that covers this area adequately. A sound understanding involving the depiction of space on a two-dimensional surface will equip the student with a feeling for form and a more acute sense of observation.

This booklet will furnish junior high school students, who have had limited exposure to drawing, with a working knowledge of perspective.

AERIAL PERSPECTIVE

Leonardo da Vinci first described it in saying that the color of a landscape, which stretches off toward the horizon, seems to become more filmy and bluer with the increasing distance. Aerial perspective depends on the amount of haze in the atmosphere that leaves us with the impression of distance.

Basic principle: aerial perspective refers to the atmospheric causes of change. There is an increase in the haziness and blueness seen in the distance in the viewing field.

COLOR

Colors which are close to the red end of the color wheel are considered warm colors and they seem to advance. Cool colors, those adjacent to the blue side of the wheel, seem to recede. The warm colors appear to be closer to the viewer and enhance the foreground shapes. Cool colors recede and are used in the background.

Intensity of color is another important factor to consider.

The hill observed nearer to you will seem to be a more brilliant green than those in back of it.

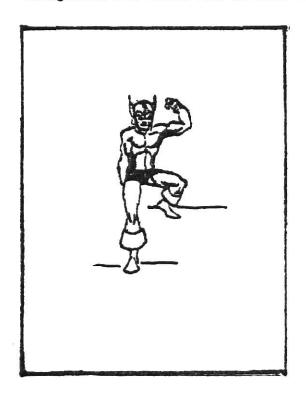
Basic principle: warm colors advance and cool colors recede.

The more intense the color, the closer it will seem to the viewer.

DIMINISHING DETAIL

The human eye cannot see with equal clarity detail on close and distant forms. Intricate textures and small shapes, such as leaves on trees or facial expressions, become blurred or indistinct as they recede into the background.

When drawing, you do not copy detail with equal accuracy or precision. Exaggerate or simplify when necessary to suggest distance. It is a mistake to show detailed areas if they are too far into the background and would not be seen in reality.





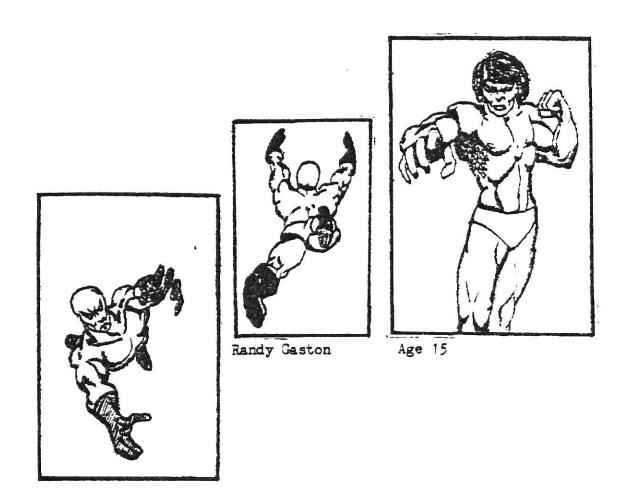
Randy Gaston

Age 15

Basic Principle: put detail in the foreground and simplify (little detail) in the background.

FORESHORTENING

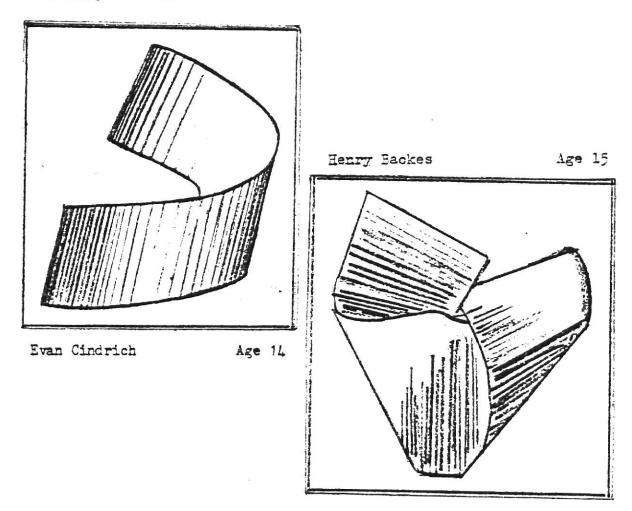
Objects that are parallel to the observer's face show their maximum size. As they revolve toward or away from the observer, the objects appear increasingly shorter and flatter. The part of the object that is nearest to you seems larger than the rest of the object. It gets shorter as it is tilted toward the "fore."



Basic Principle: in foreshortening, an object coming toward you seems to be more compact.

GRADIENTS

Translate values into a line by drawing many strokes close together. The heavier the strokes are and the less space you leave between them, the darker the area they will cover. Single lines, when grouped, create areas of dark and light and produce a change of value.

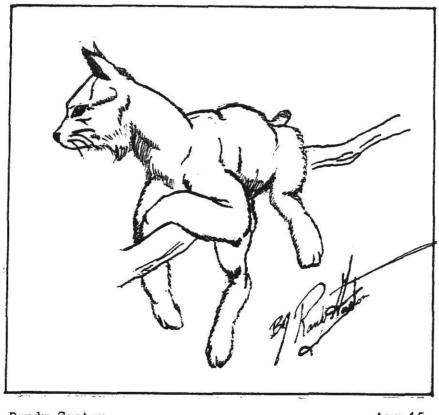


Basic Principle: control shading by the width and the spacing of lines in your picure.

LIME AND SPACE

Line indicates spatial presence and clarifies solid shapes.

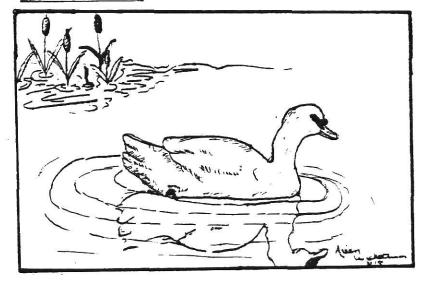
Variation in the physical properties of line such as: the thickness, direction, and location of the line cause the figure to take on three-dimensional qualities. A line can add spatial dimension to representational drawing. The accent and modulation of the lines used to describe these animals give them a feeling of form in space.



Randy Gaston Age 15

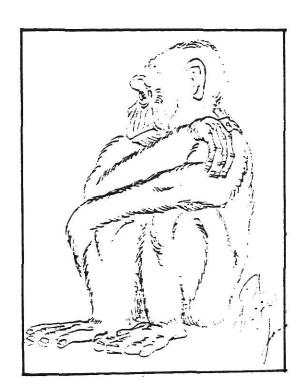
Basic Principle: variation of lines serve to clarify the spatial dimensions of solid shapes.

LINE AND SPACE



Arlen Wickstrum

Age 15



Randy Gaston

Age 15



Steve Mingle

Age 13

LINEAR PERSPECTIVE

Perspective places an emphasis on the accuracy of representation. Use it as an aid but do not let it dictate. Some things we know are approximately equal in size yet which appear to diminish with distance. In perspective, you illustrate what you see from a specific viewpoint, not your idea or mental image of the subject. All lines or planes which are in reality parallel will converge toward a single vanishing point. In handling simple objects we find the one, two, or three vanishing points occur depending on how many visible lines are not parallel to the picture plane.

*ONE POINT PERSPECTIVE

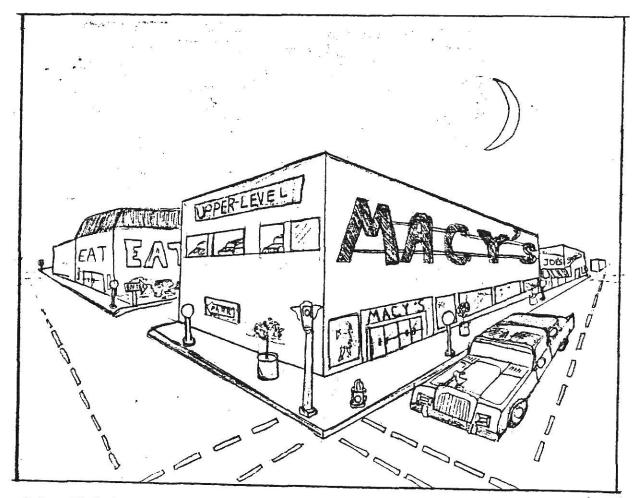
All receding parallel horizontal lines seem to converge to one vanishing point. The other lines in the irawing remain parallel to each other, and to the sides, and to the top and bottom borders of the picture.



Colton McArther Age 13

*TWO POINT PERSPECTIVE

In a two-point drawing there are two sets of parallel lines that appear to converge, each toward its own vanishing point on the horizon line. This includes all detail lines on the surface of each object in the picture. Only the verticle lines remain parallel to the border sides of the picture.

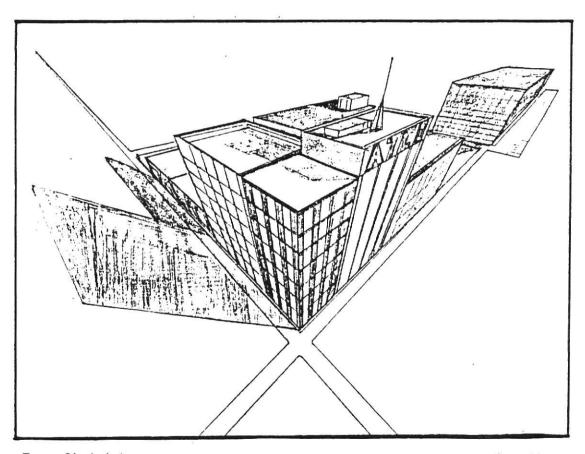


Arlen Wickstrum

Age 15

*THREE POINT PERSPECTIVE

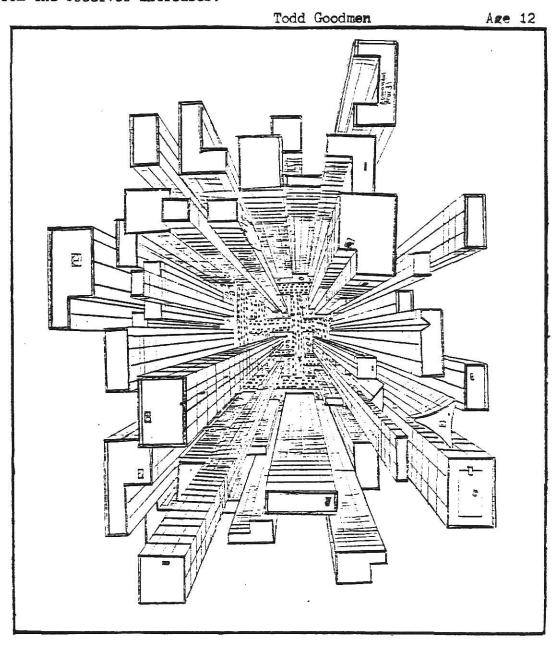
This technique involves handling the drawing using two point perspective as shown earlier for the horizontal lines in your drawing. The exception in three point perspective is when your viewpoint is high or low. When looking down, the third vanishing point is below the object. You will find the third vanishing point rising above the object when looking up.



Evan Cindrich Age 14

*AERIAL PERSPECTIVE VIEW

In an overhead view, all vertical lines appear to meet at one centrally located vanishing point. The tops of the viewed objects are their normal shapes. The clarity of detail diminishes as distance from the observer increases.



OVERLAPPING

Overlapping helps to show the relative size and position of objects in the picture. It unifies the composition and provides interest. Most of the things we see are partially hidden or overlapped by other objects. The item that hides the other is perceived as nearer.

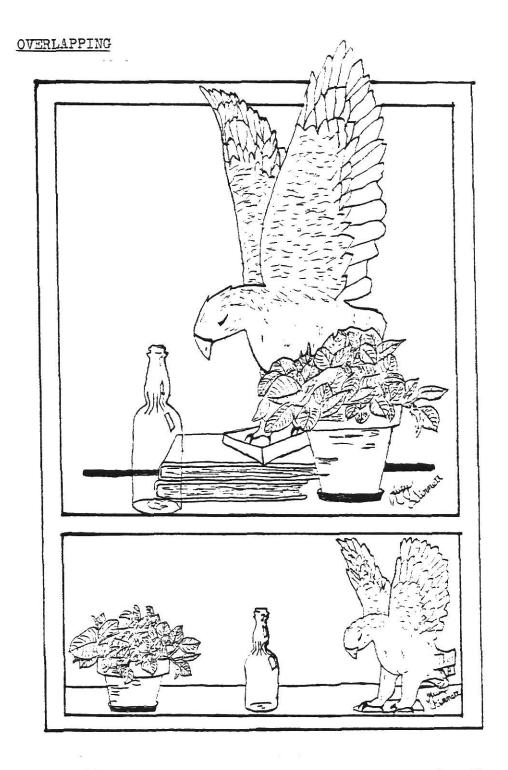




Phil Endicott

Age 13

Basic Principle: overlap objects with a good "bite" to show the viewer what is closer and to improve your compostion.

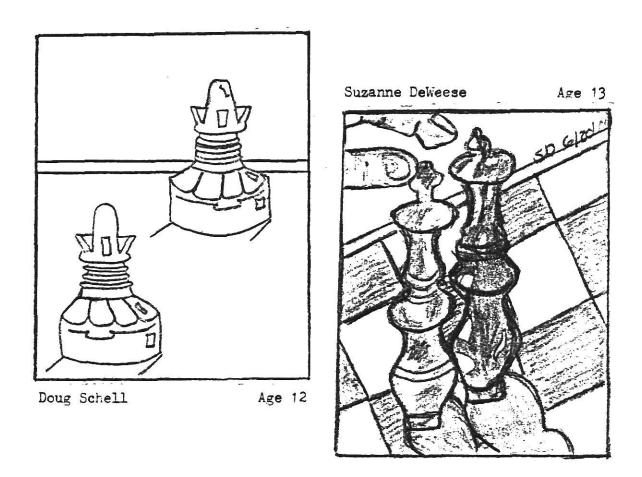


Lucy Sinnett

Age 13

PLACEMENT ON THE PAGE

In our ordinary perception we generally see far away objects as being higher up, and closer objects as being lower. When looking through a window or walking down the street, the sidewalk by your feet is closer and lower than the hills that are farther away. The bottom of the page is seen as the closest visual point.



Basic Principle: the higher the object in the picture the farther away it appears. Lower the object and it will seem closer.

SHADOWS AND SHADES

The shape and structure of three-dimensional objects can be understood when viewed in some form of light. Shades and shadows are what primarily render the shapes discernable. A good use of these increases the sense of depth and space in your work.

*CHIAROSCURO

Chiaroscuro was invented by Masaccio at the beginning of the 15th century. It is an Italian term meaning light-dark. The strong interplay of light and shadow in this shading technique make the objects more sculptural when rendered on a two-dimensional surface.

*SFUMATO

Sfumato literally means "turned to vapor" and was best illustrated by Leonardo da Vinci, who softens outlines and blurs forms in his work. The light seems to emerge from the center of the picture with a smoky, hazy mist enveloping the forms.

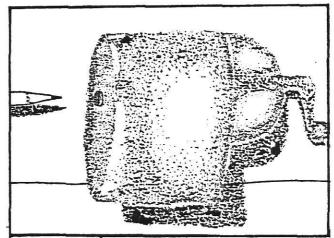
Basic Principle: working with light, shadow and shade will dramatically transform a drawing, creating a sense of the third dimension and a more sculptural quality.



Kay Fischer Age 14



Steve Mingle Age 13 SHADOWS AND SHADES



Sally Woolridge

Age 13



Evan Cindrich

Age 14



Doug Schell

Age 12

SIZE

The size we give to things and where we place them controls their importance to the picture. Large figures should contrast to the smaller figures in the background. They must assume a scale to correspond to their distance from us.





Age 14



Basic Principle: draw objects smaller as they get further from the eye.

DEFINITION OF TERMS

The following terms may be new to the student and have been used in this booklet according to these definitions.

articulate- express or formulate clearly or systematically. chiaroscuro- strong contrast in light and dark areas. diminishing- to make less.

foreshortening- the object gets shorter as it is tilted forward. gradients- rate of decrease or increase of a variable.

linier perspective- vanishing points occur depending on how many visible lines are not parallel to the picture plane.

sfumato- soft edges in the forms.

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Abstract

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A sound understanding involving the depiction of space on a two-dimensional surface will equip the student with a feeling for form and a more acute sense of observation. To my knowledge, there is not a booklet that covers the articulation of picture space adequately for the junior high student. This booklet is designed to fit that need.

The student will find in this handbook suggestions as to how to handle the difficult problem of depicting the nature of visual depth. In isolating the principles, students will gradually build up their knowledge and eventually integrate several principles in achieving a three-dimensional likeness on paper.

The illustrations selected were considered as the most obvious examples of the points brought up in the text. The student illustrattors' enthusiasm through out the construction of the booklet for use by fellow students was rewarding for all. Future junior high students using this will be encouraged when noting the ages of the illustrators. They can then see each principle as one they can accomplish. No text provides an ample quality and quantity of illustrations, but these pages of examples can be a basis for lecture and discussion. The use of this booklet should be accompanied by studies of reproductions and other works of art.

Each section is summarized by a basic content statement. Many types of spatial experiences can be achieved by the manipulation of these principles. The student's perception can be refined and sharpened by their use. This booklet will furnish the junior high school student with a working knowledge of articulations picture space.