

CURRICULUM FOR SCULPTURE OF THE HUMAN FIGURE
IN SECONDARY SCHOOLS:
AN HISTORICAL, CRITICAL, AND STUDIO APPROACH

by

Agness Philipps

B. Ed., The University of British Columbia, 1971

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS

in

THE FACULTY OF GRADUATE STUDIES
Department of Visual and Performing Arts in Education

We accept this thesis as conforming
to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

April 1984

© Agness Philipps, 1984

In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the head of my department or by his or her representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Department of Visual and Performing Arts in Education

The University of British Columbia
1956 Main Mall
Vancouver, Canada
V6T 1Y3

Date April 21st 1984

ABSTRACT

This study is to serve as curriculum resource for the teaching of sculpture in secondary schools. The programme was developed to aid a curriculum based on historical and critical discussions of art, and on studio activities in the area of sculpture of the human figure. It is to further the 1984 implementation of the Provincial Art Curriculum for Secondary Schools, grades 8 to 12.

To ascertain the usefulness of such a resource, a survey of British Columbia art teachers was carried out in February 1980 which confirmed this need. A reaction to and evaluation of the major areas of the study: the history of art, important concepts and several themes of sculpture, and studio processes for the making of sculpture of the human figure were sought from British Columbia art teachers in February 1983, and from Burnaby art teachers in October 1983. Respondents confirmed the usefulness of this curriculum resource.

The study makes use of a set of 431 slides in which the history of sculpture of the human figure is illustrated, from Prehistory to the present time. Examples are presented of all cultures of the world, which permit the use of the human figure as a subject. Such broad coverage was considered important in view of the multicultural roots of British Columbia secondary school students.

In order to delimitate the study, the theme of the human figure was chosen for several reasons: it is the most common

image in sculpture; it consists of great complexities of form; it is a most expressive tool for the portrayal of the human condition. Adolescence is a time of considerable growth and sensitivity and is therefore an appropriate time for the formation of self-concept which is greatly influenced by physical appearance. It is posited that the study of a great variety of sculpture of the human figure furthers adolescents' self-acceptance.

Although the study deals with sculpture of the human figure, the same methodology might be used for other areas of the visual arts. It is meant to provide viable and practical assistance to art teachers in the discussion of the history of art as related to the history of humankind, in the clarification of major concepts of sculpture, in the critical analysis of themes of sculpture, and in the production of creative works by students.

TABLE OF CONTENTS

	<u>Page</u>
ABSTRACT	ii
LIST OF TABLES	vii
LIST OF PLATES	viii
LIST OF SLIDES	ix
LIST OF NAMES AND NATIONALITY OF SCULPTORS IDENTIFIABLE ON SLIDES	xxxix
ACKNOWLEDGEMENTS	xliv
 Chapter	
I. INTRODUCTION	1
Need for the Study: Survey Results of B.C. Art Teachers Regarding Teaching of Sculpture in Secondary Schools	1
The Purpose of the Thesis	4
Why Teach Sculpture of the Human Figure to Adolescents?	11
II. DEVELOPMENT OF THE CURRICULUM RESOURCES	16
Purpose of Slides	16
Unit Plans	16
Introduction to Sculpture	18
Historical Overview of Sculpture of the Human Figure Based on 398 Slides	24
Anatomy of the Human Figure: The Skeleton	36

Chapter	<u>Page</u>
Study of Movement and Proportions Through Figure Drawing	45
Studio Activities for the Making of Sculpture of the Human Body, Methods and Materials	49
The Maquette in Clay	49
Terra-Cotta Sculpture	53
Metal Sculpture: Cold Wire Bending	58
Papier Mâché Sculpture	61
Plaster of Paris on Armature	65
Plaster of Paris for Carving	68
Concepts of Sculpture	74
Threedimensionality	74
Form, Shape, Mass, Volume, Monumentality	77
Criticism and Interpretation of Representations of the Figure	82
Linear Sculpture	82
Block Sculpture	85
Super-realism	89
Pathos in Sculpture	93
Religious Sculpture	99
Commemorative Sculpture	104
Everyday Sculpture	109
III. CONCLUSION	114
Response to Needs, the 1983 Survey of Art Teachers	114
Recommendations for Use Within Other Areas of Art Education	116

	<u>Page</u>
BIBLIOGRAPHY	117
APPENDIX 1: Needs Assessment - Sculpture Survey	123
APPENDIX 2: Evaluation	128
APPENDIX 3: Slides No. 1 - 431	130

Coloured slides in Special Collections

LIST OF TABLES

Table	Page
1. A Selection of 140 Slides for a Brief Overview of the History of Sculpture of the Figure for Senior Secondary Students	30
2. A Selection of 86 Slides for a More Condensed Overview of Sculpture of the Figure Throughout the Ages, Around the World, for Junior Secondary Students	34

LIST OF PLATES

Plate	Page
1. Half Life-size Figures Under Construction in the Art Room	8
2. Enlargement of the Maquette with Plaster of Paris on Armature	9
3. Display of Student Work	10
4. Proportions of the Skeleton	42
5. Gesture Drawing with the Skeleton	43
6. Gesture Drawing with the Skeleton	44

LIST OF SLIDES

Slide

1. Venus of Wildenmannlisloch
bone, Neanderthal, c. 70,000 B.C.
2. Venus of Willendorf
limestone, 4½ in., Paleolithic, c. 21,000 B.C.
3. Venus of Willendorf
limestone, 4½ in., Paleolithic, c. 21,000 B.C.
4. Venus of Willendorf
limestone, 4½ in., Paleolithic, c. 21,000 B.C.
5. Venus of Laussel
limestone, 17 in., Paleolithic
6. Venus of Lespugue
ivory, 6 in., Magdalenian (Paleolithic), c. 15,000 B.C.
7. Venus of Lespugue
ivory, 6 in., Magdalenian, c. 15,000 B.C.
8. Venuses of: (from left to right) Willendorf, Indus
Valley, Cyprus, Aslash, Syria.
9. Marble Figure
Cycladic, Early Bronze Age
10. Statuettes
Cyclades, end of 3rd millennium B.C.
marble, 20 in.
11. Deity Figure
12 in., Micronesian.
12. Bearded Figure
32 in., Micronesian.
13. Neck Rest
wood, 7½ in., Congo, Africa.
14. Traitor
wood with raffia skirt, 30 in., Congo, Africa.
15. Fetish Figure
wood with textile, 9¼ in., Congo, Africa.
16. Mother & Child
15 in., Nigeria, Africa.

Slide

17. Mother & Child
45 3/4 in., Congo, Africa.
18. Standing Figure
wood, with shell and human hair, 17 3/4 in., Maori,
New Zealand.
19. Wood Carving (Mother & Child)
33½ in., Melanesian, New Guinea.
20. Female Figure
human hair, canes, woven string, beads, 104 cm.
Melanesian, New Guinea.
21. Male & Female Figures
wood and rattan, Melanesian, New Guinea.
22. Ancestral Figures
tree fern, 50 in. - 40 in., Polynesian, Fiji.
23. Goddess
14 7/8 in., Polynesian, Tonga.
24. Ancestral Figure
wood, 17¼ in., Polynesian, Easter Island.
25. Crowned God
solid gold, precious stones, 15 3/4 in. x 8¼ in.,
Inca, South America, Peru.
26. Seated Maiden
terra-cotta, 11 3/8 in., Colima, c. 300-1000 A.D.,
Middle America, Mexico.
27. Effigy
pottery, 12 in., Colima, Middle America, Mexico.
28. Adolescent
stone, 112.5 cm., Huadiac, 700-1000 A.D.,
Middle America, Mexico.
29. Chac Mool
limestone, 58½ in. long, Mayan, 948-1697 A.D.,
Middle America, Mexico.
30. Ballplayer
terra-cotta, 17 3/8 in., Jalisco, c. 300-1000 A.D.,
Middle America, Mexico.
31. Dancer
earthenware, 2 2/3 in., Zapotec-Mixtec, c. 1200-1400 A.D.,
Middle America, Mexico.

Slide

32. Three Figures and Walrus
stone, North American, Inuit.
33. Hunter with Harpoon
stone, North American, Inuit.
34. Hunter with Seal
stone, North American, Inuit.
35. Mother & Child
stone, North American, Inuit.
36. Mother & Child
stone, North American, Inuit.
37. Pipe Figure
stone, 8 in., c. 1000-1700 A.D., North American Indian.
38. Great Totem Pole
wood, North American Indian, B.C.
39. Two Mourners
wood, 5 ft. 6 in., and 5 ft. 3 in., North American
Indian, Salish.
40. Two House Posts
wood, 5 ft. 2 in., and 5 ft. 9 in., North American
Indian, Kwakiutl.
41. Kwakiutl Chief
wood, 45 in., North American Indian, B.C.
42. Tsimshian Dancing Shaman Figure
wood with abalone shell eyes and horsehair, 24 in.,
North American Indian, B.C.
43. Shaman
wood, 19 in., North American Indian, Haida.
44. Woman on a Sea Monster
wood, 12 in., North American Indian, Haida, 1810.
45. Naked Dancer
copper, 4½ in., c. 3000-1500 B.C., India.
46. Naked Dancer
copper, 4½ in., c. 3000-1500 B.C., India.
47. Visnu
bronze, 8½ x 10 3/8 in., c. 9th century, India (front)

Slide

48. Visnu
bronze, $8\frac{1}{2} \times 10 \frac{3}{8}$ in., c. 9th century, India (rear)
49. Yakshi
stone, 1st century B.C., India.
50. Buddha
sandstone, 5th century A.D., India.
51. Buddha
black chlorite, 32 x 18 in., late 8th to 9th century,
India.
52. Rajrani Temple
sandstone, c. 1100 A.D., India.
53. Goddess Tara (Mother & Child)
stone, 11th century A.D., India.
54. The Jinas (conquerors)
68 cm., 12th to 13th century, India.
55. Shiva as Nataraja
bronze, 12th to 13th century A.D., India.
56. Vasudhara
bronze, $18\frac{1}{2} \times 15 \frac{3}{4}$ in., c. 13th to 14th century A.D.,
India.
57. Fasting Buddha
2nd or 3rd century, Pakistan.
58. Seated Buddha
stone, 9th century, Java.
59. Celestial Dancer
sandstone, 10th century A.D., Viet Nam.
60. Goddess Tara
gilded bronze, 142.5 cm., 10th to 11th century,
Sri Lanka (Ceylon).
61. Colossal Buddha
45 ft., c. 450-500 A.D., China.
62. Female Figurine
terra-cotta, 618-907 A.D., China.
63. Musicians
terra-cotta, $10 \frac{3}{4}$ in., 618-906 A.D., China

Slide

64. Guardian Figure
stone, 618-907 A.D., China.
65. Kneeling Worshipper
mud with straw and hair, 7th century A.D., China.
66. Old Man
ivory, Ming, China.
67. Kuan-Yin
porcelain, late Ming, China.
68. Kuan-Yin
wood, China.
69. Amida Buddha
bronze, 37 ft. 4 in., colossal, Japan.
70. Figure
wood, 27½ in., 13th century A.D., Japan.
71. Buddha Sattuee
bronze, 17th century A.D., Thailand
72. Praying Figure
bronze, 12 3/5 in., 17th to 18th century A.D., Thailand.
73. Hari-Hara
c. 7th century A.D., Cambodia.
74. Dancers
stone, 12th century, Cambodia, Angkor Thom ("Capital City")
75. Relief of Procession of Troops Before the King
stone, Cambodia, Angkor Vat ("Capital Temple")
76. Female Diety
11th century A.D., Cambodia.
77. Mucalinda Buddha
35½ in., 12th century, Cambodia.
78. The God Abu
marble, 3000-2500 B.C., Mesopotamia.
79. Standing Gudea
diorite, c. 2400 B.C., Chaldean-Sumerian.
80. Winged Goddess
terra-cotta, 2000-1800 B.C., Neo-Sumerian.

Slide

81. King Hammurabi
black basalt, 1800-1700 B.C., Neo-Sumerian.
82. Goddess Astarte
bronze, 1400-1200 B.C., Phoenician.
83. King Assurnasirpal II
alabaster, 9th century, Assyrian.
84. The Hero Gilgamesh
alabaster, 8th century, Assyrian.
85. Figurine
terra-cotta, Sumerian.
86. Functionary & His Wife
wood, 44 cm., 4th Dynasty, 2900-2750 B.C., Egypt.
87. Seated Scribe
granite, c. 2750 B.C., Egypt.
88. King Mycerinus and Wife
slate, c. 2680 B.C., Egypt.
89. Woman Grinding Grain
limestone, C. 2650 B.C., Egypt.
90. The Stubborn Donkey
limestone, c. 2650 B.C., Egypt.
91. Seated Scribe
limestone, 29 in., c. 2680-2540 B.C., Egypt.
92. Seated Scribe
limestone, 29 in., c. 2680-2540 B.C., Egypt.
93. Seated Scribe
limestone, 29 in., c. 2680-2540 B.C., Egypt.
94. The Mayor
wood, C. 2600 B.C., Egypt.
95. Inspector of Scribes and Wife
limestone, C. 2565 B.C., Egypt.
96. Servant Girl
wood, c. 2000 B.C., Egypt.
97. Funeral - boat
wood, c. 1900 B.C., Egypt.

Slide

98. Amenemhet III (pharaoh)
granite, c. 1820 B.C., Egypt.
99. Statuette of Imeret-Nebes
c. 1800 B.C., Egypt.
100. Carpenters, Brewers, Musicians
wood, c. 1780 B.C., Egypt.
101. Tuthmosis III
grey basalt, c. 1570 B.C., Egypt.
102. God Amon
gold, c. 1460 B.C., Egypt.
103. The Colossi of Memnon
quartzite, 57 ft. 9 in., c. 1411-1372 B.C., Egypt.
104. Torso of Armana Princess
red quartzite, 29 cm., 1375-1350 B.C., Egypt.
105. Amenhotep IV (Echnaton)
limestone, c. 1370 B.C., Egypt.
106. Painted Wood Figures (Pharaoh in lower center)
c. 1360 B.C., Egypt.
107. Statue of Woman
c. 1350 B.C., Egypt.
108. Goddess Serket, Protector of the Dead
c. 1334-1325 B.C., Egypt.
109. Tutankhamun the Harpooner
wood (gilded), 29½ in., c. 1334-1325 B.C., Egypt.
110. Tutankhamun the Harpooner
wood (gilded), 29½ in., c. 1334-1325 B.C., Egypt.
111. Colossal Statues from Abu-Simbel
sandstone, c. 1250 B.C., Egypt.
112. Colossal Statues from Abu-Simbel
sandstone, c. 1250 B.C., Egypt.
113. Funerary Figure of Lady
wood (gilded necklace), 11½ in., c. 1580-1090 B.C., Egypt.
114. Queen Karomana
bronze, 59 cm., 22 Dynasty, 950-730 B.C., Egypt.

Slide

115. Block-statue of Prophet
slate, c. 945 B.C., Egypt.
116. Block-statue of Prince
c. 570 B.C., Egypt.
117. Kneeling Priest
c. 550 B.C., Egypt.
118. "The Dattari Statue" of a Priest
black diorite, c. 400 B.C., Egypt.
119. Apollo of Piombino
bronze, 76 in., c. 475 B.C., Greece.
120. Apollo of Piombino
bronze, 76 in., c. 475 B.C., Greece.
121. Warrior from the Temple of Aphaia,
marble, c. 475 B.C., Greece.
122. Flute Player, from the Ludovisi Throne
marble, c. 470-460 B.C., Greece.
123. Harmodius and Aristogeiton
by Antenor,
bronze, Greece.
124. Zeus from Artemision
bronze, 82 in., c. 460 B.C., Greece.
125. Zeus from Artemision
bronze, 82 in., c. 460 B.C., Greece.
126. Zeus from Artemision
bronze, 82 in., c. 460 B.C., Greece.
127. Torso
by Polykleitos,
basalt, c. 450 B.C., Greece.
128. Discobolos
by Myron,
(Roman Copy), marble, lifesize, c. 450 B.C., Greece.
129. Discobolos
by Myron,
(Roman Copy), marble, lifesize, c. 450 B.C., Greece.
130. Athena Parthenos
by Phidias,
marble, covered in ivory and gold, copy, 447-438 B.C.,
Greece.

Slide

131. Dione & Aphrodite, from the Parthenon
by Phidias,
marble, 4 ft. 1 in., 442-438 B.C., Greece.
132. Relief, from the Parthenon
by Phidias,
marble, 41 in., 442-438 B.C., Greece.
133. Ilissos
marble, c. 438 B.C., Greece.
134. Aphrodite of Knidos
by Praxiteles,
marble, Greece.
135. Youth from Antikythera
bronze, 6 ft. 5 in., c. 350 B.C., Greece.
136. Youth from Antikythera
bronze, 6 ft. 5 in., c. 350 B.C., Greece.
137. Youth from Antikythera
bronze, 6 ft. 5 in., c. 350 B.C., Greece.
138. Marsyas, the Satyr
c. 300 B.C., Greece.
139. Victory of Samothrace
marble, over life-size, c. 200 B.C., Greece.
140. Victory of Samothrace
marble, over lifesize, c. 200 B.C., Greece.
141. Aphrodite of Melos (or Venus de Milo)
marble, 6 ft. 8 in., c. 100 B.C., Greece.
142. Laokoon
marble, 95 in., c. 100 B.C., Greece.
143. The Borghese Gladiator
marble, c. 100 B.C., Greece.
144. Naked Lancer
bronze, 5th century B.C., Etruscan.
145. Ombra
bronze, Etruscan.
146. Aphrodite
bronze, 33 cm., 4th century B.C., Etruscan.

Slide

147. Dionysios and the Graces
marble, early 2nd century A.D., Roman.
148. Apollo
terra-cotta, 69 in., c. 500 B.C., Etruscan.
149. Gemma Augustae
sardonyx, 8 in. x 9 in., 1st century A.D., Roman.
150. Patrician with Busts of Ancestors
marble, lifesize, 1st century A.D., Roman.
151. Augustus
marble, 80 in., c. 20 B.C., Roman.
152. Christ Blessing
ivory, 10th-11th century A.D., Byzantine.
153. Crucifix of Archbishop Gero
polychromed oak, 969-971 A.D., Romanesque.
154. Christ in Glory
c. 1090 A.D., Romanesque.
155. The Pentecost
stone, 35½ ft., c. 1132 A.D., Romanesque.
156. Christ in Glory, detail from the Pentecost
stone, c. 1132 A.D., Romanesque.
157. Eve with Forbidden Fruit
1120-1135 A.D., Romanesque.
158. Last Judgment
early 12th century, Romanesque.
159. Adam & Eve
Romanesque.
160. Adam & Eve
Gothic.
161. Tomb of Duke & Wife
c. 1230-1250 A.D., Gothic.
162. The Synagogue
stone, c. 1230-1250 A.D., Gothic.
163. The Black Prince
copper gilded, 1380, Gothic.
164. Pieta
wood, 34½ in., early 14th century, Gothic.

Slide

165. Virgin and Child
ivory, 14 in., 14th century, Gothic.
166. The Beautiful Madonna
c. 1400 A.D., Gothic.
167. Pieta
c. 1400 A.D., Gothic.
168. A Mourner
by Claus Sluter, Dutch,
1404-1410 A.D., Gothic.
169. Four Saints in Conversation
by Nanni di Banco, Italian,
1408-1413 A.D., Gothic.
170. Madonna and Child
stone, c. 1420 A.D., Gothic.
171. Madonna with Apple
c. 1420 A.D., Gothic.
172. Adam and Eve
by Riemenschneider, German, Gothic.
173. Penitent Mary Magdalene
by Gregor Erhart, German
wood, late Gothic.
174. The Virgin with the Laughing Child
by Antonio Rossellino, Italian,
terra-cotta, 20 in., mid-15th century.
175. St. George
by Donatello, Italian,
marble, 7 ft., 1415-1417 A.D.
176. David
by Donatello, Italian,
marble, 75½ in., 1408-1409 A.D.
177. David
by Donatello, Italian,
marble, 64 in., 1434-1438 A.D.
178. David
by Donatello, Italian,
bronze, 60½ in., 1438-1443 A.D.
179. Gates of Paradise
by Lorenzo Ghiberti, Italian,
gild bronze, 1425-1452 A.D.

Slide

180. Gates of Paradise, The Story of Jacob and Esau
by Lorenzo Ghiberti, Italian,
detail.
181. Madonna and Child
by Luca della Robbia, Italian,
enamelled terra-cotta, 1450-1460 A.D.
182. David
by Andrea del Verrocchio, Italian,
bronze, 4 ft. 1 in., c. 1475 A.D.
183. Eve
by Antonio Rizzo, Italian,
bronze, c. 1485 A.D.
184. King Arthur
by Peter Vischer, German,
bronze, 1513 A.D.
185. Apollo Fountain
by Hans Vischer, German,
bronze, 1532 A.D.
186. Perseus
by Benvenuto Cellini, Italian,
bronze, 1545-1554 A.D.
187. Perseus
by Benvenuto Cellini, Italian,
bronze, 1545-1554 A.D.
188. Virtue Overcoming Vice
by Benvenuto Cellini, Italian,
bronze, 9½ in., 16th century A.D.
189. Virtue Overcoming Vice
by Benvenuto Cellini, Italian,
bronze, 9½ in., 16th century A.D.
190. Virtue Overcoming Vice
by Benvenuto Cellini, Italian,
bronze, 9½ in., 16th century A.D.
191. Diana of Anet
by Jean Goujon, French,
marble, 1548-1555 A.D.
192. Nymph, from Fountain in Paris
by Jean Goujon, French
stone, 1548-1549 A.D.

Slide

193. Mercury
by Giovanni da Bologna, Flemish-Italian,
bronze, 1564 A.D.
194. Juno
by Giovanni da Bologna, Flemish-Italian.
195. Nymph
by Bartolommeo Ammanati, Italian,
bronze, 1563-1575 A.D.
196. Charles V. & Isabella
by Pompeo Leoni, Italian,
Royal Mausoleum, Escorial, gilded bronze, 1597 A.D.
197. Study for Fountain Figure
by Giovanni da Bologna, Flemish-Italian,
terra-cotta, L. 19 in., c. 1600 A.D.
198. Study for Fountain Figure
by Giovanni da Bologna, Flemish-Italian,
terra-cotta, L. 19 in., c. 1600 A.D.
199. Pieta
by Michelangelo Buonarroti, Italian,
marble, 60 in., 1498-1500 A.D.
200. Pieta
by Michelangelo Buonarroti, Italian,
marble, 69 in., 1498-1500 A.D.
201. Torso of a Youth
by Michelangelo Buonarroti, Italian,
terra-cotta, 4 5/8 in., c. 1489 A.D.
202. David
by Michelangelo Buonarroti, Italian,
marble, 18½ ft., 1501-1504 A.D.
203. David
by Michelangelo Buonarroti, Italian,
marble, 18½ ft., 1501-1504 A.D.
204. David
by Michelangelo Buonarroti, Italian,
marble, 18½ ft., 1501-1504 A.D.
205. Christ
by Michelangelo Buonarroti, Italian,
marble, 1513-1516 A.D.

Slide

206. Bacchus
by Michelangelo Buonarroti, Italian,
marble, 1513-1516 A.D.
207. Moses
by Michelangelo Buonarroti, Italian,
marble, 1513-1516, 1542-1545 A.D.
208. Slave
by Michelangelo Buonarroti, Italian,
marble, 90½ in., 1513-1516 A.D.
209. Slave
by Michelangelo Buonarroti, Italian,
marble, 86½ in., 1513-1516 A.D.
210. Slave
by Michelangelo Buonarroti, Italian,
marble
211. Victory
by Michelangelo Buonarroti, Italian,
marble, 8 ft. 6 3/4 in., c. 1520 A.D.
212. Victory
by Michelangelo Buonarroti, Italian,
marble, 8 ft. 6 3/4 in., c. 1520 A.D.
213. Squatting Figure
by Michelangelo Buonarroti, Italian,
marble, 1519-1534 A.D.
214. Tomb of Giuliano de Medici
by Michelangelo Buonarroti, Italian,
marble, 1519-1534 A.D.
215. Day
by Michelangelo Buonarroti, Italian,
terra-cotta, H. 7 in., L. 12½ in., c. 1524 A.D.
216. Day, Tomb of Giuliano de Medici
by Michelangelo Buonarroti, Italian,
marble, 1519-1534 A.D.
217. Night, Tomb of Giuliano de Medici
by Michelangelo Buonarroti, Italian,
marble, 1519-1534 A.D.
218. Tomb of Lorenzo de Medici
by Michelangelo Buonarroti, Italian,
marble, 1519-1534 A.D.

Slide

219. Right Hand of Lorenzo de Medici
by Michelangelo Buonarroti, Italian,
terra-cotta, 4 3/4 in., c. 1524 A.D.
220. Dawn
by Michelangelo Buonarroti, Italian,
terra-cotta, h. 7 in., l. 8½ in., c. 1524 A.D.
221. Dawn, Tomb of Lorenzo de Medici
by Michelangelo Buonarroti, Italian,
marble, 1519-1534 A.D.
222. Left Arm, Shoulder & Part of Back
by Michelangelo Buonarroti, Italian,
terra-cotta, L. 10 3/4 in., c. 1524 A.D.
223. Dusk, Tomb of Lorenzo de Medici
by Michelangelo Buonarroti, Italian,
marble, 1519-1534 A.D.
224. Madonna and Child
by Michelangelo Buonarroti, Italian,
marble, 1530-1534 A.D.
225. Pieta of Florence
by Michelangelo Buonarroti, Italian,
marble, 7 ft. 8 in., 1550-1556 A.D.
226. Pieta of Florence
by Michelangelo Buonarroti, Italian,
detail.
227. Pieta of Florence
by Michelangelo Buonarroti, Italian,
detail.
228. Rondanini Pieta
by Michelangelo Buonarroti, Italian,
marble, 6 ft. 4 in., 1550-1564 A.D.
229. The Merciful Christ
by Juan Martinez Montanez, Spanish,
polychromed wood, c. 1603 A.D.
230. Pieta
by Gregorio Fernandez, Spanish.
polychromed wood, 1616-1617 A.D.
231. The Abduction of Persephore
by Gian Lorenzo Bernini, Italian,
marble, 1621-1622 A.D.

Slide

232. David
by Gian Lorenzo Bernini, Italian,
detail, marble, 1623 A.D.
233. Apollo & Daphne
by Gian Lorenzo Bernini, Italian,
marble, 1624 A.D.
234. Apollo & Daphne
by Gian Lorenzo Bernini, Italian,
detail, marble, 1624 A.D.
235. The Ecstasy of St. Teresa
by Gian Lorenzo Bernini, Italian,
marble, 1645-1652 A.D.
236. St. Jerome
by Gian Lorenzo Bernini, Italian,
marble, 6 ft. 4 in., 1661-1663 A.D.
237. St. Susanna
by Francois Duquesnoy, Flemish,
marble, over-lifesize, 1629-1633 A.D.
238. St. Andrew
by Francois Duquesnoy, Flemish,
marble, 14 ft. 11 in., 1627-1639 A.D.
239. Fountain of the Four Rivers (Danube, Nile, Ganges,
Rio de la Plata)
by Gian Lorenzo Bernini, Italian,
marble, 1648-1651 A.D.
240. Milo of Crotona
by Pierre Puget, French,
marble, 8 ft. 10 in., 1671-1683 A.D.
241. The Garonne (river)
by Antoine Coysevox, French,
bronze, 1685-1686 A.D.
242. The Assumption of the Virgin
by Egid Quirin Asam, German,
stucco, lifesize, 1718-1725 A.D.
243. St. Gertrude
by Jacinto Vieira, Portuguese,
painted wood, c. 1725 A.D.
244. L'Amitie (Madame de Pompadour)
by Jean-Baptiste Pigalle, French,
marble, 5 ft. 2 in., 1750-1751 A.D.

Slide

245. Bather
by Etienne-Maurice Falconet, French,
marble, 2 ft. 7 in., 1757 A.D.
246. Bather
by Etienne-Maurice Falconet, French,
marble, 2 ft. 7 in., 1757 A.D.
247. Venus
by Johan Tobias Sergel, Swedish,
marble, lifesize, 1770s A.D.
248. Pieta
by Franz Ignaz Günther, German,
wood, 64 in., 1774 A.D.
249. Peter the Great
by Etienne-Maurice Falconet, French,
bronze, 1766-1777 A.D.
250. St. Bruno
by Jean-Antoine Houdon, French,
stucco, 1776 A.D.
251. Diana
by Jean-Antoine Houdon, French,
marble original, c. 1776 A.D.
252. Diana
by Jean-Antoine Houdon, French,
bronze version, c. 1776 A.D.
253. George Washington
by Jean-Antoine Houdon, French,
marble, 1785-1791 A.D.
254. The Bad Thief
by O. Aleijadinho, Brazilian,
c. 1798 A.D.
255. Feasting
detail of 18th century presepio,
wood, terra-cotta and cloth.
256. Venus Victrix (Pauline Bonaparte)
by Antonio Canova, Italian,
marble, 1808 A.D.
257. Perseus
by Antonio Canova, Italian,
marble.

Slide

258. Venus Italica
by Antonio Canova, Italian,
marble, 5 ft. 8½ in., 1805-1812 A.D.
259. Young Neapolitan Fisherman Playing with a Tortoise
by Francois Rude, French,
marble, 1831-1832 A.D.
260. Mercury Attaching His Wings
by Francois Rude, French,
bronze, 8 ft. 2 in., 1828-1834 A.D.
261. La Marseillaise
by Francois Rude, French,
stone, 1833-1836 A.D.
262. Ophelia
by Auguste Preault, French,
bronze, 29½ in. x 79½ in., 1843 A.D.
263. Ugolino
by Jean-Baptiste Carpeaux, French,
plaster, 6 ft. 5½ in., 1860-1862 A.D.
264. The Prodigal Son
by Constantin Meunier, Belgian,
265. Hercules the Archer
by Antoine Bourdelle, French,
266. The Statue of Liberty
by Frederic-Auguste Bartholdi, French,
hammered copper, 90 m., 1886 A.D. (construction process).
267. The Statue of Liberty
by Frederic-Auguste Bartholdi, French,
hammered copper, 90 m., 1886 A.D. (construction process).
268. The Age of Brass
by Auguste Rodin, French,
bronze, 1876 A.D.
269. The Age of Brass
by Auguste Rodin, French,
bronze, 1876 A.D.
270. l'Eveil
by Auguste Rodin, French,
271. St. John the Baptist Preaching
by Auguste Rodin, French,
bronze, 1878 A.D.

Slide

272. St. John the Baptist Preaching
by Auguste Rodin, French,
bronze, 1878 A.D.
273. St. John the Baptist Preaching
by Auguste Rodin, French,
bronze, 1878 A.D.
274. The Thinker (from the Gate of Hell)
by Auguste Rodin, French,
bronze, 1880 A.D.
275. The Thinker (from the Gate of Hell)
by Auguste Rodin, French,
bronze, 1880 A.D.
276. The Thinker (from the Gate of Hell)
by Auguste Rodin, French,
stone, 1879-1900 A.D.
277. The Three Shadows (from the Gate of Hell)
by Auguste Rodin, French,
bronze, 1880 A.D.
278. A Shadow (from the Gate of Hell)
by Auguste Rodin, French,
bronze, 1880 A.D.
279. The Caryatid
by Auguste Rodin, French,
bronze, 1880-1881 A.D.
280. Eve
by Auguste Rodin, French,
bronze, 1881 A.D.
281. Eve
by Auguste Rodin, French,
1881 A.D.
282. Study for a Burgher of Calais
by Auguste Rodin, French,
bronze
283. Three Fauns
by Auguste Rodin, French,
plaster, 1882 A.D.
284. The Once Beautiful Heaulnière
by Auguste Rodin, French,
1885 A.D.

Slide

285. Danaid
by Auguste Rodin, French,
marble, 1885 A.D.
286. The Kiss
by Auguste Rodin, French,
marble, 1886 A.D.
287. The Kiss
by Auguste Rodin, French,
marble, 1886 A.D.
288. The Bather
by Auguste Rodin, French,
1888 A.D.
289. The Prodigal Son
by Auguste Rodin, French,
bronze, 1889 A.D.
290. Balzac
by Auguste Rodin, French,
plaster, 1897 A.D.
291. The Athlete
by Auguste Rodin, French,
1903 A.D.
292. By the Sea
by Auguste Rodin, French,
plaster, 1906-1907 A.D.
293. Sculpture exhibited at the Exposition of 1900
Grand Palais, Paris.
294. Flora
by Aristide Maillol, French,
bronze, 1912 A.D.
295. Action in Chains
by Aristide Maillol, French,
bronze, 7 ft., 1905-1906 A.D.
296. Tall Venus (detail)
by Aristide Maillol, French,
297. La Serpentine
by Henri Matisse, French,
bronze, 22½ in., 1909 A.D.

Slide

298. Venus Victorious
by Auguste Renoir, French
1914 A.D.
299. Dancer
by Edgar Degas, French,
bronze & tulle skirt, 1921 A.D.
300. Eve
by Roger de la Fresnaye, French,
bronze, 1910 A.D.
301. Kneeling Figure
by Wilhelm Lehnbruck, German,
cast stone, 5 ft. 9 in., 1911 A.D.
302. Thinker
by Wilhelm Lehnbruck, German,
1913-1914 A.D.
303. Young Man Stepping Up
by Wilhelm Lehnbruck, German,
bronze, 1913-1914 A.D.
304. Dancer
by Jacques Lipchitz, Lithuanian,
bronze, 1913 A.D.
305. Unique Forms of Continuity in Space
by Umberto Boccioni, Italian,
bronze, 44 in., 1913 A.D.
306. Seated Man with Guitar
by Jacques Lipchitz, Lithuanian,
bronze, 23 in., 1918 A.D.
307. Woman with Child on Her Lap
by Käthe Kollwitz, German
39 cm.
308. Russian Beggar Woman
by Ernst Barlach, German,
23 cm., 1907 A.D.
309. Singing Man
by Ernst Barlach, German,
bronze, 1928 A.D.
310. Boy with Flute
by Renée Sintenis, German,

Slide

311. The Runner
by Renée Sintenis, German.
312. Standing Girl
by Ludwig Kasper, German.
313. Old Man Reading
by Gerhard Marcks, German.
314. The Stone, Arm of the Proletariat
by Ivan D. Shadre, Russian.
315. Torso
by Ivan Mestrovic, Yugoslav.
316. Torso
by Gustav Vigeland, Norwegian.
317. Tall Eve
by Charles Despiau, French.
318. Woman Combing Herself
by Pal Patzay, Hungarian.
319. Spring
by Eugen Szervatiusz, Hungarian.
320. Death of Petöfi
by Tibor Szervatiusz, Hungarian.
321. Small Idol
by Tibor Szervatiusz, Hungarian.
322. Woman with Cat
by Alexander Archipenko, Russian.
bronze, H. 34 cm., 1910 A.D.
323. The Kiss
by Constantin Brancusi, Roumanian.
324. The Embrace
by Carlos Bracho, Mexican.
325. Torso
by Jean (Hans) Arp, French.
326. Onward
by Alexander Archipenko, Russian,
H. 55 cm., 1925 A.D.

Slide

327. Don Quizote
by Julio Gonzales, Spanish,
welded iron, 1929 A.D.
328. Montserrat
by Julio Gonzales, Spanish,
bronze, 1937 A.D.
329. Seated Figure
by Emilio Greco, Italian.
330. Standing Figure
by Gaston Lachaise, French-American,
bronze, 1932 A.D.
331. Young Girl
by Marcel Gimond, French,
bronze, 1934 A.D.
332. Man with Sheep
by Pablo Picasso, Spanish,
bronze, 86½ in., 1944 A.D.
333. The Storm
by Germaine Richier, French,
bronze, 69 in., 1949 A.D.
334. Venus
by Marino Marini, Italian,
1945 A.D.
335. Pomona
by Marino Marini, Italian,
1949 A.D.
336. Wrestler
by Marino Marini, Italian.
337. Madonna and Child
by Jacob Epstein, American-English,
1952 A.D.
338. Young Girl on a Chair
by Giacomo Manzù, Italian,
bronze, c. 43 in., 1955 A.D.
339. Lady of Venice, I
by Alberto Giacometti, Swiss,
bronze, 1956 A.D.
340. Family
by Gunnar Nilsson, Swedish,
bronze, 1959 A.D.

Slide

341. Maquettes
by Henry Moore, English,
in his studio.
342. Reclining and Seated Small Figures
by Henry Moore, English,
bronze.
343. Reclining Figures
by Henry Moore, English,
bronze.
344. The Northhampton Madonna
by Henry Moore, English,
1943-1944 A.D.
345. Family Group
by Henry Moore, English,
bronze, H. 16 in., 1947 A.D.
346. King and Queen
by Henry Moore, English,
bronze, 6½ ft., 1951-1953 A.D.
347. Warrior with Shield
by Henry Moore, English
bronze, H. 60 in., 1953-1954 A.D.
348. The Making of: Warrior with Shield
by Henry Moore, English,
H. 60 in.
349. Reclining Figure: Arch Leg
by Henry Moore, English,
bronze, 174 in., 1969-1970 A.D.
350. Reclining Figure: Arch Leg
by Henry Moore, English,
bronze, 174 in., 1969-1970 A.D.
351. Reclining Figure: Arch Leg
by Henry Moore, English,
bronze, 174 in., 1969-1970 A.D.
352. Walking Man
by George Segal, American,
plaster, metal & wood, 1966 A.D.
353. Man in Chair
by George Segal, American,
plaster & wood, H. 50 in., 1969 A.D.

Slide

354. Girl Putting on Scarab Necklace
by George Segal, American,
plaster, wood, metal, glass, 84 x 45 x 45 in., 1975 A.D.
355. Girl Undressing
by Reg Butler, English,
bronze, 1953-1954 A.D.
356. Nude
by Reg Butler, English,
painted bronze, 296 cm., 1976-1977 A.D.
357. A State of Peril
by Karol Broniatowski, Polish,
mixed media, lifesize.
358. Women and Dog
by Marisol, French,
wood, plaster, clothes, 72 in., 1964 A.D.
359. Three Girls: Sitting
by Richard A. Miller, American,
bronze, 22 in., 1966 A.D.
360. Milord la Chamarre
by Jean Dubuffet, French,
painted fabric and polyester resin costume, 1972 A.D.
361. Embracing Lovers
by David Wynne, English,
marble, 36 in., 1970 A.D.
362. Embracing Lovers
by David Wynne, English,
marble, 36 in., 1970 A.D.
363. Girl with Dolphin
by David Wynne, English,
erecting the statue, 1973 A.D.
364. Girl with Dolphin
by David Wynne, English,
bronze, 192 in., 1973 A.D.
365. Dancer with Bird
by David Wynne, English,
plaster for bronze, 96 in., 1974 A.D.
366. Dancer with Bird
by David Wynne, English,
plaster for bronze, 96 in., 1974 A.D.

Slide

367. Portrait of Paddy
by Bruno Lucchesi, Italian-American,
bronze, cast from terra-cotta, H. 14 in., 1970 A.D.
368. Brushing Hair
by Bruno Lucchesi, Italian-American,
terra-cotta, H. 18 in., 1974 A.D.
369. Nude
by Bruno Lucchesi, Italian-American,
bonded bronze, cast from clay original, 1975 A.D.
370. After the Bath
by Bruno Lucchesi, Italian-American,
bronze, cast from terra-cotta, H. 22 in., 1976 A.D.
371. Repose
by Bruno Lucchesi, Italian-American,
bronze, cast from terra-cotta, H. 15 in., 1976 A.D.
372. Nude
by Bruno Lucchesi, Italian-American,
bronze, cast from terra-cotta, H. 11 in., 1976 A.D.
373. Arden Anderson & Nora Murphy
by John de Andrea, American,
polyester and fibreglass, polychromed in oil, 1972 A.D.
374. Florida Shopper
by Duane Hanson, American,
mixed media, lifesize, 1973 A.D.
375. Woman Bathing
by Dario Morales, Columbian,
bronze, 48 x 48 x 31 cm., 1979 A.D.
376. Woman Bathing
by Dario Morales, Columbian,
bronze, 48 x 48 x 31 cm., 1979 A.D.
377. Torso
by Dario Morales, Columbian,
bronze, 113 x 84 x 40 cm., 1979 A.D.
378. Torso
by Dario Morales, Columbian,
bronze, 113 x 84 x 40 cm., 1979 A.D.
379. Table, Leonard
by Andre Barelrier, French,
bronze, 110 x 100 x 80 cm., 1974 A.D.

Slide

380. September 1975
by Colette Whiten, Canadian,
mixed media, c. 91 x 33 in., 1975 A.D.
381. Lover
by Mary Frank, English-American,
unglazed ceramic, 23 x 44 x 25 in., 1977 A.D.
382. Standing Nude Old Woman
by Francesco Zuniga, Costa Rican-Mexican,
bronze, 1974 A.D.
383. Dialog
by Francesco Zuniga, Costa Rican-Mexican,
bronze, 1979 A.D.
384. Girl with Mirror
by Joseph Erhardy, American-French,
bronze, H. 140 cm., 1980 A.D.
385. Louis St. Laurent
by Elek Imredy, Hungarian-Canadian,
bronze, one & half lifesize, 1976 A.D.
386. Girl in Wetsuit
by Elek Imredy, Hungarian-Canadian,
bronze, lifesize, 1972 A.D.
387. Girl in Wetsuit
by Elek Imredy, Hungarian-Canadian,
the clay sculpture, lifesize, 1972 A.D.
388. Christ the Teacher
by Elek Imredy, Hungarian-Canadian,
first maquette.
389. Christ the Teacher
by Elek Imredy, Hungarian-Canadian,
scale model of armature, Armature and Section
of fibreglass casts.
390. Christ the Teacher
by Elek Imredy, Hungarian-Canadian,
clay sculpture, details.
391. Christ the Teacher
by Elek Imredy, Hungarian-Canadian,
assembly of final sculpture, fibreglass, 16 ft., 1961 A.D.
392. Jennifer
by Elek Imredy, Hungarian-Canadian,
bronze, 14 in., 1970 A.D.

Slide

393. Jennifer
by Elek Imredy, Hungarian-Canadian,
bronze, 14 in., 1970 A.D.
394. Jennifer
by Elek Imredy, Hungarian-Canadian,
bronze, 14 in., 1970 A.D.
395. Goddess of Justice
by Elek Imredy, Hungarian-Canadian,
bronze, 12 ft., 1981 A.D.
396. Goddess of Justice
by Elek Imredy, Hungarian-Canadian,
Armature on turntable and upper part in clay.
397. Goddess of Justice
by Elek Imredy, Hungarian-Canadian,
bronze, 12 ft., 1981 A.D.
398. Sculptor Robert Ipousteguy, French,
working on plaster figures, 1981 A.D.
399. Male Nude
by Michelangelo Buonarroti, Italian,
drawing.
400. Figure Drawing
by Auguste Rodin, French.
401. Figure Drawing
by Auguste Rodin, French.
402. Figure Drawing
by Auguste Rodin, French.
403. Seated Woman
drawing by Henry Moore, English,
1921 A.D.
404. Seated Figure
drawing by Henry Moore, English,
1923-1924 A.D.
405. Standing Man
drawing by Henry Moore, English,
1921 A.D.
406. Seated Nude
drawing by Henry Moore, English,
1927 A.D.

Slide

407. Mother and Child
drawing by Henry Moore, English,
1927 A.D.
408. Family Groups
drawing by Henry Moore, English,
1941 A.D.
409. Shelter Scene
drawing by Henry Moore, English,
1941 A.D.
410. Pink & Green Sleepers
drawing by Henry Moore, English,
1941 A.D.
411. Women Winding Wool, The Presentation
drawings by Henry Moore, English,
1942-1943 A.D.
412. The Family, project for sculpture,
drawing by Henry Moore, English,
1944 A.D.
413. Two Reclining Figures
drawing by Henry Moore, English
1966 A.D.
414. The Skeleton
front and rear view.
415. Skeleton and Muscles
front view.
416. Skeleton and Muscles
rear view.
417. Muscles of the Body
side view.
418. Adult body proportions
side view.
419. The growing body's proportions
420. Two views of the skull
421. The Movements of the Neck
by Jenő Barcsay, Hungarian.
422. Studies of a Hand
by Jenő Barcsay, Hungarian.

Slide

- 423. Studies of Feet
by Jenő Barcsay, Hungarian.
- 424. The Skeleton in motion.
- 425. The Skeleton in motion.
- 426. The Skeleton in motion.
- 427. The Skeleton in motion.
- 428. The Skeleton in motion.
- 429. The Skeleton in motion.
- 430. Study of Foreshortening
by Jenő Barcsay, Hungarian.
- 431. Study of Foreshortening
by Jenő Barcsay, Hungarian.

LIST OF NAMES AND NATIONALITY OF SCULPTORS
IDENTIFIABLE ON SLIDES

Slide

123. Antenor, Greek
127. Polykleitos, Greek
128. Myron, Greek
129. Myron, Greek
130. Phidias, Greek
131. Phidias, Greek
132. Phidias, Greek
134. Praxiteles, Greek
168. Claus Sluter, Dutch
169. Nanni di Banco, Italian
172. Riemenschneider, German
173. Gregor Erhart, German
174. Antonio Rossellino, Italian
175 - 178. Donatello, Italian
179 - 180. Lorenzo Ghiberti, Italian
181. Luca della Robbia, Italian
182. Andrea del Verrocchio, Italian
183. Antonio Rizzo, Italian
184. Peter Vischer, German
185. Hans Vischer, German
186 - 190. Benvenuto Cellini, Italian
191 - 192. Jean Goujon, French
193 - 194. Giovanni da Bologna, Flemish-Italian

Slide

- 197 - 198. Giovanni da Bologna, Flemish-Italian
195. Bartolommeo Ammanati, Italian
196. Pompeo Leoni, Italian
- 199 - 228. Michelangelo Buonarroti, Italian
and 399. Michelangelo Buonarroti, Italian
229. Juan Martinez Montanez, Spanish
230. Gregorio Fernandez, Spanish
- 231 - 236. Gian Lorenzo Bernini, Italian
and 239. Gian Lorenzo Bernini, Italian
- 237 - 238. Francois Duquesnoy, Flemish
240. Pierre Puget, French
241. Antoine Coysevox, French
242. Egid Qunin Asam, German
243. Jacinto Vieira, Portuguese
244. Jean-Baptiste Pigalle, French
- 245 - 246. Etienne-Maurice Falconet, French
and 249. Etienne-Maurice Falconet, French
247. Johan Tobias Sergel, Swedish
248. Franz Ignaz Günther, German
- 250 - 253. Jean-Antoine Houdon, French
254. O. Aleijadinho, Brazilian
- 256 - 258. Antonio Canova, Italian
- 259 - 261. Francois Rude, French
262. Auguste Preault, French
263. Jean-Baptiste Carpeaux, French
264. Constantin Meunier, Belgian

Slide

265. Antoine Bourdelle, French
- 266 - 267. Frederic-Auguste Bartholdi, French
- 268 - 292. Auguste Rodin, French
&
400 - 402. Auguste Rodin, French
- 294 - 296. Aristide Maillol, French
297. Henri Matisse, French
298. Auguste Renoir, French
299. Edgar Degas, French
300. Roger de la Fresnaye, French
- 301 - 303. Wilhelm Lehnbruck, German
- 304 & 306. Jacques Lipchitz, Lithuanian
305. Umberto Boccioni, Italian
307. Käthe Kollwitz, German
- 308 - 309. Ernst Barlach, German
- 310 - 311. Renée Sintenis, German
312. Ludwig Kasper, German
313. Gerhard Marcks, German
314. Ivan D. Shadre, Russian
315. Ivan Mestrovic, Yugoslav
316. Gustav Vigeland, Norwegian
317. Charles Despiau, French
318. Pal Patzay, Hungarian
319. Eugen Szervatiusz, Hungarian
- 320 - 321. Tibor Szervatiusz, Hungarian
- 322 & 326. Alexander Archipenko, Russian
323. Constantin Brancusi, Roumanian

Slide

324. Carlos Bracho, Mexican
325. Jean Arp, French
- 327 - 328. Julio Gonzales, Spanish
329. Emilio Greco, Italian
330. Gaston Lachaise, French-American
331. Marcel Gimond, French
332. Pablo Picasso, Spanish
333. Germaine Richier, French
- 334 - 336. Marino Marini, Italian
337. Jacob Epstein, American-English
338. Giacomo Manzu, Italian
339. Alberto Giacometti, Swiss
340. Gunnar Nielsson, Swedish
- 341 - 351. Henry Moore, English
- &
- 403 - 413. Henry Moore, English
- 352 - 354. George Segal, American
- 355 - 356. Reg Butler, English
357. Karol Broniatowski, Polish
358. Marisol, French
359. Richard A. Miller, American
360. Jean Dubuffet, French
- 361 - 366. David Wynne, English
- 367 - 372. Bruno Lucchesi, Italian-American
373. John de Andrea, American
374. Duane Hanson, American
- 375 - 378. Dario Morales, Columbian

Slides

- 379. Andre Barelier, French
- 380. Colette Whiten, Canadian
- 381. Mary Frank, English-American
- 382 - 383. Francesco Zuniga, Costa Rican-Mexican
- 384. Joseph Erhardy, American-French
- 385 - 397. Elek Imredy, Hungarian-Canadian
- 398. Robert Ipousteguy, French
- 421 - 423. Jenö Barcsay, Hungarian
- 430 - 431. Jenö Barcsay, Hungarian

ACKNOWLEDGEMENTS

I would like to thank the members of my thesis committee, Professor Penny Gouldstone and Professor Roy Lewis and, in particular, the chairman of my committee, Professor Graeme Chalmers, whose help and guidance was vital to the completion of this thesis.

I wish to acknowledge the Burnaby School Board, whose generosity of granting me five months educational leave made the research for this thesis possible.

I would also like to thank my dear friends Lizzie Jensen, Alice Edstrom, and Joan Gambioli for their practical help with slides, typing and proofreading, and for moral support and encouragement from them as well as other friends.

I dedicate this thesis to the memory of my late grandfather, Gyula Philipp, who brought me, when I was 12 years old, the first lump of clay which I turned into a figure.

Chapter I

INTRODUCTION

Need for the Study: Survey Results of B.C. Art Teachers
Regarding the Teaching of Sculpture in Secondary Schools

Sculpture is an ancient art, and because of its threedimensionality and technical complexity, a drastically different branch of the visual arts. Recognition of its value in the teaching of secondary school students in British Columbia has been established by its inclusion into the Secondary Art Curriculum by the Ministry of Education. However, art teacher training at university may not include the study of concepts and techniques of sculpture. Studio work in sculpture is a lengthy and complex process. The need, therefore, to select areas of useful learning activities, and provide professional development for teachers experienced in areas of twodimensional art, seemed desirable.

At the annual conference of British Columbia art teachers, in April 1980, a questionnaire was distributed by this writer to gain feedback on possible needs and attitudes to the teaching of sculpture. The text of this sculpture survey questionnaire appears as Appendix 1 of this thesis.

The questionnaire was to seek answers to three questions. Firstly, should sculpture be taught and is it technically realistic to do so in secondary schools? Secondly, how is it or

should it be presented? Are areas of studio, criticism, art history (Western or multicultural), and concepts to be included? Thirdly, are teacher preparation and readiness to teach it adequate or is more training needed either at university level or through professional development?

The number of respondents were thirty-two. Results were tabulated to the question whether it should be taught, and 32 out of 32 answered in the affirmative. Whether teacher training should include preparation for the teaching of sculpture was answered yes by 30, no by 2. The question of adequate training in this area was broken down to junior and senior secondary levels. The responses to junior grades were 12 out of 32 not adequately prepared and 20 yes, but to senior grades 25 out of 32 not adequately prepared and only 7 said that they felt competent. In spite of these results, or perhaps because of lack of knowledge, equipment and facilities were not considered problems.

Methodology as to how the respondent art teachers taught sculpture, leaned heavily towards studio activities. They concentrated on methods such as how sculpture was made. This was further supported by their answers to the "Quick Quiz" which was to test their own studio proficiency. Amazingly, although as stated earlier, 25 out of 32 did not feel adequately trained to teach sculpture in senior grades, they did profess to be able to do most complex techniques of sculpture, some of which, in this writer's opinion, are not necessary or realistic for use in public schools. The possibility presents itself that due to the emphasis on studio work, many teachers might have endeavoured

to gain knowledge from "how to" books, prevalent in many areas of the arts and crafts.

Just as emphasis on studio work emerged from the responses to the questionnaire, it became clear how areas of criticism and art history were neglected. None of the responding art teachers taught concepts such as mass, form, monumentality, nor did they use sculpture for discussion or criticism. They did not differentiate between the use of photographs, films, slides and the "living" sculpture with its threedimensionality when viewed from all sides. Furthermore none seemed to indicate a need for viewing and discussion of sculpture from all cultures of the world which would have indicated a sensitivity to the students' multicultural roots. On the other hand, they did not use examples of Western art! At present, with the advent of a new Secondary Art Curriculum, these answers might have reflected new needs in the areas of history and criticism.

In the area of why sculpture should be taught and what it has to offer that other forms of the visual arts do not provide, many responding teachers provided sensitive and interesting observations. These varied from the general, such as "children seem to enjoy threedimensional work," and that they "don't get enough such experience," or that "most art programmes emphasize only twodimensional forms," to specifics, such as sculpture being "more physical," that it provides "opportunity to gain skill in use of new tools," that it is a "tactile experience" which encourages the "use of senses in touch," and the "using of hands for other than cut, paste, colour," or even for "blind

exercises." One respondent observed that sculpture "teaches dimensions and proportions" but did not elaborate in which way this might be more so than any other form of the visual arts. Another person wrote that sculpture "gives the threedimensional aspect that drawing or painting can't develop, [that] perspective becomes more easily understood and appreciated, [that] overall perception improves due to added appreciation of depth (from all sides, top and bottom)." Two interesting further comments point to other learning outcomes, namely, that sculpture assists in "developing the additive/subtractive thinking process," and that by doing it, students "learn sustained artistic stamina." One of the more controversial comments states that sculptural activity "is a natural development of attributes [that] the human mind possesses."

In conclusion, I quote those teachers who gave what could be regarded as the most fundamental reason for the teaching of sculpture in secondary schools. One said that sculpture is "important in making students aware of the threedimensional environment," another that "the world is not twodimensional," and a third simply stated that sculpture "gives students an idea of threedimensional form which is what they see."

The Purpose of the Thesis

The original rationale for the preparation of these curriculum materials was based on a perceived lack of preparation for

instruction in sculpture. Inasmuch as the teaching of sculpture is supported in the new Provincial Secondary Art Curriculum scheduled for full implementation in September 1984, the problem became acute. One of the five visual expression areas of that curriculum deals with the teaching of sculpture through the study of art history, the practice of art criticism, and the making of sculpture. This thesis is meant to provide viable and practical suggestions to teachers of art for the implementation of the sculpture section of the new curriculum.

Sculpture deals with themes such as the human figure, portraiture, animals, natural forms and geometric shapes in abstract sculpture, and manifests itself in two types of work: sculpture in the round or as a relief. In order to delimitate this study, a decision had to be made as to which theme and which type of sculpture to use. Sculpture in the round was chosen; it is more difficult because of its full three-dimensional quality, and its greater contrast to all the other two-dimensional expressions in art. The theme of the human figure was selected, again for its relative difficulty and complexity of form, and for its potential for psychological growth in adolescents.

Exposure to the multitude of representations of the human figure originating in diverse cultures, different time periods, and by a great variety of artists should communicate the value placed on the human body as a wondrously expressive tool for the portrayal of the human condition. The broad use and the manifold appearance of the human figure created by sculptors historically and cross-culturally should aid adolescents in accepting

themselves as they are, even if they do not conform to the ideal which the influence of the media makes them want to resemble. To strengthen the self-esteem of adolescents at this sensitive stage of their development is one of the goals of this curriculum resource. At the same time, another goal may be achieved through the study of art history, which will enable students to learn to recognize time periods, places of origin, and styles of given artists through study of the works on the slides.

Men and women are portrayed in sculpture of the figure, and their hopes, aspirations, sorrows and despair, as well as achievements find expression there, and call for interpretation. Reflecting on what the work tells us about the societal and personal values of its time, developing empathy with the feelings and intentions of the artist who made the figure, will provide the vocabulary for reasoned criticism, as well as an appreciation of the artist's role in society. Such discussion will bridge the gap between divergent cultures, and span differences in time. Examples of criticism based on a number of themes are provided as suggestions of how to approach such critical analysis.

Studio activities were carefully selected for their suitability in the secondary school setting. All unit plans have been thoroughly and repeatedly tested by myself in the classroom. Preparatory activities include figure drawing, the study of anatomy, and the making of a maquette; all considered important prior to involvement in studio work. Suggested methods and materials are detailed and specific, but they include fewer in

number than the Provincial curriculum. This is a deliberate omission, as many of the materials and processes suggested in the guide seem, in my experience, beyond the scope of the secondary school timetable and facilities and beyond the technical expertise of most art teachers. However, as photographs of some student work demonstrate (see Plates 1, 2 and 3), most satisfactory outcomes can be achieved both at the basic and the advanced level with these studio activities. Students will gain knowledge of the proportions of the body, they will come to perceive it as unified form, thereby overcoming their frequently fragmented view of the body. Students will use the tactile senses, and gain skills with tools and materials of sculpture. Furthermore, they will extend their attention span through lengthier involvement, which such work in sculpture necessitates. Although this thesis deals with the human figure only, much of the methodology might be transferred to other areas of sculpture.



Plate 1

Half life-size figures under construction in the art room



Plate 2

Enlargement of the maquette with plaster of Paris on armature

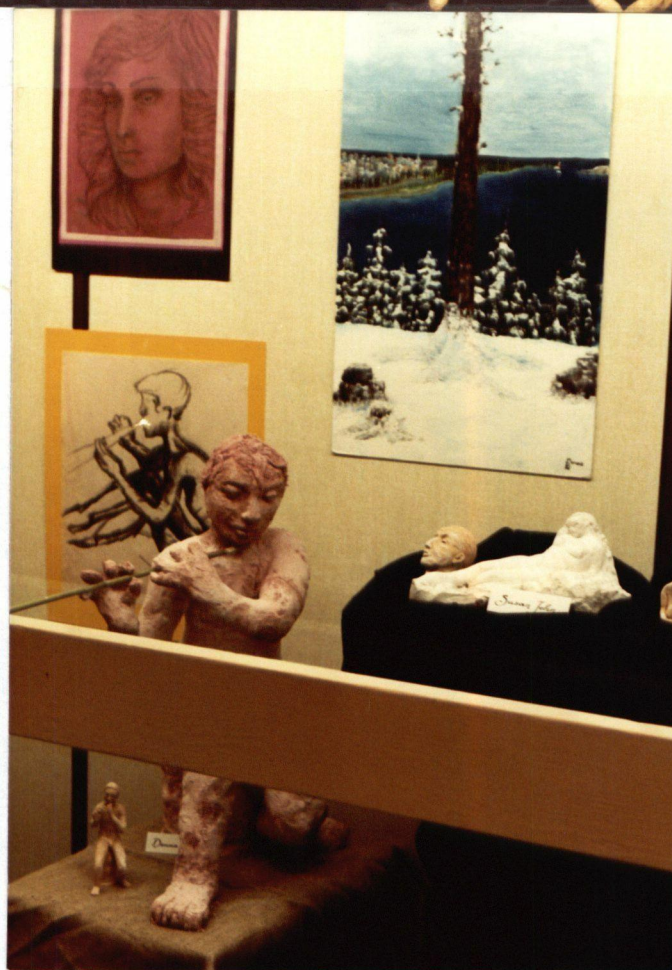


Plate 3

Display of student work

Why Teach Sculpture of the Human Figure to Adolescents?

We are surrounded by a natural and man-made environment of threedimensionality. Indeed, the centre of our personal universe, the manifestation of our existence, is our very three-dimensional body. Interest in, and awareness of the physical appearance of the body is heightened in adolescence. Throughout life we may at times love or hate our bodies but always part of our self-image is determined by the perception of the appearance of it.

Adolescence, a time of tumultuous growth and great sensitivity, is a good time to openly deal with aspects of artistic interests and concerns with the human figure. Viewing and discussing slides of sculpture made by a multitude of sculptors, originating from vastly different cultures and time periods of human history but all expressed through the figure, afford a broadening of the spectrum in which the human body is viewed in our society. Individual family customs and taboos vary greatly in our multicultural society but aside from this, the influence of the media through television and advertising is clearly towards "youth culture" and the beautiful, slim body of a "Cheryl Tiegs." Our adolescents who do not measure up to the ideal of our North American society could be seriously damaged in their self-esteem unless concepts of the human body, other than media-held and appearance-based, are introduced to them. Subject areas such as physical education or biology no doubt make contributions to the perception of the body as a miraculously

efficient creation. Yet the visual arts, and in particular sculpture, can add a most valuable dimension.

Feldman (1973) compares sculpture to other forms of visual arts when he says that, "The capacity of sculpture, no matter what its materials, to occupy real space and to compel belief in its aliveness distinguishes it from painting and graphic art in general" (p. 328). This aliveness of sculpture is particularly effective when it deals with the human figure. Sculpture, as a rule, stands by itself and does not include the environment as part of the work. If it uses the subject of the human figure, we often see ourselves in it, and in this sense it may become "everyman." The sculptor may choose from the young or the growing figure, the mature or the decaying figure, the healthy or the ill, and from many body types of differing proportions. In addition to these, there are the infinite varieties of poses, the body in motion or at rest, the use for the expression of emotions, thought and actions. Despair or hope, happiness or sorrow, depression or elation, heroism or cowardice, boredom or tranquillity, excitement or action, are among the many moods which can be expressed with the human figure through the heightened sensitivity of the artist. In adolescence many of the above feelings are strongly manifest and rapidly alternating, therefore exposure to the study of sculpture of the figure at this time through heightened empathy, can leave a lasting impression.

The impression gained from the study of sculpture of the figure from different periods and places can be liberating for

our adolescents. Looking at, and talking about how the nude or draped body expresses beliefs and customs of the time and culture can be interesting and insightful. At the same time, while viewing and discussing a multitude of slides, the students are bound to perceive that each body type or age has its expressive force, its dignity and use, and therefore a certain "beauty" which is much more than skin-deep. They will also learn of the acceptance of the figure as a manifestation of our humanity, worldwide and as old as mankind, and are bound to be favourably affected in the acceptance of their own appearance and of themselves.

The psychological impact of historical overview and critical discussion of the figure may be further broadened by studio activity. They seem to prepare the ground for expression and creation of sculpture of the figure by the students themselves. This provides the opportunity to directly and openly deal with a figure of their own making not only involving the tactile senses but activating a learning process regarding the proportions of the body which leads away from a fragmented perception of the body they seem to possess, to a unified image of it. As an example, adolescents perceive their arm and hand but most frequently don't know how it relates proportionately to their body. They are often surprised to find the arm longer than they would have thought, the elbow near the waist and the hand ending not far above the knee. Or else they know that they have shoulders but do not know how the arm is attached to the body. Discoveries of this nature are frequent while they are working on

a figure. At this point marked differences may be observed between junior and senior secondary school students.

It is observable in my own classes that grade 8 or 9 students have less apparent inhibitions but also less knowledge of proportions or even lack knowledge of certain parts of the body. They seem mostly to struggle to achieve a likeness to a body. It is interesting to observe that they often leave out the area between waistline and loins and attach the legs to the waist. Leaving out the lower trunk might suggest inhibitions related to their sexuality. This point might be further supported by the tendency of both girls and boys to choose to create a male figure. Those who choose the female figure experience great difficulties modelling the breasts either from inhibition or simply because of lack of knowledge. Further, there is a general puppet-like stiffness and lack of inventiveness of movement in the work of this age group, especially obvious when one views the work of a whole class.

Senior students, in contrast, even if without previous training in art, seem to have a better knowledge of and feeling for the body. They manifest a much increased interest in spending a great length of time working on sculpture of the figure. They tend to demand accuracy in depicting the body realistically, and they use a great variety of poses. The brooding, stiffer poses of junior students give way now to frequent interpretations of athletes in action. However, regardless of the subject chosen to be expressed with the figure, other important learning outcomes are the lengthened attention span, the

staying power with one project extending over several weeks, and the interest and pride they take in the quality of the finished product. These indeed are characteristics of art created by mature artists.

Our dependence on and relationship to our bodies forms an important part of how we cope with life itself. An increased understanding of the structure and the expressive quality of the human body, whether our own or that of our fellow men can only enhance the quality of our life. Adolescence is an appropriate time to gain such knowledge.

Chapter II

DEVELOPMENT OF THE CURRICULUM RESOURCES

Purpose of Slides

The slides are of paramount importance as all unit plans use them as lesson aids. A major part of the research was devoted to the selection of sculpture, and slides of these had to be made for illustration of all the facets of sculpture explored in this thesis. Beyond this, the slides have the potential to be used in many other lessons.

The first consideration in the selection of works for slides was an all-encompassing purpose: to illustrate the entire history of sculpture of the human figure from Prehistory to the 1980's, worldwide, and from all cultures which produced sculptures of the figure. To achieve such coverage, the relevant history of art was divided into convenient chapters. Prehistory was first, then came Primitive Art, for which the decision was made to keep it as a group following Prehistory. Although chronologically it would not belong there, it was placed there for the sake of the stylistic and functional connections; the willingness to distort the figure for the expression of ritual beliefs. Further grouping of the slides follows geographical areas such as the Far East, the Middle East, and Egypt. From this point the slides cover the major areas of the history of Western art. By the 17th century, the grouping becomes

chronological. The many movements in Western art of the 20th century are not considered in detail, although there is suitable representation of styles, so the slides might be used for this purpose. The final slides illustrating the history of art include sculptors of the figure from both Europe and North America, up to and including 1981. Consideration was given to representing several local Lower Mainland sculptors of the figure. This broader but more superficial coverage was abandoned in favour of an in-depth approach to one Vancouver sculptor, Elek Imredy, whose work serves to illustrate beyond the historical aspect, many other areas of this curriculum. Lower Mainland sculptors are featured in detail in Susanne McFeely's thesis entitled, "Teaching Sculpture: a rationale and resource kit" (1983).

As well as giving an overview of the history of art, the 398 slides also provide the underpinnings for the illustration of concepts of sculpture such as threedimensionality, form, mass, volume, monumentality, as well as for the subject areas chosen for critical discussion. The topics which are used for art criticism and interpretation are a sample of many more possibilities. One could choose other sculptural themes, or make comparisons between styles or artists. The slides could serve as a resource and as lesson aids in many art teaching situations.

Studio activities are also enhanced by the use of the slides, and 33 slides are included to help with the teaching of art anatomy and figure drawing.

In addition to all the aforesaid practical purposes, the selection of sculptures was also made with the constant purpose

in mind that they are to be viewed by adolescents. Works were included, and some were left out, with the aim of sparking the interest of adolescents. Invariably, works of importance might have been missed. For the sake of limiting the total number of slides, others were excluded. It is posited that what is included will be used, and useful, in the teaching of sculpture of the human figure in secondary schools.

Unit Plans

Introduction to Sculpture

Rationale:

To present a general overview of sculpture, its unique qualities as opposed to other areas of the visual arts, the concepts it involves, and the methods and materials used in its making.

Goal:

Students will comprehend the difference between sculpture and most of the twodimensional visual arts.

Objectives:

- An introductory knowledge of concepts such as threedimensionality and monumentality.
- A general knowledge of possible differences between outdoor and indoor sculpture.
- An overview of methods and materials used in outdoor and indoor sculpture.

Resources:

Slides: No. 211 and 213
No. 139 and 140
No. 3 and 4
No. 388 and 391
No. 215 and 216
No. 51 and 69
No. 39, 42, 45 and 46
No. 251 and 252

Lesson aids:

Endeavour to purchase a good quality replica of a sculpture such as the "Venus de Milo" or the "Thinker" by Rodin, of which you need to have a photograph of at least 8" by 11" in size, taken from one angle, usually the frontal position, and mounted on cardboard.

Materials for student use:

Notebook to take notes.

Discussion:

- Hold up a piece of paper to demonstrate what a truly twodimensional object looks like. Ask students to give you examples of other truly or nearly twodimensional objects in our environment, such as billboards, records, pancakes. Not many can be found. We are ourselves threedimensional and most things surrounding us are 3 D. These have height, width and depth.

- Whereas artists working on a 2 D surface mostly try to create the illusion of shape, distance and depth, in sculpture shape and form are materially present.

- Sculpture which is fully threedimensional is referred to as "sculpture in the round." Hold up the replica of a sculpture you have acquired, or an original one if you have it, and the photograph of it, both facing the students from the same angle. Ask them to keep their eyes on the sculpture which you now very slowly should turn, completing a full circle. Draw attention to the difference in appearance of the sculpture from the many other angles seen. Well known sculptures such as the "Venus de Milo" or Michelangelo's "David" are sometimes not recognized if a photograph is shown of them taken from a different angle. Sculpture in the round must look different and satisfactory from all angles. It could be photographed from up to 360 angles. Therefore the sculptor must work on it from all angles, preferably developing it evenly while turning it constantly.

- Colour is the lifeblood of painting; it is its most important design element. Colour is seldom used in sculpture; its major design element is form. Form can appear changed by light and shadow. A sculpture completed can be, and must be subjected to changing light and shadow but while it is created, and in order to ensure the purity and completeness of form as the sculptor wishes it to exist, it must be made in even light and preferably northern light which is least likely to cast strong shadows. Form can truly be comprehended not only by the eye but also by touch. It should be possible to touch all sculpture to enjoy it more completely.

- Photographs of sculpture can not really convey the full impact of its presence in space. As we have seen, many photographs would have to be seen to do justice to the changing forms

and shapes. But the size of a sculpture is also only a guess if we see it on a photograph. Some sculpture looks very large on a photograph even if it is small in actuality. This is what is referred to as "monumentality." The word originates from monument, and monuments were commonly large. The size of a sculpture is important to the sculptor when he plans a piece, so he must know whether it is going to be located outdoors or indoors.

- Outdoor sculpture is surrounded by open air, sky above, and often buildings nearby. Its scale must be related to the large features of buildings and of nature. It must be big to be seen. It also must be of durable materials as it is exposed to the weather year around. Indoor sculpture can be of any material and, depending on the room, mostly of smaller size.

Discuss with the students any outdoor sculpture in your area. If in the Lower Mainland of British Columbia, examples can be discussed, or visited if fieldtrips are a possibility. Examples are: "Gassy Jack" in Gastown; the "Family" by Jack Harman in front of the Pacific Press building; "Bannister and Landy" by Jack Harman at the Pacific National Exhibition; the "Knife's Edge" by Henry Moore on Little Mountain; the "Crab" by George Norris in front of the Planetarium, and many more. Suitable materials for outdoor sculpture depend on the climate. In the Lower Mainland metal is a priority, although long lasting materials generally include stone and, more recently, fibreglass.

- Major groups of materials are as follows:

Stone, consisting of the hardest, granite; the most popular,

marble; and softer ones such as limestone, sandstone and soapstone. Stone is quarried; it is part of a mountain. The most famous quarries for marble are in Italy. Sculptors often go to quarries to pick out a particular block of stone. Michelangelo did this in his time in Italy. Those famous quarries still exist--Verona red marble or Carrara white marble are examples.

Wood is another important group of materials for sculpture and there are many kinds of woods used. The hardest wood comes from Africa: ebony which is black, or "lignum vitae," the "wood of life." The softest wood is balsa, and there are many in between.

Metal is the third most important group of materials used for sculpture. The most favoured by sculptors is bronze, which is an alloy, and can be treated to become coloured green or gold or dark brown. Other metals used are steel, aluminum, gold and silver, among others. Copper is rarely used by itself as it oxidizes and even deteriorates outdoors.

The Miscellaneous group of materials includes the modern plastics such as fibreglass or resins, plaster of Paris, concrete or cast stone, the all important clay or terra-cotta sculpture, and several more. Some of these materials can be used in more than one way.

This leads to the final consideration, that of methods used to make sculpture.

- Two fundamentally opposed methods cover most studio work in sculpture. The processes are: building up or adding, and taking away or carving.

Building up, or adding may be done in clay, or papier mâché, or plaster of Paris on wire, or metal pieces soldered or welded

together, or constructed from balsa wood, cardboard, etc. Claywork may be left in clay, fired in a kiln and thus transformed into terra-cotta (baked earth) sculpture, or it may be cast into plaster of Paris or bronze, or other materials. Wax is also used to build up sculpture but if left without casting into a more permanent material, it could easily deteriorate due to heat.

Taking away, subtracting or carving takes place when a block of stone, wood, or plaster of Paris is reduced to a sculpture by, quoting Michelangelo, "removing the material which is superfluous." Visualizing the final sculpture in order not to remove what is needed can be greatly aided by the modelling of a small version of the sculpture in clay, referred to as a "maquette."

-Demonstrate the following aspects of the unit with the appropriate slides.

Slides No. 211 and 213, "Victory," by Michelangelo, as seen from three angles, and No. 139 and 140, "Victory of Samothrace," seen from two angles, to demonstrate the varied views presented by 3 D.

Slides No. 3 and 4, the "Venus of Willendorf," to show its unexpected small size. No. 388 and 391, "Christ the Teacher," by Imredy, and No. 215 and 216, "Day," from the Medici tomb by Michelangelo, to show maquette and final sculpture.

Slides 51 and 69, both "Buddha" figures of stone and bronze, to demonstrate inadequacy of photographs to guess size of work, 32 inches to 37 feet respectively.

Slides No. 39 and 42, British Columbia Indians' wood figures, the first 5 ft. 6 inches and 5 ft. 3 inches, the second 24 inches. Also slides No. 45 and 46 of the "Naked Dancer," made of copper, from India, and only 4½ inches in size. These illustrate the large differences in size not visible from the photographs.

Slides No. 251 and 252, "Diana," by Houdon, the first the marble original which needed the vegetation as support for the figure, and the later bronze version which carries the upright figure without support with the innate strength of the metal.

Historical Overview of Sculpture of the Human Figure Based on 398 Slides

Rationale:

In sculpture, artists have consistently depicted the human figure. An overview of the history of humankind can be traced to some extent through the history of sculpture of the human figure, as most cultures permitted representations of it. To look at such work dated from 70,000 B.C. to 1981 A.D., worldwide, through the eyes of prehistoric, primitive, and sophisticated artists, expands horizons and may make the students take pride in their humanity.

Goal:

Students will be given an overview of the diversity of human images from the Ice Age of the Neanderthalers to the urban dwellers of present day North America, from primitive societies

of past and present, and from cultures extinct as well as from those surviving and thriving today.

Objectives:

Students will grow in understanding of humanity's struggle for survival, and of art used for the expression of feelings and beliefs throughout the centuries. They will also develop the ability to recognize historical epochs, styles, countries of origin, and specific sculptors' works as a result of viewing and discussing the slides.

Lesson aids:

The complete list of slides is arranged according to periods and styles of art history. This will enable students to study art history in detail, as seen through sculpture of the human figure, presented over several lessons. Slides are grouped the following way:

1. Prehistoric - from 70,000 B.C.
 - 21,000 B.C.
 - 15,000 B.C.
 - 3,000 B.C.

Slide No. 1 - 10

2. Primitive

- Micronesian (11, 12)
- African (13 - 17)
- Melanesian (18 - 21)
- Polynesian (22 - 24)
- South American (25)
- Middle American (26 - 31)

Inuit (32 - 26)

North American Indian (37 - 44)

Slide No. 11 - 44

3. Far Eastern

India (45 - 56)

Pakistan (57)

Java (58)

Viet Nam (59)

Sri Lanka (60)

China (61 - 68)

Japan (69 - 70)

Thailand (71 - 72)

Cambodia (73 - 77)

Slide No. 45 - 77

4. Near and Middle Eastern

Mesopotamian (78)

Chaldean-Sumerian (79)

Neo-Sumerian (80 - 81)

Phoenician (82)

Assyrian (83 - 84)

Sumerian (85)

Slide No. 78 - 85

5. Egyptian

Slide No. 86 - 118

6. Greek

Slide No. 119 - 143

7. Etruscan

Slide No. 144 - 148

8. Roman

Slide No. 149 - 151

9. Byzantine

Slide No. 152

10. <u>Romanesque</u>	<u>Slide No. 153 - 159</u>
11. <u>Gothic</u>	<u>Slide No. 160 - 173</u>
12. <u>Renaissance</u>	<u>Slide No. 174 - 198</u>
13. <u>Mannerism</u>	<u>Slide No. 199 - 228</u>
14. <u>17th and 18th Century</u> (Baroque & Classical)	<u>Slide No. 229 - 255</u>
15. <u>19th Century</u>	<u>Slide No. 256 - 293</u>
16. <u>20th Century</u>	<u>Slide No. 294 - 398</u>

19th and 20th century art were purposely simplified and movements such as Impressionism, Expressionism, Fauvism, Cubism, Futurism, Dada, Formalist, Constructivist, Surrealist, Conceptualism were omitted, as they were felt to be outside the scope of this thesis.

However, if either a preliminary overview is to be given to the students, or the history of art through the figure not to be taught in depth, two shortened lists of slides follow, as Tables 1 and 2. These are recommended for study for Senior or Junior Secondary students respectively, and will permit an overview of sculpture of the figure both historically and cross-culturally.

Discussion:

Show the slides, a group at a time. Where applicable discuss the historical and geographical setting, and the national and social background of the artists. Students should do their own research, and be prepared to participate in the discussion of the works. An example of such a class discussion might be as follows.

Prehistoric art: talk about the environmental conditions of Early Man. Neanderthals lived during the Ice Age as well as during the somewhat warmer Inter-Glacial Period. Neanderthal art was found mostly in caves, and seemed to have begun about 35,000 years ago, peaked 15,000 years ago, and faded 10,000 years ago. More than 200 caves were found, many of these in the South of France and the North of Spain, but also in the Near and Middle East, as well as in Africa.

Fossil records of Neanderthal man were first found in 1856 A.D., in the valley of the Neander River in Germany. The very first cave was discovered due to an accident, when a hunter's dog fell into it at Altamira, Spain. During the dog's rescue, the cave was first seen with its walls full of superb paintings. The owner of the land where Altamira lies explored the caves, and publicized his findings. He died before the art of the cave was believed to be made by Early Man. It was not accepted because of the supreme skills of its artists. Only when evidence mounted with the discovery of many caves was cave art accepted as genuine.

Several so-called "Venus" figures were found at prehistoric sites; the oldest carving of bone dated as far back as 70,000 years ago (Slide No. 1), which is remarkable and most moving in its "modern" simplicity. Dating from a later period, more such figures were found; three of these dated from 21,000 B.C. to 15,000 B.C. (Slide No. 2 - 7). However, more painted cave art and fewer figures survived, which might be attributed to the small size of these figures, and which suggests that they were

carried around as amulets. Because of the exaggerated feminine proportions of these figures, they are presumed to be fertility figures. The harsh conditions of climate made the survival of Early Man possible only if he/she existed in reasonable numbers. Neanderthal man might not have understood how children were created but he knew women bore them and, therefore, the group's survival depended on them. "Sympathetic magic" was used to bring about success in the hunt, therefore the animal paintings on the cave walls. Similarly, the female fertility figures were used for the continuation of the race.

Neanderthal fossil records date Early Man as appearing about 100,000 years ago, during the somewhat warmer interglacial period of 130,000 - 70,000 years ago. Human population entered North America, possibly from Siberia, when glaciation lowered the sea level and they could cross the Bering Strait. This might have begun 40,000 years ago. They reached South America at least 20,000 years ago. Gradually, in most parts of the world, the hunting-and-gathering way of life was replaced by agriculture. This began in some parts of the world as much as 10,000 years ago, and in the Americas about 5,000 years ago. The cave art of Early Man was replaced by a geometric style of art which becomes evident in the later Cycladic figures dated about the third millenium B.C. (Slide No. 9 and 10). A comparison between the styles of the Prehistoric and Cycladic "Venus" figures can be seen on Slide No. 8.

Table 1

Slides in Sp. Coll

A Selection of 140 Slides for a Brief Overview
of the History of Sculpture of the Figure
for Senior Secondary Students

Slide No.	1	Prehistoric	Slide No.	60	Sri Lanka
	3	"		61	China
	4	"		64	"
		<u>Primitive:</u>		69	Japan
16		Nigeria	71		Thailand
19		New Guinea	72		"
24		Easter Island	76		Cambodia
26		Mexico			<u>Near East:</u>
27		"	83		Assyria
28		"	86		Egypt
29		"	89		"
30		"	91		"
33		Inuit	92		"
35		"	95		"
39		N. Am. Indian Salish	96		"
41		Kwakiutl	102		"
		<u>Far East:</u>	104		"
45		India	105		"
49		"	108		"
51		"	109		"
57		Pakistan	110		"
			116		"

	Greco-Roman:	Slide No.	168 Gothic 15th C.
Slide No. 121	Greek		172 " "
123	"		173 Late Gothic
125	"		176 Donatello
130	"		178 "
133	"		179 Ghiberti
134	"		180 "
138	"		182 Verrocchio
139	"		187 Cellini
140	"		188 "
141	"		189 "
142	"		190 "
144	Etruscan		199 Michelangelo
146	"		202 "
149	Roman		203 "
150	"		204 "
155	Romanesque 12th C.		215 "
156	"		216 "
157	"		218 "
159	"		219 "
160	Gothic 13th C.		222 "
166	" 14th C.		223 "
167	" "		228 "

Slide No. 232	Bernini	Slide No. 294	Maillol
233	"	303	Lehmbruck
234	"	309	Barlach
<hr/>		311	Sintenis
240	Puget	314	Shadre
242	Asam	319	Szervatiusz
243	Vieira	323	Brancusi
249	Falconet	324	Bracho
251	Houdon	336	Marini
252	"	339	Giacometti
256	Canova	340	Nilsson
262	Preault	345	Moore
264	Meunier	347	"
266	Bartholdi	354	Segal
267	"	355	Butler
268	Rodin	356	"
269	"	358	Marisol
271	"	359	Miller
272	"	365	Wynne
273	"	366	"
275	"	367	Lucchesi
284	"	371	"
287	"	372	"
<hr/>			
293	Paris Exhib. 1900 A.D.		

Slide No. 373 de Andrea

374 Hanson

375 Morales

376 "

377 "

382 Zuniga

383 "

388 Imredy

391 "

Table 2

A Selection of 86 Slides for a More Condensed Overview of
Sculpture of the Figure Throughout the Ages,
Around the World, for Junior Secondary Students

Slide No.	1	Prehistoric			Near East:
	4	"		Slide No.	84 Assyria
		Primitive:			89 Egypt
	15	Congo			91 "
	18	New Zealand			92 "
	26	Mexico			102 "
	28	"			108 "
	33	Inuit			110 "
	35	"			116 "
	41	N. Am. Indian			Greco-Roman:
		Far East:			123 Greek
	49	India			125 "
	51	"			135 "
	57	Pakistan			136 "
	60	Sri Lanka			137 "
	64	China			141 "
	65	"			146 Etruscan
	69	Japan			149 Roman
	71	Thailand			151 "

Slide No. 171	Gothic	Slide No. 345	Moore
174	" 15th C.	347	"
178	Donatello	353	Segal
193	da Bologna	355	Butler
199	Michelangelo	364	Wynne
202	"	366	"
208	"	367	Lucchesi
215	"	370	"
216	"	374	Hanson
222	"	375	Morales
232	Bernini	376	"
251	Houdon	379	Barelier
252	"	384	Erhardy
258	Canova	386	Imredy
271	Rodin	387	"
272	"	388	"
275	"	389	"
287	"	390	"
294	Maillol	391	"
309	Barlach	392	"
310	Sintenis	395	"
311	"	397	"
329	Greco	399	Michelangelo drawing
336	Marini	404	Moore "
338	Manzu	406	" "
339	Giacometti	412	" "

Anatomy of the Human Figure: The Skeleton

Rationale:

The skeleton is of vital importance to artists interested in depicting the human figure as it is the "armature" which holds it up, governs its proportions, enables and restricts its motions. Study of the skeleton is a necessary introduction to working with the figure in the visual arts, and can be of particular advantage to adolescents who do not see proportions and who lack knowledge of the inner structure of their own bodies.

Goal:

Students will gain knowledge of anatomy of the human figure.

Objectives:

Seeing and drawing the skeleton in terms of:

- proportions
- physical functions
- structural strength
- limitation of movement.

Resources:

Slides No. 414 to 420.

Plates No. 4, 5 and 6.

Lesson aids:

1. Prepare large (23" by 36") drawing on Manilla Tag from Plate No. 4 in simplified form by first dividing the paper in eight horizontal sections. The top section, number 1, represents the head without the neck and is the measure used for the rest of the body.

2. Prepare large (24" by 36") drawing on Manilla Tag of two views of the skull in simplified form by using Slide No. 420, two views of the skull, frontal and the side.
3. Obtain X-rays of the skull, chest, pelvis, hands, feet, etc. from a laboratory and display taped on to the windows. Try to get adult and child X-rays to demonstrate difference in size.

Materials for student use:

Graph paper 12" by 18"

Plain paper (manilla or cartridge)

Pencils

Discuss by using the large visual of Plate No. 4.

- Function of the skeleton as the internal framework which "holds us up" and enables movement. Compare skeleton to inner structure of wood frame for houses and steel frame for high-rise buildings. We forget its role because it is hidden from view.

- Skull: point to ratio of facial area to rest which is about 1 to 2. Emphasize domelike structure which houses and protects the brain. Point to brow area which protrudes and protects deeper set eyes. Point to shortness of nose bone which allows great differences in the size and shape of noses.

- Spine: explain that vertebrae are smallest in the neck and grow in size downward until the tailbone. The cortex is thickest in the neck as the greatest number of nerves lead to the hands in order to enable them to do a multitude of movements unmatched anywhere in the body.

- Chest: its shape resembles a basket. Individual ribs

are fragile but their number and shape gives strength and flexibility to protect vital organs such as the heart and lungs, and allow for expansion and contraction when breathing.

- Pelvis: the overall shape resembles a bowl, it accommodates vital organs such as the source of life. Point to the functional differences in size between male and female pelvis. This is one of the means of identification of an unknown skeleton.

- Arms: demonstrate yourself and on the visual and have students find their elbow along their body which is at the waistline, and the whole arm including the hand reaches close to the knee. This is an important proportion most students do not see and is best demonstrated by having the students stand up. Explain about the shoulder joint which is like a ball-bearing; it enables circular motion, and the elbow which has restricted motion. Demonstrate and have students study their hand and the many movements and actions it is capable of making. It is the most sophisticated tool in the world. Point to the size of the hand and demonstrate yourself and with students that by putting the base of the hand near the wrist to one's chin, and by stretching the fingers over one's face, you will find the size of the hand about equal to the height of one's face from chin to hairline. Just as students often make the arms too short, they also make the hands far too small.

- Legs: the length of legs needs to be emphasized. They start at the end of the trunk and are the halfway point of the body between sections 4 and 5. From the hipjoint the legs angle inward to the ground in order to better carry the weight of the

body. The hipjoint is the largest joint in the body and it too resembles a ball-bearing like the shoulder. The knee, like the elbow, also has restricted movement but the directional movement of the knee is exactly opposite to the one of the elbow.

- Hands and Feet: they are composed of many small bones and joints which enables a greater range of movement, and for the feet, an increased capacity to carry weight. Emphasize that feet are larger than one's hands, another part of the body which is often depicted as much smaller by students.

- Neck: it resembles a column that holds up the head. Mention that dancers must have long necks which they use for expression of emotions by moving the head. There are two important sets of muscles which move the head. One set is vertically in the nape of the neck, the other two start each behind the ear and cross diagonally forward to meet at the base of the throat, left and right of the hollow below the "Adam's apple." This second set has the longest Latin name of all the muscles: "sternocleidomastoideus."

- Proportions: as seen on the visual, the adult body is divided into eight parts, the head without the neck being the measure; it goes seven times into the height of the body, or sometimes only six and a half times. The growing body's proportions are different, as seen on Slide No. 419, because the head grows very little after birth.

Activities:

1. Students draw on 12" by 18" graph paper or, if not obtainable, on plain paper, divided into eight horizontal sections

the frontview of the skeleton and the sideview of the body on the same paper, as displayed on the large visual.

2. Students draw the skull from the front and sideview on the same sheet of paper as displayed on the second large visual. These activities involve the reduction in the size of the drawings compared to the visuals but are otherwise copied. Yet they are most important as an exercise which familiarizes the students with the proportions, height and width of the body. Follow above activities by showing slides for more detailed study of neck movements, hand and feet movements, on Slides No. 421, 422 and 423. Follow with further slides of the skeleton in motion, Slides No. 424 to 429.

Assignments:

Provide written description of specific activities performed by a person, such as:

- climbing a ladder
- falling off the roof of a house
- sitting on a chair and drinking a cup of tea
- playing soccer or any other sport.

Students are to draw several activities with the skeleton only, or choose one activity and make it by repetition of stages of the movement into a "flip" book. Encourage sideviews for an easier assignment. See Plates No. 5 and 6 for examples.

Further discussion:

Explain the concept of "foreshortening" with a student model or yourself.

- Show:
1. frontal view of an arm stretched straight forward,
 2. frontal view of the upper leg of a sitting figure,
 3. view Slides No. 430 and 431 to study foreshortening of the reclining figure.

Further activity:

Borrow full-size real skeleton from your Resource Centre and arrange on table in sitting or reclining pose with some drapery or a hat to lessen any repulsion or fear, and heighten interest and humour.

Students are to pick a detail or portion of the skeleton such as: the skull, a thigh, the pelvis, the ribcage, a foot or a hand, and make a detailed, tonal study in pencil or ink. You may wish to assemble these parts into a (possibly distorted) collage of all the students' work as a group project.

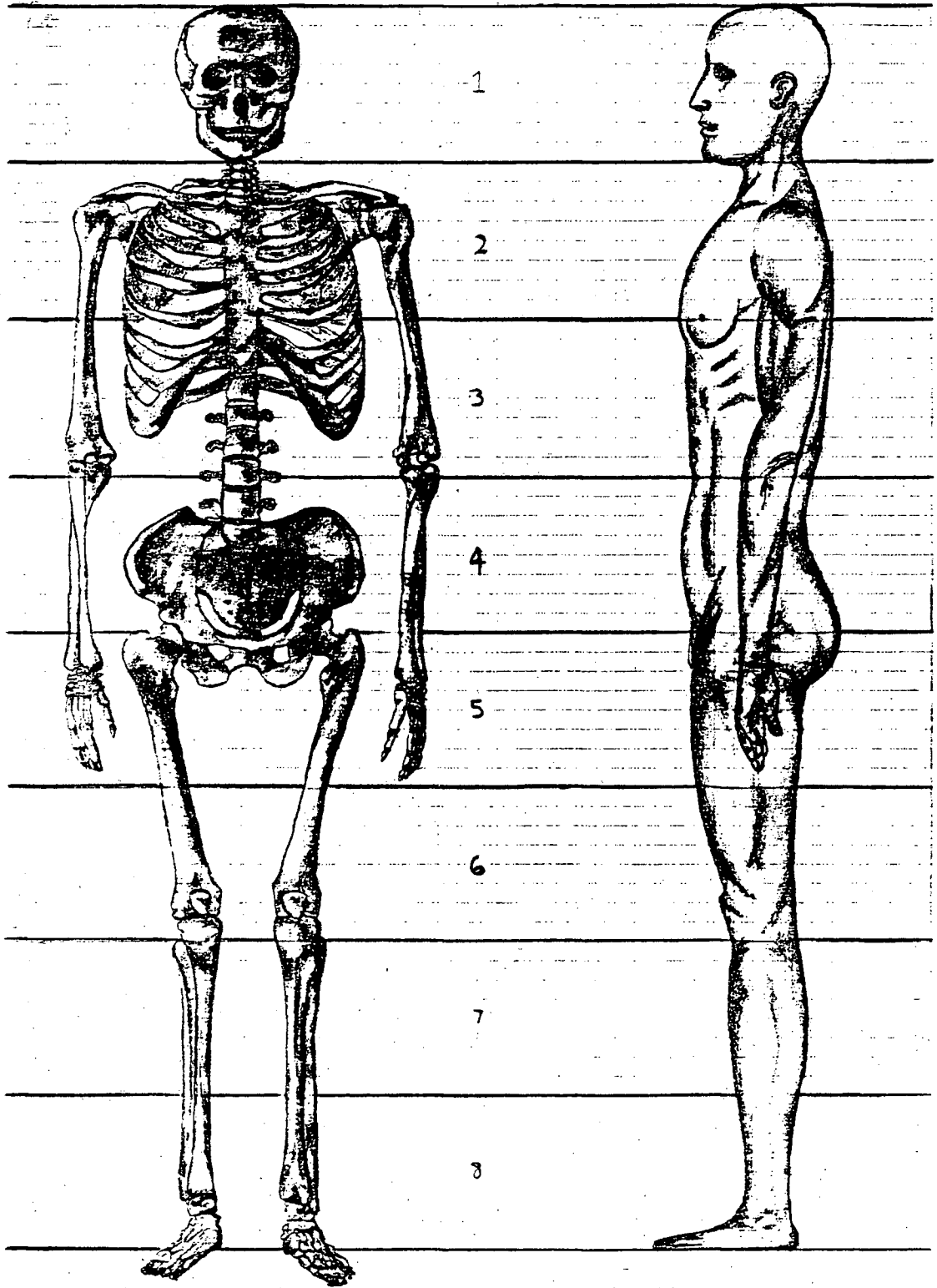
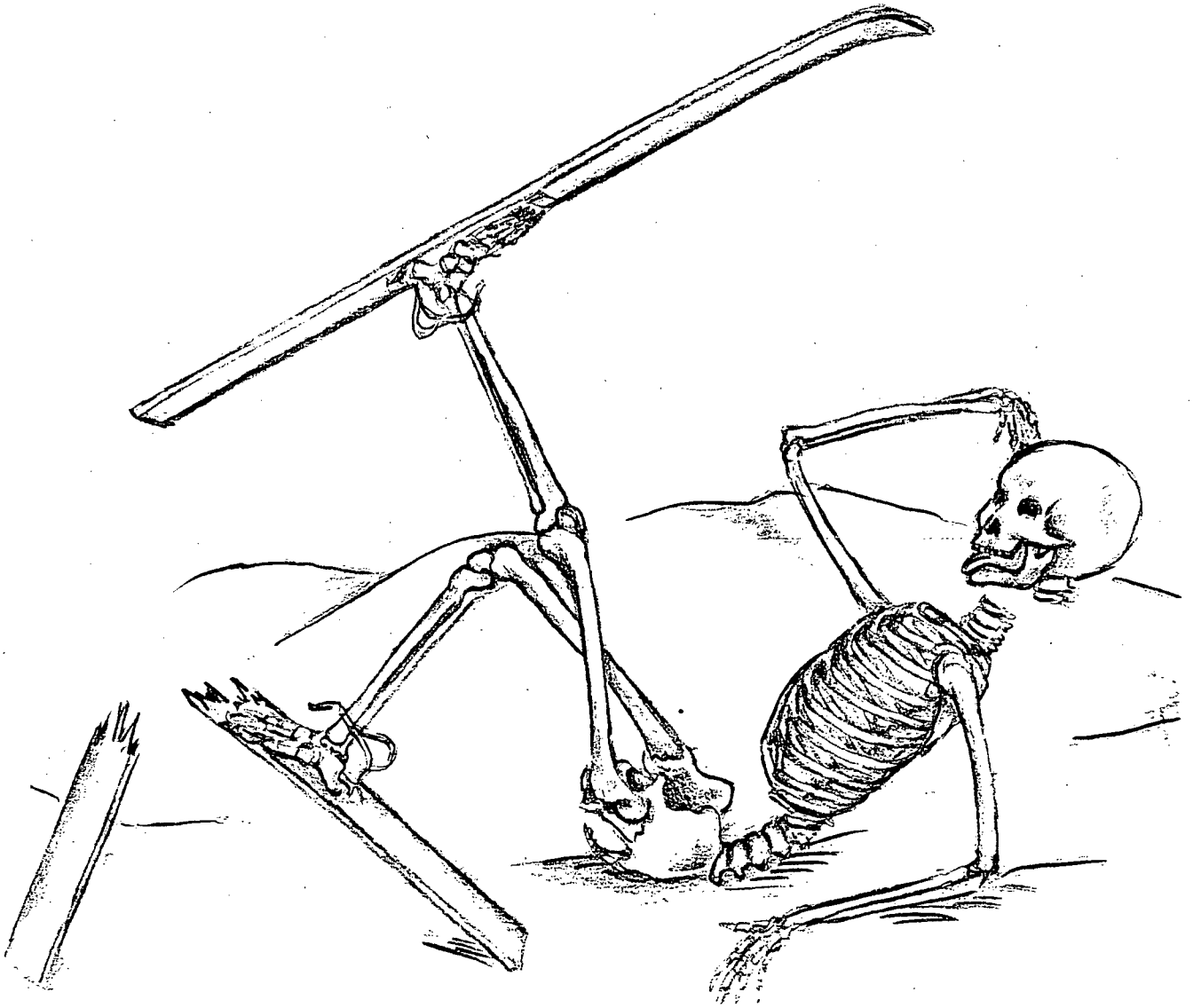


Plate 4

Proportions of the Skeleton



Lucretia

Plate 5

Gesture Drawing with the Skeleton

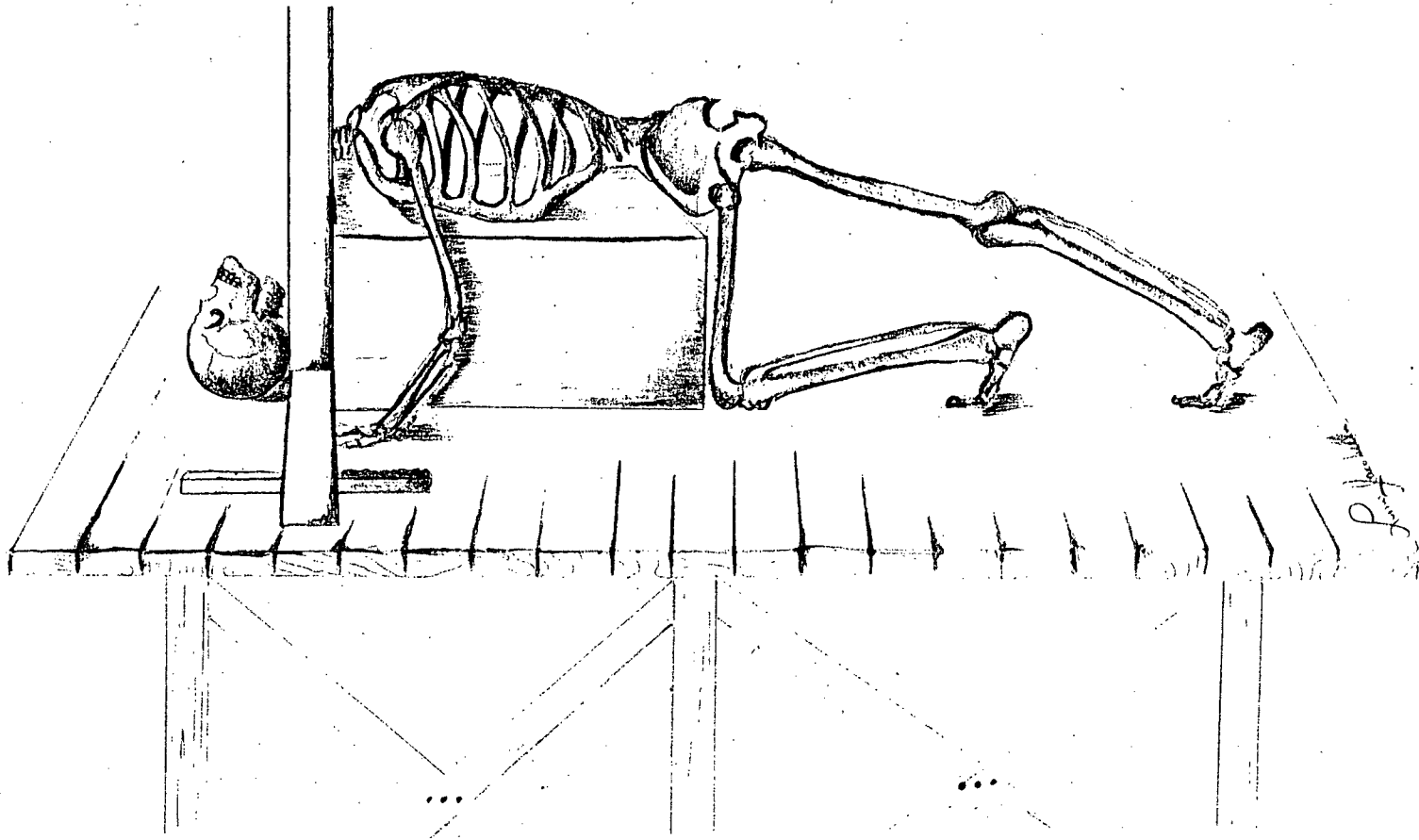


Plate 6

Gesture Drawing with the Skeleton

Study of Movement and Proportions Through
Figure Drawing

Rationale:

Figure drawing from live models has been, and still is an activity engaged in by sculptors. It provides an opportunity for closer observation of the great range of body structures in humans as well as for study of proportions of the body, and of movements suitable for representation in sculpture.

An approximation of this studio activity can be achieved in the public school system by using "works of art" which reveal the nude body in suitable poses although seen through the eyes of a sculptor.

Goal:

Students will learn to capture on a twodimensional surface, one or more views of a human body in motion, understand its proportions, learn about body types and generally have an opportunity to work as if from a nude model in a studio setting.

Objectives:

- An alternate method to the maquette in clay for planning a sculpture of the figure.
- An opportunity to put into effect knowledge gained of the proportions of the body through the study of anatomy.
- Observation of multiple body types and ages as they affect the figure.
- Concentrated "looking" at the figure as an image for artistic expression.

By controlling the length of time for each pose, achieving

a speeding up of the perception of mass and movement, and recording it on paper.

Resources:

Slides number: 26, 28, 60, 89, 91 and 92, 96, 109 and 110, 125 and 126, 135 and 137, 143, 187, 195, 202, 213, 215, 232, 245 and 246, 252, 256, 259, 268 and 269, 271, 272 and 273, 274 and 275, 283, 287, 291, 292, 294, 296, 300, 301, 303, 309, 310, 311, 313, 314, 318, 329, 330, 331, 333, 336, 338, 340, 355, 367 to 372, 383, 392 and 394, 399 to 408.

Lesson aids:

Prepare as examples some large size gesture drawings, preferably 18" by 24", of figures from slides or from models. Use conté or charcoal to achieve wider lines and in some instances indication of shading with touches of charcoal.

Show Slides No. 399 to 413 as examples of drawing styles of Michelangelo, Rodin and Moore.

Materials for student use:

18" by 24" drawing board for each student

18" by 24" newsprint and manilla paper

Bulldog clips

Conté crayon in brown, black, etc.

Discussion and demonstration:

- Set up room for projecting slides. Have students sit facing the screen but not too far to the left or right of the screen, or the image will appear distorted.

- Demonstrate the need to face screen where slides will

appear just as one would face the model. Avoiding turning one's head furthers retention of image and only one's eyes need be lifted to the screen and down to the paper.

- Each student should have a drawing board with several sheets of paper clipped to it. Affix bulldog clip away from exact centre of board otherwise it could interfere with full use of the paper. Emphasize importance of the angle between the eye and the paper which is to be at about 65°. Therefore the paper should be clipped to the drawing board with the bulldog clip and the board in an upright position resting on one's lap and leaning against a table or the back of a chair. It must be held upright or lengthwise, depending on the shape of the image of each slide.

- Prepare conté crayon sticks by breaking them in half. This is important as it will discourage use of the conté as a pencil. Show how to use it on its side which is a useful procedure for quickly mapping out the whole image. Encourage students to draw as large as the paper will allow, with free and sweeping motions, concentrating to capture the motion of the figure without any details. As they become more experienced, they will succeed not only in getting the movement but managing the space on the paper so that the whole figure is located on it. In the beginning it is more important to draw large size figures even if some parts of the figure will not fit on the paper.

- First project Slides No. 399 to 408, which are examples of drawings by Michelangelo, Rodin and Moore. Point out the many lines which search out the form and movement, the broader ones indicating some shading to emphasize shapes, and the

general lack of "one perfect line."

- Now begin projecting slides from the list. Discuss each slide and encourage observation for several minutes before beginning drawing activity. Point to the general shape of the image which often fits a triangle or square, to the location of the head related to other parts of the body depending on the movement, to the weight of the body if on one supporting leg and the resulting rise of the pelvis and lowering of the shoulder on the side of that leg, to the position of hands and feet related to each other, and such similar analysis as the particular slide suggests to you.

- Demonstrate how to rough out guidelines in the style of a "stick man" to ensure that the whole figure will be accommodated on the paper. Encourage students to draw large, with a relaxed arm sweeping over the paper even if at the beginning it might result in not getting all the figure on the paper. This is more desirable than a small, timid drawing on the large paper. As students progress through several days of drawing, do try to make them get the whole figure well placed on the paper. Drawing activity such as this seems very difficult to students at first, but amazing progress is made through days of experience.

- Timing the length of projecting each slide is vital. Explain that this approximates the studio situation where the model holds each pose for a limited length of time. Vary the time from very short warm-up sketches of no more than two minutes, to five or ten minutes, and later to an occasional study developed with shading, of fifteen or twenty minutes. Skill grows with volume, and students will have many unfinished

looking drawings. Catching the movement of the sculpture-model must be done fast, like a gesture drawing.

- Student should use newsprint first and, with more experience, manilla or cartridge paper.

- Discuss work each day towards end of period, and at least one example of all students' work. Also walk around during drawing activity to help with suggestions.

At the end of the day of figure drawing have students select, with your help, perhaps four to five drawings. These, if given extra time, may be further developed with conté without projecting the slides. Hold a class discussion of these drawings after you have had time to mark them.

Studio Activities for the Making of Sculpture of the Human Body, Methods and Materials

The maquette in clay.

Rationale:

In sculpture the maquette may be viewed as an alternative to drawing because it is important to plan a piece of sculpture in a threedimensional medium consistent with the threedimensional quality of the final piece. Drawing, even from several angles, as a preparation for the larger piece, may be found less related to the concepts of sculpture, such as form, shape, mass and volume.

Goal:

Students will be able to plan a piece of work in a flexible medium such as clay by roughing out its shape from all angles.

Resources for student use:

Material: clay with grog (sculpture clay)

- Tools:
- wooden modelling tools
 - small metal turntables (finishing wheels)
as used in ceramics
 - plastic bags
 - spray bottle for water (plant mister)

Lesson aids:

Slides No. 197 and 198

No. 201, 215, 216, 220, 221, 219, 222

No. 341

No. 388, 389, 390 and 391.

Discussion:

Project slides and explain the advantage of planning a larger piece of sculpture, often created subsequently in a different material, in the round. Show Slides No. 197 and 198 by Giovanni da Bologna, which is 19 inches long and is roughed out from clay, serving as an approximate plan for a much larger figure. It lacks the finish and detail of a final piece but has been fired in a kiln and thereby transformed into a more permanent material called terra-cotta, meaning baked earth. Therefore the artist may use it at any later stage to enlarge it in any material he wishes. Such a "plan" in clay is called a maquette.

- Michelangelo also used this technique to plan the work he later carved in marble life-size or larger. Slides No. 201, 219 and 222 are such studies. Slides No. 215 and 216, as 220 and 221, show two works by Michelangelo, the first of each the

maquette in fired clay, terra-cotta, and the second the final work in marble. The maquettes are 7" by 12", the finals life-size.

- Slide No. 341 shows maquettes by Henry Moore which are not always made of terra-cotta, but also carved from plaster of Paris. Nevertheless, they are the small size models for large pieces in stone or bronze.

- Slides No. 388 to 391, a work by the Vancouver sculptor, Elek Imredy, show the development of a 16 ft. sculpture from its planning stage as a maquette to erection on site in Edmonton, Alberta.

Demonstration:

- Open a bag of fresh clay. Use a clay cutter to slice off a thick piece. Pluck apart and show how clay in good condition "sticks" together. It does not crumble or crack, nor is it so wet that it would become muddy. Pass some bits of clay around to make students feel the consistency of good clay. Explain that the heat of one's hand tends to dry out clay, as well as the air if it is exposed to it for some length of time. Therefore the clay one is working with should be kept inside an open plastic bag and the students should reach in for the smaller pieces they need. To prevent early drying of the clay it should not be held in one's hand in larger amount than needed for present work. Stress that clay is a material one builds up with. The sculpture must slowly grow from the inside outward by the addition of small lumps. It is not to be squeezed into shape by holding a large lump in one's hand.

- Take the metal turntable and place the board on it. Sit down at the lowest chair and stress the importance of the sculpture being viewed at eye-level. You may have to raise the turntable for taller students with anything from a box to an upside-down basin in order to bring it closer to eye-level. Take a lump of clay, place in an open plastic bag and, by plucking small lumps from it, proceed to build up the sculpture evenly from all angles by turning the turntable frequently. Only when the whole piece is roughed out, start using modelling tools on the surface.

- Spray the sculpture with a fine mist of water and place it in the plastic bag. Demonstrate how it is to be well tucked in so air cannot enter the bag and dry out the sculpture between classes.

- Distribute one plastic bag per student. Give a small piece of masking tape to each student for their name to be written on and attached to the outside of the plastic bag. This will easily identify the individual pieces without having to look inside the bag. Stress the importance that only the sculpture goes into the bag at the end of each period. Leftover clay goes back into the clay bin (metal garbage can with lid) or a strong plastic bag, as it could damage the sculpture. Also, the clay can be kept in better condition in a common container. Appoint monitors to check at the end of each period whether the clay is broken into smaller lumps and wetted in the clay bin and the lid well closed; also that the clay is wiped off the modelling tools (in order not to plug the sink), then washed and dried.

- Store individual sculpture well wrapped in the plastic bag and misted with water until finished. Then do not wet anymore, and dry very slowly to prevent cracking. This is best accomplished if in the beginning it is still left in the bag, but the bag is left ajar. Then gradually remove from the bag and leave to dry in the open. Depending on the size of the maquette (anywhere from 4 to 6 inches), it should be left to dry for about two weeks. It must be completely dry throughout before it is fired in the kiln.

- Maquettes need no mounting or finishing in any way on the surface as this process is best reserved for the larger, final sculpture.

Terra-cotta sculpture.

Rationale:

Well finished terra-cotta sculpture presents an attractive and durable work of art, and is very suitable in secondary schools where the time to work on a piece is limited by the period's length, as well as by the overall available time for the sculpture units within the total art programme.

Goal:

Students will complete a medium-sized sculpture of the human figure which they will fire, finish, and mount in a professional manner.

Resources for student use:

Material: clay with grog (sculpture clay)

Tools: - assorted wooden modelling tools

- boards (plywood)
- small metal turntables (as used in ceramics)
- plastic bags
- spray bottle (plant mister)
- wax paper

Lesson aids:

- Slides: No. 26, 27
 No. 367-372

Discussion:

Show Slides No. 26 and 27, and state the sculptures' ages and explain how and why they have survived in such good condition (terra-cotta figures from Colima).

Show Slides No. 367-372 by the present day American-Italian sculptor Lucchesi, who works in clay and produces terra-cotta sculpture of medium size (around 12 to 14 inches) which are sometimes also cast in bronze.

Explain the advantages of working in terra-cotta. These are:

1. working with a flexible medium such as clay which allows frequent alterations,
2. using the human figure on a scale of around 12 inches in length which permits working without armature. Also due to the structure of the human body, which has no great differences in volume, hollowing out is not necessary,
3. by firing the clay work it becomes extremely durable; it does not crack or alter (unless it is dropped).

Remind the students of your demonstration of the maquette

in clay, or please refer to it if you did not do a maquette with the same students. It is even more important to handle the clay the same way, as it must remain moist as this project takes a longer time to complete. At the same time attention must be given every day to the clay in the bin (garbage can on wheels, with lid) to see that it remains in small pieces and therefore can easily be kept wet.

The work must again be kept at eye-level and be frequently turned. Make students stand up from time to time so that they also examine and work on their sculpture as viewed from above. It should also be lifted up, and while carefully supported in one's hand, worked on from below. If a sitting figure is not completed from the underside, it will result in a partial figure as if it would have been sliced off. Therefore the development of the sculpture from all angles is extremely important, particularly when its subject is the human figure.

Encourage your students to pick one of the many, many possible poses for a sitting figure or a figure reclining. It is possible but difficult to complete a standing figure in terracotta, as one does not use an armature. If a standing figure is desired, it must be supported with a column of clay while worked on. When finished, double check that it will be able to stand on its feet and balance, before it is dried. Once dry and fired, it will stand if attached to a base.

During the days of completing this sculpture it must be stored on its own small board, the same one which the student works on during class. This will protect the relative fragility

of the figure while moist. Before putting it away for the next period, it not only must be sprayed with a fine mist of water but in the advanced stage of work the narrower parts such as arms, legs or head should be wrapped gently in wet paper towel so drying of these parts does not get ahead of the thicker torso. This retarding of the drying process should also be done when the piece begins its final drying process before it is fired. Before the figure on the board is put into the plastic bag and tucked in for the next day, slide a small piece of wax paper between the sculpture and the board as even a shellacked board might soak up moisture from the sculpture prematurely. Remove the paper when you work on the figure.

Do not allow students to wet the surface of the figure while they work. This results in a too smooth, textureless finish. If a relatively smooth finish is desired, it is better to scrape the "leather-hard" clay surface with a wire loop tool later.

Should parts of a sculpture break while in progress, it is important to follow this process:

1. check the anatomy. For example, a head may not stay on the figure if the two major sets of muscles (one pair in the neck, the second set coming from behind the ear diagonally forward to the base of the neck in front) are not built up in clay.
2. If a crack appears, do not repair on the surface only as it will reoccur. Dig in along the crack and fill with slip. Slip is the same clay as you are using, only

mixed with water to a very thick, creamy consistency.

3. If a leg, arm or head breaks off, rough up the two surfaces of the breakage with a pointed tool to create "tooth marks." Load some slip on one surface and press together with the second surface. Smear the excess slip around the joint; it will act as glue.

When the figures are completed, follow the slow process of drying as outlined for the maquette in clay. Thorough drying, two weeks perhaps, is important to prevent blow-up in the kiln. Fire work as you would greenware in ceramics.

Finishing suggestions for the bisqued sculpture:

- Materials:
- white paste floor wax
 - assorted colours of shoe polish
 - old toothbrushes
 - jars
 - various size wood pieces for base of sculpture
 - felt (black or brown)
 - "Weldbond" glue
 - sand paper
 - linseed oil, stain, varnish

Cover each sculpture with a layer of paste wax, using the toothbrush with a circular motion, until it will not soak up any more. This seals the pores and protects it from dust.

Mix each colour of shoe polish with white floor wax in a jar to reduce strength of colour. Use various colours of brown or black where desired on the figure, with a separate toothbrush

kept for each colour. You need to reserve some for the clean first layer of floor wax. With dry extra toothbrushes, polish up the high points of the sculpture to give it highlights.

Pick a square of wood appropriate in size and of the right height so that it enhances, not dwarfs the sculpture. Just as the frame is to a painting, the base is important to a sculpture.

You may have to laminate some wood together to get the right shape. Leftover wood from Industrial Education classes is a good source. "Weldbond" glue will work to laminate the wood, and is also used for glueing the sculpture to the base. Prior to doing this, cut and glue a piece of felt to the bottom of the wood, stain or oil with linseed oil or varnish the rest of the wood base. Sandpaper the bottom of the sculpture where it touches the base, and glue on the sculpture.

Metal sculpture: cold wire bending.

Rationale:

Metal sculpture with wire belongs to the building-up or additive techniques and is particularly suitable to provide a transition from drawing to sculpture because with wire one is able to "draw" threedimensionally. It is also a direct method leading straight to the final sculpture without intermediate steps. As well, due to the innate strength of the metal, larger and more open pieces can be constructed, and the sculptural concept of volume as opposed to mass can be achieved.

Goal:

Students will understand the importance of choice of material for a planned piece of sculpture, for example: wire enables

the artist to construct the figure in extreme motion, such as running, for which clay, for instance, would not be suitable.

Objective:

Students will construct a metal sculpture based on the human figure from various types of wire and copper sheeting, and mount it on a wooden base.

Materials for student use:

- needlenose pliers and other pliers
- wire cutters
- snips
- C-clamps
- hammers
- small nails
- various square pieces of wood for base
- stovepipe wire or black annealed wire
- copper wire
- wire coat hangers
- copper sheeting
- outdoor telephone cable: soft, multicoloured wires on the inside (if obtainable)

Discussion and activities:

Begin with a session on continuous line drawing as an introduction to, and with emphasis on, "drawing" three-dimensionally with wire.

Distribute a length of soft wire, approximately two metres per student. Give out needlenose pliers and other pliers to each student, if possible. Have students begin experimenting

with the wire by bending or looping it, or making spirals over pencils but pulling these apart, always consciously turning it and working with depth to get away from twodimensionality. After the initial session of experimentation with wire and pliers, get the students to plan on paper the approximate figure they wish to make. Encourage strong movement for their figure, as we would see in various sports or in dance, as this technique is most suitable for open form, relatively precarious balance, and the opposite of bulk. Some students have the tendency to wind the wire too tightly, which not only uses up a lot of unnecessary material (wire), but is contrary to the best effect achieved with it. Note: Negative-positive spaces are most called for with this technique and "see-through," X-ray images.

As students finalize their plans by drawing on paper, distribute the following materials: C-clamps, coat hangers, ordinary pliers, rough pieces of wood for "working" base, hammer and nails. Instruct the students who want to make figures either in extreme motion and/or larger than about 10 inches high, to open up the wire coat hangers, clamp them in the C-clamp, and fashion what would correspond to a simplified version of the skeleton for their sculpture. The heavier wire of this skeleton will support the figure better and will add interest through contrast. This skeleton should be nailed down on a temporary (working) wooden base, in order to see whether it stands in the desired pose, or perhaps it needs additional support. Having it on a temporary base is also very important in order to free both hands for working with the thinner, softer wire.

Students who are doing smaller figures do not need the strength of the coat hanger wire but should nevertheless use the soft wire, perhaps doubled, to construct a skeleton for visual strength.

The remainder of the figure can be attempted as closely approximating the human anatomy as desired by using knots made with needlenose pliers to indicate joints, "outlining" shapes and muscles threedimensionally, or even shaping internal organs or bones such as ribcage. Finally, embellishments can be added with the soft, coloured wire from telephone cables which can even be woven, and/or with copper sheeting from which hats, helmets, weapons, umbrellas, etc. can be fashioned. The final figure or figures must then be removed from the rough wooden base and attached to a well-finished base. Use stain, varnish or linseed oil to finish the wood, staple with guntacker or nail down sculpture and glue a piece of felt under the base. Elaborate wooden bases combined with copper sheeting may be attempted if suitable for the subject matter of the figure in wire.

Papier-mâché sculpture.

Rationale:

Newspaper and wallpaper paste are the cheapest available materials for the classroom teacher, yet large size, lightweight sculpture can be constructed from it by both junior and senior students. It provides the chance to make large sculpture more easily with the additive or build-up process, culminating in the most indestructible piece of sculpture which can be made with ease within the limitations of the Secondary School.

Goal:

Students will get involved in the building of larger sculpture and be encouraged by the relative ease of manipulating the material without the necessity of keeping to a definite prior plan or using an armature. Papier-mâché allows for more spontaneity than clay, wire or plaster.

Objective:

Students will begin with a small clay maquette as a plan but will be able to depart from it and produce a larger sized sculpture than they would have dared to attempt in other sculptural materials where armatures for larger pieces would be indispensable. They will be able to choose a finish which will include several colours, not recommended for use in other sculpture.

Materials for student use:

- wallpaper paste
- bitter alum (potassium aluminium sulfate)
- tissue paper in assorted colours
- paints
- shellac or varnish
- paper cutter
- bucket
- small containers with lids
- newspaper
- wax paper

Activities:

The making of a clay maquette is advisable as a starting point, although departure from the original plan may occur, indeed it should be encouraged.

Distribute newspaper to each student, as well as long, narrow strips of newspaper cut with the paper cutter. These long strips will be turned into shorter pieces, as needed during construction.

Mix in a bucket, a box of wallpaper paste and water according to the recipe on the box, or simply add the powder to the water to get a thick cream consistency. You may use a strainer for adding the powder to avoid clots. Mix with a wooden spoon or, better still, with your hand to get a smooth paste. Now add a good pinch of alum to the paste, mix, and distribute into smaller containers with lids. The alum prevents the wallpaper paste from going bad and cheesy, and lids keep it from drying out.

Cover working surfaces with wax paper to which wallpaper paste is less likely to stick.

Students must take sheets of newspaper, crumple it thoroughly and rub it vigorously in order to break down the fibre, and make the newspaper pliable. Then students form large clumps of shapes, vaguely appropriate for the planned sculpture, sprinkle wallpaper paste among the crumpled form, and attach clumps to each other with newspaper strips to hold them together. They should avoid using too many strips else it will look like individual packages, instead of large forms used to build up the

general shape. As wallpaper paste does not stick until it hardens, at the daily clean-up each work in progress must be supported to hold its desired shape until it dries overnight. The more paste used, the slower it dries and the heavier it becomes. However, once dried, the sculpture becomes stone hard in whatever shape it dried in, without the possibility of changing it.

When the whole figure is roughed out, there is great need to go over the entire surface, filling in unnecessary dips with small amounts of crumpled paper with paste. This will create inner tension of the form and a smooth surface. Surface textural effects, such as hair made of thinly cut strips of newspaper, may be added.

Final finish of the work may be chosen from these alternatives: leave sculpture made of newspaper, and add interesting touches by cutting out from the paper images such as eyes, or even words as they are appropriate. A thin layer of varnish or shellac may be applied to seal the surface. Other possibilities are either using paint to cover sculpture in one, or many colours, or else tissue paper in colours, torn into patches and using overlapping to create additional colours or shades. The latter tends to unify the sculpture more than the use of several painted sections. Tissue paper contains dyes which colour hands or anything else in contact with it, and it is hard to remove even from hands the same day. It does come off hands eventually.

Lack of armature lends greater freedom to this technique with papier-mâché, and because of the strength of the material it is even possible to build an upright figure in the horizontal position, and stand it up when dry.

Plaster of Paris on armature.

Rationale:

Sculpture made with a thin layer of plaster of Paris upon an internal wire armature can yield the largest size work practical within the Secondary School setting with its facilities and timetable. It can be set aside and worked on from day to day, without special care taken between sessions. Very large sculpture remains still light enough in weight to be easily handled by all students.

Goal:

Students will have the opportunity to work on a very large piece of sculpture, using the additive, build-up process with a still relatively flexible material allowing gradual development and a measure of change.

Objective:

Students will plan the large work by first doing a clay maquette. They will have more freedom in choosing a pose for the figure as the strong wire armature they will construct will permit movement of the figure and extended extremities, if desired. Depending on the size of the figure, time for completion will be considerable, thus encouraging students to persevere with a project.

Materials for student use:

- plaster of Paris, to be used with caution
- chicken wire
- stovepipe wire

- iron oxides or powder tempera paint to colour the plaster
- burlap
- rubber ball, cut in half
- scissors, pliers, spoon, knife
- nails, hammer
- small basin
- wooden board
- flexible container for dry plaster
- wax paper or tar paper
- metal spatulas, large to very small

Activities:

Have students prepare a clay maquette as a detailed plan for the large sculpture. Considerable freedom to choose the pose for the figure is possible but extreme motion, such as a running figure, will need a heavier armature, partly of wood, for strength. The armature, however, must remain internal, covered completely by the plaster of Paris.

Students must decide the size of the work they want to do. Half lifesize or even full lifesize figures are entirely possible but, of course, are more suitable for senior students that are fewer in number, reducing day to day storage space needs.

A board is needed as a working base. If wood is used as part of the armature, it must be nailed to the base. Parts of the figure must be formed from chicken wire which can be squeezed into the shapes needed for various parts of the figure, then pliers and stovepipe wire used to attach the parts to each other securely, and also finally nailed to the working base. The latter is necessary to keep both hands free for work. The armature

must stand firmly on the base so that the figure does not topple when later weighed down with plaster.

Cut burlap strips $1\frac{1}{2}$ to 2 inches wide and 4 to $4\frac{1}{2}$ inches long. Make plenty as it will be used to cover the whole figure as if it was bandaged from hand to foot. Make a small amount of thin plaster of Paris mixture in half rubber ball. Dip each strip of burlap in the plaster and proceed to cover all of the chicken wire armature with overlapping strips. This will form the base to which the final layer of plaster will adhere. Now decide on the desired colour of the sculpture. White gives a lifeless appearance to the human figure, but it might be appropriate for the planned sculpture. If colour is desired, experiment with red or black iron oxides or powder tempera paints by mixing with dry plaster. Make patches of sample casts to decide on colour. Wait until dry as colour is lighter then. Having decided on the colour, mix a bucket full of dry plaster for a half lifesize figure with colour, store well sealed in a plastic bag or other container. Plaster exposed to air will lose its ability to set. Students should use the half rubber ball or a small basin to make small batches of plaster to very thick cream consistency and slowly cover the entire work with a thin layer. The advantage of using the rubber ball is for the ease with which it can be cleaned by turning it inside out into the garbage. Use a spoon and ordinary table knife to smooth on the first layer of plaster. As the work progresses, students should use metal spatulas for surface texture and details. Fibre, string, wool or any material can be used for hair or clothing when first dipped in plaster, if such a finish is desired.

Provide wax paper sheets or tar paper to cover working surface. This can be shaken off into the garbage frequently and, of course, reused.

Very large work does not need a base as much as smaller pieces do. However, exhibiting large work can truly be a challenge.

Footnote to another use of plaster of Paris, namely, that of casting negative and positive molds from it. Use of so-called "waste molds," where the negative is destroyed when the positive is cast, is a relatively simple process when there are only two halves to the negative mold. Such is mostly the case for portraits. The human figure is far more complex, with undercuts and negative spaces, and almost always necessitates the making of a piece mold. This is a very complex process and not practical within short class periods in Secondary Schools. Also, justification for making piece molds lies mainly in its use for casting in metal, or of making a number of copies of the original, and is thus hardly feasible in the Secondary art programme.

Plaster of Paris for carving.

Rationale:

Plaster of Paris is a most economical material to use for the subtractive process of carving. It is suitable to imitate the colours and the shape of stone blocks but it is a much easier material to carve. It yields the final work by the direct method, and needs little special finishing to achieve a durable

piece of sculpture. By carving in plaster of Paris, students can experience the excitement of the emerging sculpture hidden in the block.

Goal:

Students will be encouraged, and will find it increasingly necessary to visualize the final sculpture before they begin to carve, as what is removed can not be replaced. They will produce a well finished, solid piece of sculpture.

Objective:

Students will prepare a suitable maquette in clay as a plan and necessary guide for the carving of a larger piece. During the process of carving, accidents may happen which will necessitate adapting the original maquette and to find an alternate solution. Students will experience greatly increased difficulties in handling an inflexible material such as plaster, but will hopefully also learn to enjoy the solidity and strength inherent in it.

Materials for student use:

- clay for the maquette
- plaster of Paris
- iron oxides and powder tempera to colour the plaster
- chisels
- mallets
- old lino cutting tools
- paring knives
- old dental tools

- milk cartons, strong plastic bags or simple wooden
boxes for molds
- liquid soap
- buckets - plastic, flexible
- wax paper or tar paper
- thin foam rubber pieces
- milk

Lesson aids:

Slides No. 215 and 216, 220 and 221, 251 and 252, 282
and 285, 310, 311, 308 and 309, 322 and 324.

Discussion and activities:

Show slides of Michelangelo's terra-cotta models (No. 215 and 220), and the lifesize marble sculptures based on them (No. 216 and 221). Discuss the need for the maquette as an aid to plan the final sculpture, and the help it provides by using it from each side as a guide to what might be removed from the plaster block. The maquette also serves in determining the shape of the block to be cast.

Emphasize the inherent strength and weak points of plaster of Paris as a material, namely, the impression of strength and heaviness of form it conveys when the sculpture is kept as a compact design, but its unsuitability for protruding shapes of lesser thickness than the rest of the form. Related to the human figure, poses must be chosen of the body at rest, not in movement, and arms and legs must be kept close to the body. Suitable poses are numerous sitting ones, or even lying down as well, but negative space between parts of the body must be kept

at a minimum. Show slides of Rodin's work, No. 282, a bronze figure unsuitable for carving, but No. 285 most appropriate. Similarly, No. 310 and 311, by Sintenis, unsuitable; on the other hand, No. 308 and 309, by Barlach, No. 322 by Archipenko and No. 324 by Barlach effective. Also show Houdon's "Diana," on Slide No. 251, in marble, carved with the necessary support of plants at her feet, and No. 252, the bronze version, without any support except in the strength of the metal.

After the students prepare the maquette, prepare for casting the block. Suggest colours to imitate stone, such as pale pink, pale grey or pale green and, if any of these is chosen, use red or black iron oxide--from glaze materials--or powder tempera paint to mix with the dry plaster. Make small sample casts, let dry, to determine suitability of colour. Students might opt to remain with white plaster, although it looks rather lifeless for the human figure. If a colour is chosen, mix a much larger amount of dry plaster with it than you anticipate using, as it is not possible to match the colour closely enough. For the standard size bucket you could be needing 10-15 kg of plaster (about half of the standard sack). Keep the coloured dry plaster in a separate container; basins or buckets are suitable. Choose the containers for their size and shape. Milk cartons are for limited small size sculpture. Strong plastic bags can be used to pour the liquid plaster into and by tying it, and also placing it with the bag into another container from which it can be removed when it hardens, more flexibility is obtained to achieve a different shaped block as well as a larger

sized one. Wooden boxes need be hammered together for larger blocks of plaster but they have to be well prepared with several brushings of liquid soap to prevent the plaster from fusing with the wood. Before you pour plaster into a box, seal the seams of the box from the outside with fresh clay, pouring slowly so little plaster will escape at the seams. As the plaster sets, it no longer leaks from weak points of the box.

To mix the plaster for pouring, proceed as follows: fill the bucket three-quarters full with cold water. Place on newspaper to ease cleaning. If you work near a sink, make very sure that not even the smallest amount of plaster of Paris gets into the sink because it will quickly block the drain. Slowly add the dry plaster by the handful, shaking it with an open palm into the water. Keep adding until dry peaks form on the water's surface and the plaster no longer sinks into the water. Only at this time should you stir it to eliminate lumps. Stirring speeds up the setting of the plaster which is a chemical process and is irreversible. Have your container ready to pour the plaster, now at very thick cream consistency, before it solidifies. Plaster sets within a few hours and feels warm to the touch during this process. Set aside containers, and immediately clean up everything with plaster on it, by scraping it into the garbage can first, and later use wet paper towels to wipe everything clean. Avoid washing things with plaster on them in the sink. If you do, let a lot of water run through the sink to prevent plugging it.

Provide large pieces of wax paper or tar paper to cover the tables where students work. These can be shaken into the

garbage and reused each time.

Carving must begin with the maquette in sight. Students might use a piece of charcoal to sketch on the plaster block but it might be difficult if it is moist. However, the plaster block must be kept wrapped in plastic while work is in progress as it is easier to carve a moist block than a wet one. Students should use larger chisels and heavier mallets at first, depending on the size of the sculpture, and rough out the entire piece from all sides. Students must hold the chisel at a 45° angle and always hammer pieces off from the inside towards the outside of the sculpture, away from their hands.

As the sculpture emerges, they should use progressively smaller chisels and lighter mallets. Eventually no mallet is needed, and they can work with old lino cutting tools, paring knives and dental tools if you have them. Remind them to keep the sculpture turning and to develop it evenly from each side. To keep the piece from slipping around on the table, a piece of foam rubber will hold it still.

The finished carving should be mounted on a base, but before students do this they need to seal the pores which will keep the sculpture cleaner over time. Use whole milk to brush on the carving; it is thin enough not to form a coat and detract from the surface texture but fat enough to seal the pores.

In conclusion, tell the students the story about Michelangelo who seemed to carve great blocks of marble into beautiful sculpture with ease. He responded to his admirers with a shrug, saying that he, after all, only removed the superfluous stone, the sculpture was there all along.

Concepts of Sculpture

Threedimensionality.

Rationale:

Most things in the environment are threedimensional. In sculpture depth, which manifests itself in form, is a reality, in contrast with much of twodimensional work where it is an optical illusion. Perception of threedimensionality does not seem inborn in most people in spite of its frequency around us, therefore attention needs to be directed to it in the learning process.

Goal:

To foster awareness of threedimensionality in students even as they view sculpture one side at a time.

Objective:

Students will direct their attention to the actual advancing and receding of form, and its changing character as the same sculpture is viewed from different angles.

Lesson aids:

Slides No. 2 and 3, 6 and 7, 45 and 46, 47 and 48, 91 and 92 and 93, 105, 109 and 110, 113, 124 and 125 and 126, 135 and 136 and 137, 139 and 140, 177, 186 and 187, 188 and 189 and 190, 197 and 198, 202 and 203 and 204, 211 and 212, 245 and 246, 258, 268 and 269, 271 and 272 and 273, 274 and 275 and 276, 280 and 281, 286 and 287,

349 and 350 and 351, 361 and 362, 363 and 364,
365 and 366, 377 and 378, 386 and 387, 392 and
393 and 394.

Small, actual sculpture, a replica or student work, preferably, but not necessarily, of the human figure.

Discussion:

Hold up the sculpture, turn it slowly around. Direct the students' attention to the changing image of the piece from different angles. Explain how in many parts of the sculpture a particular form begins to grow out of another, leads the eye around to a new angle, and has another form emerge from it. This phenomenon helps to unify a piece of sculpture, just as it makes our body whole. The muscles connect each part of our body, observable to the eye, such as the head grows out of the neck which in turn emerges from the shoulders; from there the arms continue in one direction, the trunk in another. Similarly, on the face, the nose or lips are not "tacked on" but the nose is growing out of the cheeks with the upward swinging bridge of muscles, and the circular muscles of the mouth, connected to the cheeks and chin, have the lips only at the final tip of the muscles.

Introduce the slides by telling the students that they will see the same sculptures from two to three angles, but of course only one angle at a time. Thus the camera's lense has selected one angle for them and it will appear as a twodimensional image on the screen. Therefore they need to look for forms which

lead their eyes around the work even if they will not be able to turn the sculpture to see where it leads. The acquisition of such a feeling might be compared to the curiosity of what lies beyond a mountain or the curve of a road.

Some of the slides present easily recognizable further views of the same work, others are surprisingly different. The complex forms of the 17,000 year old "Venus of Lespugue" (No. 6 and 7) are easier perceived from the sideview (No. 7) and need to be viewed again, the second time, from the front. The statue of "Visnu" from 9th century India (No. 47 and 48) is intentionally different from front and back, reflecting multiple roles of this Hindu deity. Slide No. 105 shows two views of the Pharaoh Echnaton. This slide is suitable for study of advancing and receding form in its highly realistic portrayal of a less than perfect body. Echnaton instituted a new religion which did not survive his reign. Artists were directed to portray him realistically which is in marked contrast to the idealized depiction of other Egyptian Pharaohs. This slide, as Slides No. 113, 177 and 258, have the added advantage that they combine two views of the same sculpture simultaneously.

Slides of the Greek statue, the "Victory of Samothrace" (No. 139 and 140), present the usual sideview and the barely recognizable and obviously disadvantageous frontal view. Similar conclusions might be arrived at with other combinations of views of the same figure. One of Michelangelo's statues, "Victory," is exciting from one angle (No. 211) but most awkward from two others (No. 212)--hardly expected from a great master!

Rodin's "St. John the Baptist" (No. 271 and 272 and 273) presents an opportunity to study the movement of walking from different angles. Rodin's "The Kiss" (No. 286 and 287), on the other hand, barely satisfies one's curiosity of the work's totality. Henry Moore's "Reclining Figure: Arch Leg" (No. 349 and 350 and 351) gives a good account of the strength through three different views of his deceptively simple forms. David Wynne's "Embracing Lovers" (No. 361 and 362) needs special study to visualize that the slides are actually of the same work. Finally, Elek Imredy's "Girl in Wetsuit" (No. 386 and 387), so well known in Vancouver but mostly from the one angle of the postcards, presents on Slide No. 387 three uncommon views of the finished clay statue in the artist's studio.

Form, shape, mass, volume, monumentality.

Rationale:

Words such as form, shape, mass, volume, and monumentality are common in discussions of sculpture. Each stands for a concept descriptive of sculpture and therefore an examination of each should be attempted, in order to provide a meaningful vocabulary for adolescents.

Goal:

To facilitate the usage of above terms in the description of the qualities of a given sculpture, be it the work of other artists or the students' own work.

Objectives:

Students will learn to understand some unique elements of

sculpture, and they will be able to use these terms in discussion.

Lesson aids:

Slides No. 2 and 3 and 4, 6 and 7, 34, 51 and 69 and 77,
79, 83, 98, 199 and 200, 207, 210, 224, 225,
263, 286-7, 290, 308, 322, 324, 344 (Mass)

Slides No. 21, 33, 39, 45 and 46, 55, 109 and 110, 124-5-6,
129, 139, 143, 185, 187, 188, 235, 257, 265,
283, 289, 297, 311, 327, 345, 355 (Volume)

Slides No. 2 and 3 and 4, 6 and 7, 18, 28, 51 and 69 and
77, 79, 98, 107, 199 and 200, 215-6, 224, 228,
274-5-6, 290, 294, 309, 341, 342, 344, 349-50-51,
330 and 333 and 382 (335, 367), 404 and 406
and 407 (Monumentality)

Discussion:

Form as a manifestation of depth has been discussed within the unit on threedimensionality.

Form can be solid or the void between solids, similar to negative and positive space in twodimensional work. Form and shape are often used interchangeably, although form tends to be mostly a threedimensional element, whereas shape is also used as a twodimensional design element. In the description of the whole sculpture, form is better used to describe the total organization of all parts, including its inner structure. The parts of the whole work are better called shapes, thus shape would tend to be the smaller unit in comparison with form.

Apart from the use of form for the whole work, it is also used to describe the quality of form, e.g., dense, heavy, solid, or thin, fragile, outward thrusting. As all sculpture consists of form, there are no specific slides recommended for its study.

For the purpose of explaining the concepts of mass versus volume, it might be useful to imagine that one would drape a soft cloth over two sculptures such as the Inuit works of "Hunter with Harpoon" (No. 33) and "Hunter with Seal" (No. 34). Within the cloth enclosed is the volume of each work. No. 33 would appear larger than No. 34. "Hunter with Harpoon" has outward thrusting forms with spaces between them, and thus appears to be lighter and to have greater volume. "Hunter with Seal," on the other hand, is chunky, has great density of form, no internal spaces, and gives the impression of heavy weight which is called mass. (If there are suitable sculptures in the classroom, student work or replicas, you might demonstrate this with a cloth draped over them.) Similarly, the "Naked Dancer" (No. 45-46), "Tutankhamun the Harpooner" (No. 109-110), and "Zeus from Artemision" (No. 124-5-6) consist of slender, fragile, outward thrusting shapes and large volumes, compared to the "Standing Gudea" (No. 79), "Amenenhet III" (No. 98), "Moses" by Michelangelo (No. 207), which are all of compact, solid mass. Rodin's two works, "The Three Fauns" (No. 283) and "The Kiss" (No. 286-7) are both a pyramidlike composition, but while the first has many voids and open spaces (which contribute to the feeling of lightness appropriate for their dance), and large volume, "The Kiss" is much tighter of form and of seemingly

heavy mass. Such comparison can also be made of two of Henry Moore's works (No. 344 and 345), the first having more mass, the second volume. Thus larger volume often means lighter, thinner forms extending from a core, or intertwining but keeping special voids between them. The concept of mass is best applied when form is so organized that it is kept dense, and in the case of the figure, the extremities are kept close to the body. A composition of more than one figure showing a lot of mass, might appear as if carved from the same block. Compare the two Gothic Pietas (No. 164, 167) to Michelangelo's (No. 199-200). See how he managed to keep the composition tight and simple, and how the increased mass lends greater weight to the image depicted.

For analysis of the concept of monumentality, it might be useful to look at the origin of the word which is "monument." Monuments are large. They are erected to commemorate worthwhile events or people, they depict the essentials of the events or the people, and are sometimes thought of as most successful when kept simple, with little movement, and symbolic gestures.

Monumentality in a work is not related to size. In fact, what may in reality be very small, will appear lifesize or bigger. Photographs or slides are useful to illustrate this, because they can mislead about the size of the work, and make it guesswork to judge the sculpture's actual size. Considering some of the Prehistoric "Venus" figures, the one from Willendorf (No. 2 and 3), to those who do not know its actual size, becomes

a great surprise when they are shown Slide No. 4, where it is held in a hand and its actual size of 4½ inches is revealed. Looking at the "Venus of Lespugue" (No. 6 and 7), it also seems large, and having no other scale, like the hand for the former to compare it with, it is difficult to believe that it is only 6 inches high.

Monumentality is present in some sculptors' work and absent in others'. Henry Moore's maquettes (No. 341 and 342), if they were each viewed separately, could not be distinguished from his very large work, such as the "Reclining Figure: Arch Leg" (No. 349-50-51); just as Michelangelo's "Dawn" appears lifesize on the maquette (No. 220), as it is in fact on the marble figure (No. 221). Monumentality gives the appearance of large size.

Monumentality is conveyed by simplicity of form, lack of unnecessary detail, a static stillness which may seem timeless in the sense that we do not anticipate a future motion, and seems "weighty" in its importance. Heaviness of mass, however, does not guarantee monumentality. There has to be a content related to the heroic which is expressed in the work. To illustrate this point, Marini's "Pomona" (No. 335) and Lucchesi's "Portrait of Paddy" (No. 367) have the mass of heavy bodies, but not the content of heroism. In contrast, Lachaise's "Standing Figure" (No. 330), Richier's "The Storm" (No. 333), and Zuniga's "Standing Nude Old Woman" (No. 382) contain the strength, the pride, the suffering of all women, which makes these works monumental.

Criticism and Interpretation of
Representations of the Figure

Linear sculpture - the elongated, the ethereal body.

Rationale:

This aspect of sculpture of the figure endeavours to convey man's inner nature as concerned with the supernatural or sacred, a sense of austerity, other-worldliness, perhaps even alienation, by extreme linear elongation of the body with minimal three-dimensionality. Understanding of such work from different periods of history would further the adolescent's appreciation of the human condition.

Goals:

Students will learn to analyze sculpture which in appearance may seem to them at first ridiculous or even repulsive but which communicates deep ideas and emotions with which they can perhaps identify.

Objectives:

Students will develop ways of understanding and discussing the expressive qualities of sculpture which, because of an unrealistic and distorted appearance, they may at first tend to reject.

Lesson aids:

The following slides are suggested for discussion:

No. 71: "Buddha," Thailand, 17th century

No. 144: "Naked Lancer," Etruscan, 5th century

- No. 145: "Ombra," Etruscan
- No. 146: "Aphrodite," Etruscan, 4th century
- No. 303: "Young Man Stepping Up," Wilhelm Lehmbruck
- No. 320: "Death of Petöfi," Tibor Szervatiusz
- No. 327: "Don Quizote," Julio Gonzales
- No. 339: "Lady of Venice I," Alberto Giacometti
- No. 346: "King and Queen," Henry Moore
- No. 355: "Girl Undressing," Reg Butler

Discussion:

Begin by drawing attention to the technique and the material, metal, which makes such slender and tall sculpture possible. As shown in most of the above slides, sculptors used the most attractive of metals, bronze. The only exception is Szervatiusz' work (No. 320), which is carved of oak and is $3\frac{1}{2}$ meters high. The skill of the sculptor and the hardness of the wood make this linear work possible.

Lead the discussion to the present day ideal of health and beauty, the slimness culture of North America. Foremost representatives of this are the highly paid, and admired role models in the fashion industry. The great contrast between their height and weight is necessary for them in order to become models. They look great dressed, but we never see them without the drapery of fashion apparel. An example of extreme slimness was the successful but grotesque-looking British model, Twiggy, some years ago.

Reg Butler's "Girl Undressing" (No. 355) could be interpreted, in the above sense, as a representative of the North

American ideal of youth and beauty. Butler succeeds in making us forget the lack of appeal in her proportions, and to convey, as she stretches and undresses, the awkwardness, the innocence, the awakening sexuality of youth.

Giacometti's "Lady of Venice I" (No. 339), on the other hand, appears to have a shrunken, emaciated body. The sculptor succeeds in the portrayal of the human body with a minimum of mass but considerable volume. The surface texture's roughness conveys a sense of suffering, fear, vulnerability, and combined with the effect of her slimness, she seems to shrink from the world.

Lehmbruck's "Young Man Stepping Up" (No. 303) seems at first glance smooth and longlimbed, and suggests pure elegance. But the position of the arms and head suggest a fragility, a sensitivity, an introverted man. The pose of stepping up may further indicate youth, upward bound, towards the future.

In contrast to Lehmbruck's youth, it is hard to discern from the body of Szervatiusz' work, perhaps only from the head, that we are looking at the death of a young man. Petöfi is the foremost poet of the Hungarian language, and he died during the Revolution of 1848 which he helped to incite, lead, and fight in against the Austrian opporessors of Hungary. The sculpture, through the shrunken body, clearly shows suffering and death, but the elongated body, with its 3½ meters height towering over ordinary man, becomes the symbol of youthful patriotism to which the artist wants us to look up to.

Moving from the 19th century back to the 5th and 4th

century B.C., and Etruscan art, as shown on Slides No. 145 and 146, in particular, we can but interpret with 20th century eyes what the artist wished to express. Relatively little is known about Etruscan culture, as it was of short duration and was eventually absorbed into the Roman Empire. Of the well known bronze sculpture of the founding of Rome, depicting a she-wolf and the twins Romulus and Remus suckling her, we know that the she-wolf is of Etruscan origin from circa 500 B.C. and the twins are later additions from the 16th century. The realism and workmanship of the she-wolf suggest that it was not a lack of ability which made the Etruscan sculptors depict the body as stylized and elongated, to the point of infinite lightness. Man, as he appears in "Ombra" and "Aphrodite," is a mere shadow of himself. Reaching to the sky, he is not of this world. His head in the clouds, is he the expression of profound religious symbolism, or of the pain and despair of a disappearing race?

Such are examples of discussion on distorted, linear sculpture of the figure. They lead us from present day slimness culture which, if perverted, can lead to anorexia nervosa, the illness of the young and rich, through occasional states of alienation from society, or the withdrawal experienced in pain and shyness, to spiritual heights, all of these expressed by some sculpture of the human figure.

Block sculpture - the compact, the earthy body.

Rationale:

A certain kind of sculpture of the human figure uses

maximum mass, a minimum of negative shapes within the overall form, and might require distortion of the figure in order to keep it compact.

This exaggerated solidity conveys ideas, such as firmness, reliability, timelessness, strength, or earthboundness which need to be discussed in order to be appreciated by adolescents.

Goals:

Students will learn to consider possible meanings of sculpture of the human figure which they likely would have at first rejected as absurd, or even disgusting, and would therefore not have understood the ideas that the sculptor wished to express.

Objectives:

Students will be able to discuss possible meanings and ideas expressed in sculpture of the figure which, although not realistic, convey fundamental feelings and ideas common to man from the dawn of history to the present.

Lesson aids:

The following slides are some of those suitable to discuss block-like, compact sculpture:

- No. 2 and 3: "Venus of Willendorf"
- No. 27: "Effigy," Colima
- No. 33: "Hunter with Harpoon," Inuit
- No. 35: "Mother and Child," Inuit
- No. 115: "Block Statue of Prophet," Egypt
- No. 116: "Block Statue of Prince," Egypt
- No. 308: "Russian Beggarwoman," Ernst Barlach

- No. 309: "Singing Man," Ernst Barlach
 No. 321: "Small Idol," Tibor Szervatiusz
 No. 322: "Woman with Cat," Alexander Archipenko
 No. 323: "The Kiss," Constantin Brancusi
 No. 324: "The Embrace," Carlos Bracho
 No. 361 and 362: "Embracing Lovers," David Wynne

Discussion:

Consider first the materials and methods used in this group of sculpture. With one exception, that of Archipenko's "Woman with Cat," which is made of bronze, all these works are made of natural non-man-made materials. Clay is used in only one, the Colima "Effigy," which is modelled. All others are carved, hewn from wood and stone, a physically more demanding process. These materials are more suitable to use for conveying heaviness, and compactness of form. This weightiness ties these works to the earth and conveys meaning, the opposite of asceticism.

Ernst Barlach, a German sculptor, was greatly influenced by his travels in Russia. His work, made of wood, can be related to Inuit stone carvings. Both deal with ordinary man, his struggles to live in an hostile environment, cold climate, vast landscape of the tundra, where only the strongest survive. These stocky men must stay close to the earth, must relate and blend with it, and carry the burden of survival in the harshest of environments. The difference between these two people and their circumstances is reflected in the choice of topics depicted by the artists. Russia is densely populated, and Barlach

symbolizes its poor through the beggar woman, and the longing, the joys and sorrows of simple man through singing out his soul. In contrast, the Inuits are few in the vast landscape. Their ties are closer to nature and the earth, which provides, through the skill of hunters, and the care of mothers for their children, continued survival.

Another comparison might be made between the "Venus of Willendorf," and the "Small Idol" of Szervatiusz on the one hand, and Brancusi's "The Kiss," Bracho's "The Embrace," and Wynne's "Embracing Lovers" on the other. All of these works deal with what might be called the "survival of the species."

The fundamental urge for survival is in all of us. It is our approach to it which changed as we compared the prehistoric with present day expressions of the ingredient for continued life, which is love.

In 21,000 B.C. life must have been precarious for man. Moving to where the climate allowed food for survival, and battling with the forces of nature, man's strength lay in his numbers. The environment must have presented a constant chain of unpredictable events, where the only constant positive factor was woman, who produced offspring. So the prehistoric artist carved a pregnant woman, concentrating on those parts of the body in which the child grew. He carved it in simple, basic shapes, monumental in its proportions, but small in size, so it could easily be carried, like an amulet, wherever they went, to insure the magic needed for fundamental and continued existence. Szervatiusz' "Small Idol" seems no different from the

"Venus of Willendorf," only they are made 23,000 years apart.

As the above two works deal directly with childbearing, how might they be connected with the second group of works by Brancusi, Bracho and Wynne, which deal with manifestations of physical love, even if symbolically? This is where the significance of the block-like, compact form of these sculptures is of great importance. Here, in the fusion of these earthy bodies, united in earthly joy so clearly far removed from any suggestion of otherworldliness, the artists convey man's dependence on the earth, and our dependence on each other for the continuation of life through the symbolism of the loving embrace depicted in these statues. Should there be a need to further illustrate the direction these works point to, Rodin's "Kiss" (Slide No. 286 and 287) may be viewed for contrast, where the artist depicts the closeness of two loving souls with a gentle physical touch.

Super-realism - the contemporary, and polychromed body.

Rationale:

Some figure sculptors of the 20th century tend to remain realistic interpreters of the human body. Of the over fifty contemporary sculptors whose work is included in this thesis, only fifteen have abstracted the figure. Although the majority, including younger and older artists, have remained with realistic portrayals of man, a few in the past decade achieved a super-realistic representation. Their work appears at first glance to be a living person with whom identification becomes

unavoidable. This innovative approach enables these artists to make social comments which call for discussion and interpretation.

Goal:

Students will realize the role artists can play in pointing to social and personal values of society, and learn to critically assess these values.

Objectives:

Students will discuss the purpose of making sculpture completely lifelike, the ability of such work to uphold or criticize ordinary occurrences in our lives.

Lesson aids:

Slides No. 353, 353, 354: Segal

355, 356: Butler

367 to 372: Lucchesi

373: de Andrea

374: Hanson

380: Whiten

Discussion:

Explain, at first, the difference between creating a sculpture of the human figure from imagination, or by sometimes looking at a living person as a model, and the mechanics of taking a cast from a live person, which is called a "life-cast." This method might have originated in an old tradition of making a death-mask of an important, or beloved person who has just died. However, if grease is applied to the skin and gauze on top of

it, plaster casts can be taken of live people, made in sections which are subsequently assembled for the purpose of casting the positive, which is the figure.

The result becomes an exact replica of the model, and less an interpretation of it. In life-casting, who is used, in what pose he or she is used, what finish is applied, and what, if any, environment it is placed in, become the artistic decisions.

Examples of two artists' work can be seen on Slides No. 352, 353, 354 and 380, who chose to leave them in white plaster; Whiten with a smooth, Segal with a rough surface texture. Both artists use an environment which forms an integral part of the sculpture. Adolescents might relate better to George Segal's lonely figures, one pacing up and down laden with worry, another sitting helplessly and forlorn in a chair, waiting for life, or perhaps its passing, or the girl who might be trying to break out of her loneliness by the symbolic action of decorating herself with jewellery, yet seeing only her own image in the mirror. The rough surface texture and the ghostly whiteness of the figures is further emphasized by the ordinary objects and the realistic colours which surround them. It is the very lifelike quality of the figures which force us to see in them ourselves or people we know. They might trigger compassion in us for the loneliness of modern man, or perhaps warn us of emptiness lurking to engulf us if we fail to give meaning to our lives.

Some artists wish to carry the lifelike appearance to the point where their figures need to be touched to convince us

that they are statues. To achieve this effect they paint their figures in realistic skintones, add real hair to them and, if called for, use carefully selected clothes on them. Two slides (No. 355 and 356) show conventionally made sculpture by Reg Butler in the mid-1950's, and painted bronze made by him in 1977, a suitable comparison to illustrate the effect of the two opposing techniques.

Super-realism can be achieved without life-casting. For this purpose, Bruno Lucchesi's work of the 1970's (Slides No. 367 to 372) is included here. His work is modelled and either fired to become terra-cotta, or cast in bronze. The difference which the effect of his work has compared to life-casting, might be studied here, and seems to rely on the colour of the materials he uses. If one would be able to imagine his work polychromed in real skintones, with human hair added, then, at least on photographs which conceal the small size of most of his sculpture, one would think them "real." Being what they are, warm bronzes and terra-cottas, they seem soft and tender, and in place of sharp social commentary, we perceive a celebration of the beauty of the body.

John de Andrea's and Duane Hanson's works (Slide No. 373 and 374) are life-cast, polychromed, and lifesize. The nakedness of the young couple in de Andrea's work--the fact they are asleep, uncovered, and remote from each other--seems to convey a sense of vulnerability and the worst kind of loneliness, that of being lonely even when together.

Hanson's "Florida Shopper," a fixture of urban society's preoccupation with shopping, is, at the same time, a caricature of someone frequent in North American society, who cannot grow gracefully old. Perhaps it is the fear of dying which makes this older woman try to turn the clock back and wear a mini-skirt, heavy costume jewellery and a wig which does not suit her. The expression of her face is hostile and unhappy and it powerfully brings home the fate of so many old women who are perhaps widowed, as they tend to live longer, and who, even if they have family, are often far away from them. Those who have not made a life meaningful for themselves in their own right, but only in context of others who left them behind, are left in their old age devoid of any joys except to spend time with much needless shopping.

Adolescents should be able to feel and understand the social messages in these super-realistic, life-cast works. They might be able to apply them in their own lifestyle, and to their own personal values, and forestall the sadness which emptiness and loneliness bring.

Pathos in sculpture - the human body by two masters,
Michelangelo and Bernini.

Rationale:

Michelangelo Buonarroti is almost universally recognized as the greatest sculptor of the human figure. His mastery and works had a profound influence on Western art. Therefore a closer look at his particular genius with the figure seems to be appropriate.

Gian Lorenzo Bernini was as admired as Michelangelo during his lifetime, and also left a considerable body of work, but over time his sculpture of the figure has perhaps not stood up to that of Michelangelo's. Both were masters in contrasting ways, and Bernini's work can be used as a foil to set off that of Michelangelo.

Goal:

Students, who will likely respond with admiration to the skill of carving marble and the capture of intense emotions by Bernini, will be given the opportunity to explore the depth of expression in Michelangelo's work.

Objectives:

Students will compare and discuss the virtuoso technique of Bernini, his illustrations of stories which capture a moment in time. These will be contrasted with the simplicity of form and pathos in Michelangelo's work which makes them timeless.

Lesson aids:

Slides No. 199 to 228, Michelangelo, and
No. 231 to 235, and 239, Bernini

Discussion:

Talk about the long life of both, Michelangelo into his 89th year, and Bernini into his 82nd year. The former lived in the 15th and 16th century, the latter mostly in the 17th century. During those times artists were employed for specific commissions by ruling families as well as the pope, who was a

ruler, with the power and money to pay for these works. Although artists of fame were admired, perhaps only in Michelangelo's lifetime did they become highly respected, mainly because of his example. He was not only a great sculptor, but also a great painter, architect and poet. They thought of him as having a divine spark and referred to him later as the "divine" Michelangelo, a genius in the true sense of the word.

Michelangelo was very successful in his lifetime and earned a great deal of money. He gave most of it to his family in order to restore them to their previous high standing in society, which was partly lost for lack of money by the time Michelangelo was born. As much as he cared for his family's reputation and welfare, he spent little on himself. He lived very simply, with little material comforts and he devoted himself completely to his art. During his long life he experienced profound changes in his philosophy, and these changes can be best understood from the sculpture he has created, of which the human figure was the central topic.

The dignity of man is perhaps the single most important characteristic of all his sculpture. Aspects of this dignity manifest themselves in the heroic, the proud, the strong, even the angry expressions he imparted to his figures in the first half of his creative life. Good examples of these traits are his "David" (Slides No. 202, 203, 204), and "Moses" (Slide No. 207). The "David" is more extensively discussed in the unit plan on "Commemorative Sculpture - Heroes and Villains," but looking at it here, we can see the pride, the strength of the

young man, his angry facial expression, his lack of fear which makes him truly heroic. Michelangelo achieved these characteristics while having to work with a difficult piece of marble which other sculptors tried but could not handle. A block too narrow, yet it yielded to Michelangelo an 18½ foot high statue of the slim youth, David. This was a technical feat but, just as important, it was accomplished without sacrificing artistic expression. The "Moses" statue gives an interpretation to this important figure from the Old Testament, that of a strong leader, physically and mentally superior, who led his people out of slavery from Egypt, a man sure of his beliefs but also given to righteous anger. It has been suggested that these early works echo the Master's own sense of superiority over the average man.

Many of the changes in Michelangelo's outlook on life were the result of his increased understanding of the suffering and oppression man has to endure. His works begin to reflect these and the commissions for the tombs of the pope Julius II, and that of the Medici brothers, gave him the opportunity for many figures which express this pathos and struggle. The many versions of "Slaves" he carved (three of these shown on Slides No. 208, 209 and 210) portray attitudes of submission, of struggle, and of rebellion. The "Victory" statue (Slides No. 211 and 212) shows how the strength of youth triumphs over the exhaustion of age. The symbols of earthly time, "Dawn," "Dusk," "Day," and "Night" (Slides No. 214 to 223), of the Medici chapel, seem to embody the trap man is caught in in this life

which eventually ends in death. Yet the soul rises and is liberated in the Christian afterlife symbolized by the central statue of the chapel, the "Madonna and Child" (Slide No. 224). The mature artist turned away from the heroism of youth to the inner life of middle age, learning to cope with waning strength of the body but with increased acceptance of death ahead of him.

As Michelangelo entered really old age, he became increasingly a better Christian but in a profound, inner, spiritual sense, not in outward observations of ritual. His Florentine Pieta is far removed from the serene beauty, both internal and external, of his early Pieta (Slides No. 225, 226, 227 and 199, 120). In the Florentine Pieta death is accepted with joy as an end to suffering and in the expression of Christ and Mary the afterlife is shown as the divine love awaiting the freed spirit. Michelangelo now seems to have accepted death. His last work, on which he worked only days before his death, is the Rondanini Pieta (Slide No. 228). The Master, who has sung the praises of the incomparable beauty of the human body in countless sculptures, left us his final legacy in this Pieta. Here the body has lost all physical beauty, the rough shapes transform it into the spirit, and Michelangelo gives up the vision of beauty on earth for the vision of divine grace.

Years after Michelangelo's death, the extremely gifted artist Gian Lorenzo Bernini did not want to walk in the footsteps of Michelangelo. He wanted to be an innovator and capture strong action and emotion in place of the seeming passivity of Michelangelo's figures. If one views Michelangelo as

an introvert who showed us not what the eyes see but what is happening inside of man, Bernini was the extrovert who captured in stone what the camera can now capture on film, frozen action and momentary strong emotions, not suppressed and contemplated, but freely expressed. He achieved these effects with a mastery of technique never equalled before or after him in marble.

While Michelangelo carved the figures contained in the block of marble, bursting with inner energy and manifesting outward tension, Bernini used several blocks of marble to add to the figures and enable them to move, to gesticulate in a highly theatrical manner, holding back nothing. He chose the moments of high drama, whether in his "David" (Slide No. 232) in the moment of throwing the fateful stone, or in mythological stories of the "Abduction of Persephore" (Slide No. 231), and of Apollo pursuing Daphne who, a moment before capture, turns into a tree thus eluding per pursuer (Slide No. 233, 234). Bernini's religious works show the same exaggerated emotions, such as in the "Ecstasy of St. Teresa," or "St. Jerome" (Slide No. 235, 236), and it may well show us, as indeed he was, a very religious man who observed all the rituals and ceremonies of his Christian faith. He did not seem to struggle for his faith nor search for deliverance from earthly suffering. He found great enjoyment in this life and lived in splendor; a rich and highly favoured man. He spent almost all his life in Rome and because he dominated the artistic community of his time with practically all commissions going to him, he left his mark through his works in Rome to such a degree that some say that Rome is Bernini. He also

was a famous architect and made many fountains for Rome, such as "Fountain of the Four Rivers" (Slide No. 239) symbolizing the great rivers of his political time. The mastery of his style is most significant, however, in the totally lifelike bodies and incredible, super-realistic details of the faces on those bodies. One must stand in awe of his skill with the chisel, and his ability to capture the precise facial expression showing a particular emotion of the moment.

Yet one might pose the question, is life nothing but a stage where we act out our great moments? Or is there time for reflection, a time to sort things out, to come to terms with uninvited occurrences, a time, frequently, to suffer, to struggle against suffering, to seek for higher meaning in our lives, to search for solutions, and prepare for our inevitable end? For inspiration on these issues we must turn to Michelangelo who dealt with them in his own way, but his own way, through his great artistry, was transformed into the universal condition of all men.

Religious sculpture - the body of Buddha and Christ.

Rationale:

Man has given expression to religion through making graven images. Whether "pagan," worshipping many gods, or monotheistic, man has used sculpture for religious purposes throughout human history. Few images have influenced so many, and over such length of time, as Buddha has the religion of the East, and Christ, that of the West. Whether we view them as holy men

or part of and one with God, is a matter of personal religion, but in our multicultural society we should look at representations of both Buddha and Christ as examples of the many world religions present in and meaningful to members of our society.

Goals:

Students will broaden their understanding of religions, other than their own, which are meaningful to millions of people living on this earth, some of whom live right among us, and develop a conception of art as important in conveying religious ideas.

Objectives:

Students will learn about Buddha the man, through major events in his life, his impact on the life of millions from India to Japan, and review and compare Jesus' life and influence on Western culture to that of Buddha, as expressed through sculpture of the figure.

Lesson aids:

Slides on Buddha:

No. 50 (China), 51 (India), 57 (Pakistan),
58 (Java), 61 (China), 69 (Japan), 71 (Thailand), 77 (Cambodia).

Slides on Christ, and Christ with the Virgin Mary:

No. 152, 153, 154, 156, 205, 229, 388-391, Christ
No. 165, 166, 170, 171, 174, 181, 224, 337,
344, Virgin with child

No. 164, 167, 199 and 200, 225 and 226, 228, 230,
248, Pieta

Discussion:

Talk about Buddha, the man, his princely origins, how he was sheltered from seeing anything ugly, or anyone suffering, and how he discovered that there were many who suffered greatly from sickness, from poverty, and from being members of a lower caste without opportunity for improvement.

Talk about the caste system in India, and compare it with European class differences of the Middle Ages or Feudal times, and with our own North American freedom, which has hidden remnants of a class system, even in our society. Talk about how rank, money, prestige gained for achievement, can influence a person's life, and what it must feel like being without such opportunity.

Return to the life of Buddha, who, having seen the misery of lowly people, gave up his princely life and devoted himself to the quest for finding the remedy to human suffering. He became an ascetic, gave up all that was comfortable and pleasant in life. He also undertook a period of fasting, and almost died of it, yet still did not find the secret to man's happiness. Finally, he seated himself under the famous fig tree, called the Bo, or bodhi tree, a large tree which grows in Northern India, and vowed not to rise until he found enlightenment. During the 49 days he sat there, he was attacked by demons with visions of temptation of the flesh and of worldly power and wealth (not unlike Christ in the garden of Gethsemane); he also endured

storms and earthquakes. He persevered, and the truth was revealed to him which he set out to preach to his fellow men: to exercise discipline and moderation in worldly desires, and compassion toward all other living things, in order that man may live in harmony with the world.

Buddha's teachings created a great following in his lifetime, and Buddhist monks lead a life according to his example. Buddhism spread from India to China and Japan, and to other Far-Eastern countries, and it exists to this day in those countries as well as in Western society. Locally, Lower Mainland students could visit the new Buddhist temple in Richmond, B.C. Some parallels can be drawn between Buddha, the holy man, and the life of Jesus Christ, the founder of Christianity.

Images of Buddha and Christ did not appear for many centuries after their death. In Buddha's case, he forbade his followers to worship him, but they also were reluctant to picture him as earthly man, as he became otherworldly through enlightenment. "Bodhisattvas" were easier to portray, because they have reached enlightenment, yet chose to remain on earth to preach and do good. Early Christians were also afraid to portray Christ who had risen after death and returned to God, his Father. Living so close to the times when images of pagan gods were everywhere, they feared idolatry. To present the divine figure of Jesus as earthly man they thought to be sacrilegious. The Eastern Church continued in its non-acceptance of statues but reluctantly allowed paintings. Eventually, both Buddhism and Christianity recognized the value of commemorating its

founders with statues for the sake of the multitude of people who could not read, and who needed to see what was preached to them.

The self-afflicted suffering of the Buddha through mortification of the flesh and fasting to near death, might serve as a limited comparison to Christ on the cross. Both sought to relieve mankind from suffering, to help the lowly, the downtrodden, and both were willing, and Christ did, to give their life to this cause. The Buddhist path to happiness is closely related to the Christian doctrine of love. Both decree that man should not kill, lie, steal, commit sexual misconduct, harm his fellow creatures, or think evil thought, but spend time in what one calls meditation, the other prayer.

Although both Buddhism and Christianity eventually commemorated other holy men and women with sculptures of the figure, the Virgin Mary was chosen to be included in this chapter, with slides depicting her with either the Christ child, or the dead Christ. These portrayals of some historically known episodes in the life of Jesus provide us with significant signposts in his brief stay on earth. Paintings can illustrate many Bible stories, but sculpture seems to be able to show us the essence in the portrayal of the happy innocence of the Christ child in contrast to the suffering and sacrifice of Christ on the cross. Again, on the lap of the Mother, the Virgin Mary, the dead body of Christ before it has risen becomes a symbol of the ultimate sacrifice.

Commemorative sculpture - heroes and villains.

Rationale:

Man has the seeds of both nobility and evil in him. These qualities could turn him into a hero or a villain. Mythology and ancient history has many heroes and some villains. In present day North American society it sometimes seems to be the reverse. Yet youth has a great need to rejoice in and identify with heroes, and to better deal with villains. This need seems to be borne out by the degree of response to Terry Fox, or even to the fictitious world of J.R.R. Tolkien, the writer. Inspiration for a better life and an improved understanding of the role of art might be gained from the examination of heroes and villains personified in some sculpture of the figure.

Goals:

Students will gain understanding of other societies of the past and inspiration for the present from identification with heroes and villains of the past. They will grow in understanding of the role art can play in reflecting values of a given culture.

Objectives:

Students will learn to discuss and critically evaluate sculptures of the human figure on the themes of heroes or villains. They will look at sculptures from diverse societies and at work by a variety of artists.

Lesson aids:

The following combination of slides, related or contrasted by their topic, are suggested for discussion:

No. 14 and 41: "Traitor" (Congo, Africa), and "Kwakiutl Chief" (North America)

No. 54 and 123: "The Jinas (conquerors)" (India), and "Harmodius and Aristogeiton" (Greece)

No. 84 and 184 and 249 and 314 and 253 and 385: "The Hero Gilgamesh" (Assyria), "King Arthur" by Vischer, "Peter the Great" by Falconet, "The Stone, Arm of the Proletariat" by Shadre, "George Washington" by Houdon, and "Louis St. Laurent" by Imredy

No. 129 and 143 and 144 and 265 and 291 and 311: "Discobolos" by Myron, "The Borghese Gladiator" (Greece), "Naked Lancer" (Etruscan), "Hercules the Archer" by Bourdelle, "The Athlete" by Rodin, and "The Runner" by Sintenis

No. 176 and 177 and 178 and 182 and 202 and 203 and 204 and 232: "David" by Donatello, by Verrocchio, by Michelangelo, and by Bernini

No. 186 and 187 and 257: "Perseus" by Cellini and by Canova

No. 121 and 347: "Warrior" (Greece), and "Warrior with Shield" by Moore

No. 240 and 327: "Milo of Crotona" by Puget, and "Don Quixote" by Gonzales

No. 207 and 271 and 272 and 273: "Moses" by Michelangelo,
and "St. John the Baptist" by Rodin

No. 119 and 120 and 185: "Apollo of Piombino" (Greece),
and "Apollo Fountain" by Vischer

No. 159 and 160 and 172 and 280 and 281: "Adam and Eve"
(Romanesque), (Gothic), and by Riemenschneider, and
"Eve" by Rodin

No. 138 and 206 and 254 and 158: "Marsyas the Satyr"
(Greece), "Bacchus" by Michelangelo, "The Bad Thief"
by O. Aleijadinho, and "Last Judgement" (Romanesque)

No. 263 and 264 and 289: "Ugolino" by Carpeaux, "The
Prodigal Son" by Meunier, and "The Prodigal Son" by
Rodin

No. 188 and 189 and 190 and 213 and 233 and 234: "Virtue
Overcoming Vice" by Cellini, "The Abduction of Per-
sephore" by Bernini, and "Apollo and Daphne" by
Bernini

Discussion:

Introduce the topic with a general discussion of what attributes would qualify a person for being called a hero or a villain. Consider such heroes of our present society in Canada as Terry Fox, Wayne Gretsky or Steve Podborski. Compare them with men of the past or of other societies, such as Winston Churchill, Martin Luther King, Mahatma Gandhi, Anwar Sadat, Pope John Paul II, Lech Walesa, Mohammed Ali, Elvis Presley, John Lennon. Give also examples of villains, such as Adolf

Hitler, the Ayattolah Khomeini, Clifford Olson the child killer, Ali Agca the Pope's would-be assassin.

What have the heroes and villains in common? They both might rouse the masses, become a symbol to them, and a leader for good or evil. What tells heroes and villains apart? Heroes often set great tasks for themselves in the interest of others, and accomplish them through much personal sacrifice. They succeed against great odds, where villains fail when the going gets tough. Heroes' selfless attitudes are in contrast to the self-centred egoism and disregard of the interest of others by villains. Noble men may suffer in the interest of a cause or for the good of their fellow-men in contrast with the inability of evil men to stand pain or disappointment. Heroes maintain a humble attitude while they perform super-human deeds. Villains feel the headiness of power while engaged in sub-human deeds. The bringers of joy, freedom and happiness contrast with the bearers of sorrow and suffering.

Begin showing the slides; and as you deal with each example, give the historical or political background, the religious or mythological story, or societal values applicable to each work. By using the suggested slide combinations you would be dealing with values held by primitive societies, with military accomplishment, with political leadership, with athletic achievement, with bravery in the face of great danger, with the price paid for war, with religious dedication, with human failings and tragic mistakes, with weakness of the spirit or of the flesh. For example:

The story of David and Goliath, as described in the Old Testament, 1 Samuel 16 and 17, gives the background knowledge to the contest between David, the young shepherd and Goliath, the giant Philistine, who faced each other in battle, each representing his own country and people. Read it to the students, then show them the slides (No. 176, 177, 178, 182, 202, 203, 204 and 232).

In Michelangelo's "David," the stress is on the head and the hands. Attached to the young body, the large hands of a man indicate not only the early maturity of young David, and that he already had killed bears and wolves to protect his sheep, but point to his future physical growth. But beyond this, they draw attention to the reasons for his victory. The head is where the idea originated for the means to slay the powerful opponent. In the sculpture, David still seems to assess the idea and to be in the process of making his decision while his hands appear to get ready for the fatal slingshot with the "smooth stone." Michelangelo tells us more about the character and heroic quality of David the youngster, with less obvious means, than the other sculptors under consideration here.

In contrast to Michelangelo's is Bernini's "David." Bernini's is most action-packed, capturing the moment of supreme physical effort coupled with the highest degree of concentration, attributes of any outstanding athlete. Thus, Bernini's "David" might be the most appealing to adolescents, except of those more thoughtful students, who might perceive the absence

of the heroic as there are no indications of the vulnerability of youth facing a formidable opponent in heavy armour. What we see is the highly trained athlete, well prepared for the challenge.

Donatello and Verrocchio both depicted the moment of triumph after the deed was accomplished by David. The earliest Donatello (No. 176) and the Verrocchio show a proud David seemingly asking for applause. This attitude is not in keeping with that of a hero. The physical accomplishment exists without doubt but there is a sense of a Mohammed Ali, the professional, who expects rewards. Yet some professional athletes perform great deeds in a sport but remain as if humbled by their own success. Perhaps this is the attraction and the hero quality in our own Wayne Gretsky.

Donatello's later two "Davids," less so the earlier marble than the later bronze sculpture, show David more as a hero. The tender youth with the outsized sword of Goliath still in his hand, eyes downcast, seems to contemplate the wonder of his deed. Inward-turned, relaxed in body, he appears as the instrument of a higher power fulfilling his fate. Thus Donatello's bronze "David" might be the most true to his biblical theme.

Everyday sculpture - depictions of the common man.

Rationale:

Throughout the history of sculpture on the theme of the figure, artists have sometimes turned away from commemorating important events and outstanding individuals in favour of the

mundane and of ordinary man. These works can tell us something about the society that these common men lived in, and often help us, through the communication of activities and feelings, to bridge the gap to another society, culture, and age.

Goal:

Students will gain an understanding of the artist's role in depicting a society's life and values through images of the common man. This will help them to associate with cultures foreign to them, and thus broaden their horizon and sense of belonging to a shared humanity.

Objectives:

Students will discuss sculpture showing ordinary man involved in activities of play or work, and expressing feelings we all can associate with, and they will learn to recognize common elements of our lives in those of other times and other societies. They will also learn to see, in works of present times, values and beliefs that we hold. The seemingly commonplace can be of significance for commemoration.

Lesson aids:

Slides No. 30 and 31 (Mexico); 32, 33, 34 and 35 (Inuit); 45, 46, 63, 65 and 66 (China); 74 (Cambodia); 86, 87, 89, 90, 92, 94, 95, 96, 97 and 100 (Egypt); 122, 129 (Greece); 168 (Gothic); 213 (Michelangelo); 255 (18th century Presepio); 259 (Rude); 264 (Meunier); 270, 276, 284, 288, 289, 291 and 292 (Ródin); 299 (Degas);

301 (Lehmbruck); 304 and 306 (Lipchitz); 308 and 309 (Barlach); 310 and 311 (Sintenis); 313 (Marcks); 318 (Patzay); 322 (Archipenko); 324 (Bracho); 329 (Greco); 332 (Picasso); 335 and 336 (Marini); 338 (Manzu); 340 (Nilsson); 345 (Moore); 352, 353 and 354 (Segal); 355 and 356 (Butler); 359 (Miller); 367 to 372 (Lucchesi); 373 (de Andrea); 374 (Hanson); 375 and 376 (Morales); 379 (Barelrier); 383 (Zuniga); 384 (Erhardy); and 392 (Imredy).

Discussion:

You might approach the discussion by pointing to some ordinary activities under which some of the slides may be grouped. One such group might be under the general heading of "play."

Included under "play" you might put musicians from China (Slide No. 63), the flute player from Greece (Slide No. 122), Lipchitz's man with guitar (Slide No. 306), Barlach's singer (Slide No. 309), and Sintenis' flute playing boy (Slide No. 310). Compare the graceful Greek girl deeply engaged in the music she is making with the awkward, growing body of the boy by Sintenis. He, too, is fully giving himself to the tunes he is producing. Two different bodies, the girl and the boy, both sitting; both could be anyone of today making music.

Still under "play" you might look at dancers or athletes. Show the slides of the dancer from Mexico (Slide No. 31) of 600 to 700 years ago, the one from India (Slide No. 45, 46) of 3,500 to 5,000 years ago, from Cambodia (Slide No. 74) from

the 12th century, and Degas' dancer (Slide No. 299) from the early part of our century. Point to the similarity of pose and bearing between the girl from ancient India and the classical ballet dancer by Degas.

On the topic of "sports" you can look at the ballplayer poised to throw the ball (Slide No. 30) from the Mexico of 300-1,000 A.D., then at Myron's "Discobolos" (Slide No. 129) from Greece in 450 B.C., ready to throw the discus, and Sintenis' runner (Slide No. 311) of this 20th century, all in the moment of action. Rodin's athlete (Slide No. 291) from the beginning of this century, seems to be waiting for his turn of action, while Marini's wrestler (Slide No. 336) from our times, rests between rounds.

A group of slides of this century and of Western Art commemorate mundane activities of washing and bathing, combing one's hair, checking in the mirror for appearance or for putting on jewellery. These works use the female figure, and it might be assumed that this is as much an indication of women's preoccupation with their appearance as it is an opportunity to portray the female nude. Show the following slides: No. 288, 318, 354, 355, 368, 370, 375, 376, 384, and 392, and ask the students to identify with these activities. Point out how graceful and beautiful these sculptures are, and how little the average person might be aware of their own appearance when deeply engaged in such trivial, routine activities. It might be further added that keeping clean and well-groomed has not always been desirable in society, and that the frequency of

choosing this topic is far more common in our recent history, which reflects our sense of values.

Further comparisons might be made on the theme of the family. Particularly interesting is the lower status of women indicated on two sculptures of couples from Egypt from c. 3,000 B.C. (Slides No. 86 and 95). After that, look at Nilsson's family group (Slide No. 340) showing an older and a younger woman and a child without the presence of the father. Then see Henry Moore's family (Slide No. 345) where man and woman are equal protectors of the children, and Lucchesi's young mother and child (Slide No. 371), seemingly all alone in the world. How much these family portrayals, created 35, 25, and 7 years ago, reflect the ups and downs of the nuclear family, and the values and problems of our times, is a worthwhile topic for discussion. Similar conclusions might be arrived at as reflections of societal values by the comparison of two works depicting old age. The graceful, dignified, self-confident old man from China's Ming Dynasty times (Slide No. 66) is a figure of respect for old age. Rodin's old woman (Slide No. 284), on the other hand, is a desperate, degraded person, and her wretched nakedness reflects her lack of value, a symbol of our society.

Chapter III

CONCLUSION

The rationale for the writing of a sculpture curriculum resource was the need for it in secondary schools. Sculpture is not always taught as part of the art curriculum, and those teachers who do include it have often not sufficient background to teach a combination of "making sculpture" and "talking about sculpture." Teachers and students need to acquire an understanding of the vocabulary of sculpture, which is necessary for historical understanding and critical interpretation of works. The results of the 1980 survey, carried out at the British Columbia Art Teachers' annual conference, confirmed the need for this study. Reinforcement was further received from the new Secondary Art Curriculum of the Ministry of Education which contains sculpture as one of the five visual expression areas. Implementation of the new curriculum is scheduled for September 1984, thus adding urgency to this study.

Response to Needs, the 1983 Survey of
Art Teachers

A presentation was given to the February 1983 Annual Conference of the British Columbia Art Teachers' Association, entitled "Ideas and three approaches to the teaching of sculpture," with encouraging results. An overview of the history of sculpture of the human figure was presented through slides. Unit

plans in the area of concepts, a studio activity, and critical interpretation of a theme were discussed. Verne Smythe, as recorder, wrote in the Journal of the British Columbia Art Teachers' Association (June 1983, 23:1) that "the session was enjoyable, scholarly and useful," and described the slides and the "three distinct types of lessons, complete with handouts." An evaluation questionnaire, included as Appendix 2 of this thesis, was distributed to participants of the session. The same evaluation form was used after another presentation in October 1983, to the Burnaby Art Teachers' Association. A number of respondents at both presentations confirm the usefulness of the material. The acquisition of copies of slides is repeatedly mentioned, and it might be considered useful in the future to produce such a kit. Andy Nelson, Assisting Teacher of Art in Burnaby, writes, "we want a copy for the district . . . so many great ideas; you must share it." Another teacher wrote, "I hope you will be publishing your slides and lectures," and Ann Healy, an art teacher, stated that "the ideas can be transferred to any medium--and [are] as such valuable to everyone teaching art." Some art teachers expressed specific needs to which the study responds, e.g., "more studio techniques" and more of the theme approaches to art history and "cultural discussions." Art teachers, June Oddson, emphasized the usefulness of "especially the concept of threedimensionality," as well as the "uses of materials," and Neil MacDonald wrote in connection with the slides as resources, to include lists of the "names of the artists - names of sculpture," which was done.

Further dissemination of the material might be planned for the future in the form of longer workshops, and with a selection of slides as suggested in the unit plans.

The choice of subject matter for this study, the sculpture of the human figure, could be used in several other ways for unit plans, and might be adapted by teachers to suit the specific composition of individual classes. Further themes might be chosen, such as "mother and child," "comparison between pagan deities from several cultures," or "the relativity of the perception of beauty" as depicted in the slides.

Discussions may be based on selected works as slides, or photographs, or replicas, or students' sculpture. Such lessons where students can grow in critical thought, as well as through opportunity to express what they feel and perceive can often lead to understanding of the ways art questions and expresses society's values and beliefs.

Recommendations for Use Within Other Areas of Art Education

The subject area of this study could be replaced by portraiture, and much of the methodology applies in a similar manner. Studio activities and concepts could also be applied to abstract sculpture, and themes to other areas of the visual arts. Once students gain confidence in interpreting and criticizing the work of artists, they can be better persuaded to criticize their own work, which is so essential to their growth as young artists and human beings.

BIBLIOGRAPHY

BOOKS:

- Arnason, H.H. History of modern art. New York: Harry N. Abrams, Inc., n.d.
- Anton, F., & Dockstader, F.J. Pre-Columbian art and later Indian tribal arts. New York: Harry N. Abrams, Inc., n.d.
- Baraschi, C. Sculpture of the nude. Bucharest: Meridiane Publishing House, 1970.
- Barcsay, J. Anatomy for the artist. London: Octopus Books Ltd., 1976.
- Bazin, G. The history of world sculpture. Secaucus: Chastwell Books Inc., 1976.
- Baynes, K. Art in society. Woodstock, N.Y.: The Overlook Press, 1975.
- Bowness, A. Henry Moore, sculpture and drawings 4, sculpture 1964-73. London: Lund Humphries Publishers Ltd., 1977.
- Breasted, J.H. Geschichte Aegyptens. Vienna: Phaidon-Verlag, 1936.
- Busch, H., & Lohse, B. Europäische Plastik der Spätgotik und Renaissance. Frankfurt am Main: Umschau Verlag, 1963.
- Butler, R. Western sculpture definitions of man. New York: Harper & Row, Publishers, Inc., 1979.
- Charbonneaux, J. La sculpture Grecque. Paris: Braun & Cie, n.d.
- Charbonneaux, J. Les sculptures de Rodin. Paris: Fernand Hazan, 1949.
- Cheney, S. Sculpture of the world: a history. New York: The Viking Press, Inc., 1968.
- Churchill, A.R. Art for preadolescents. New York: MacGraw-Hill, Inc., 1971.
- Clark, K. The nude, a study in ideal form. New York: Pantheon Books, Inc., 1956.

- Clark, K. Henry Moore drawings. London: Thames and Hudson, Ltd., 1978.
- Devambez, P. Greek sculpture. New York: Tudor Publishing Company, 1961.
- Davis, D.J. Behavioral emphasis in art education. Reston, Va.: National Art Education Association, 1975.
- Feldman, E.B. Varieties of visual experience. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1973, and New York: Harry N. Abrams, Inc., 1973.
- Fraser, D. Primitive art. London: Thames and Hudson, 1962.
- Graves, R. New Larousse encyclopedia of mythology. New York: The Hamlyn Publishing Group, Ltd., 1974.
- Grohmann, W. The art of Henry Moore. New York: Harry N. Abrams, Inc., n.d.
- Hammacher, A.M. The evolution of modern sculpture, tradition and innovation. New York: Harry N. Abrams, Inc., n.d.
- Hibbard, H. Masterpieces of western sculpture, from medieval to modern. New York: Harper & Row, Publishers, Inc., n.d.
- Hughes, G. The sculpture of David Wynne 1968/1974. London: Phaidon Press Limited, 1974.
- Humbert, A. La sculpture contemporaine. Paris: Éditions Albert Morancé, 1954.
- Huyghe, R., & Jaccottet, P. French drawing of the 19th century. London: Thames and Hudson, 1956.
- James, P. (Ed.). Henry Moore on sculpture. London: Macdonald and Co. (Publishers) Ltd., 1966.
- Janson, H.W. Key monuments of the history of art, a visual survey. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1959, and New York: Harry N. Abrams, Inc., 1959.
- Janson, H.W. History of art, a survey of major visual arts from the dawn of history to the present day. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1963, and New York: Harry N. Abrams, Inc., 1963.
- Koczogh, A. (Ed.). Tibor Szervatiusz. Budapest: Corvina, 1978.
- Koller, A., & Lernet-Hoenia, A. Marino Marini. Frankfurt am Main: Fischer Bucherei K.G., 1961.

- La sculpture, méthode et vocabulaire. Inventaire Général des Monuments et des Richesses Artistiques de la France. Paris: Imprimerie Nationale, 1978.
- Leakey, R.E. The making of mankind. New York: E.P. Dutton, 1981.
- LeBrooy, P.J. Michelangelo models, formerly in the Paul von Praun collection. Vancouver: Creelman & Drummond Publishers, Ltd., 1972.
- Leicht, H. History of the world's art. London: George Allen and Unwin, Ltd., 1952.
- Levy, M. The human form in art; the appreciation and practice of figure drawing and painting. Liverpool: Odhams Press Ltd., 1968.
- Lucie-Smith, E. Late modern, the visual arts since 1945. New York: Praeger Publishers, Inc., 1976.
- McFeely, S. Teaching sculpture: a rationale and resource kit. Unpublished Master's thesis, University of British Columbia, May 1983.
- Machotka, P. The nude, perception and personality. New York: Irvington Publishers, Inc., 1979.
- Malmstrom, M. Terracotta, sculpture by Bruno Lucchesi. New York: Watson-Guptill Publications, 1978.
- Marquez, G.G. Morales. New York: Aberbach Fine Art, 1980.
- Martinie, A.H. Rodin. Paris: Braun & Cie, 1948.
- Merillat, H.C. Sculpture west and east. New York: Dodd, Mead & Company, 1973.
- Morris, D. Manwatching, a field guide to human behavior. New York: Harry N. Abrams, Inc., 1977.
- Myers, B.S. Art and civilization. New York/Toronto: McGraw-Hill, 1967.
- Oęska, A., & Skrodzki, W. Współczesna rzeźba polska. Warsaw: Arkady, 1977.
- Padovano, A. The process of sculpture. New York: Doubleday & Company, Inc., 1981.
- Pfeiffer, J.E. The creative explosion: an inquiry into the origins of art and religion. New York: Harper & Row, 1982.

- Pierce, J.S. From abacus to Zeus, a handbook of art history. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1977.
- Prache, A. Sculpture in the Louvre. Paris: Fernand Hazan et Vilo, 1967.
- Randall, R., & Haines, E.C. Design in three dimensions. Worcester: Davis Publications, Inc., 1965.
- Read, H. A concise history of modern sculpture. New York: Frederick A. Praeger, Inc., 1964.
- Read, H. The art of sculpture. Princeton: Princeton University Press, 1969.
- Rogers, L.R. Sculpture, the appreciation of the arts/2. London: Oxford University Press, 1969.
- Sauerlandt, M. Michelangelo. Leipzig: Karl Robert Langewiesche Verlag, 1941.
- Schlemmer, O. Man, teaching notes from the Bauhaus. London: Lund Humphries, 1971.
- Selz, P. New images of man. New York: Museum of Modern Art, 1959.
- Smith, H. The religions of man. New York: Harper & Row, Publishers, 1965.
- Tolnay, de C. Michelangelo. Princeton: Princeton University Press, 1975.
- Torbrügge, W. Prehistoric European art. New York: Harry N. Abrams, Inc., 1968.
- Trier, E. Form and space, sculpture of the twentieth century. New York: Frederick A. Praeger, 1968.
- Visual Dictionary of art, A. Greenwich, Conn.: New York Graphic Society Ltd., 1974.
- Wasserman, J.L. (with contributions by Cuno, J.B.). Three American sculptors and the female nude; Lachaise, Nadelman, Archipenko. Cambridge, Mass.: Fogg Art Museum, 1980.
- Wentinck, C. The human figure, in art from prehistoric times to the present day. Wynnewood: Livingston Publishing Company, 1971.
- Yoyotte, J. Treasures of the Pharaohs. Cleveland: The World Publishing Company, 1968.

CATALOGUES AND PAMPHLETS:

- Aboriginal and Melanesian Art. Exhibition at Art Gallery of New South Wales, 1973.
- Arts of India and Nepal, The Nasli and Alice Heeramaneck Collection. Boston: Museum of Fine Arts, 1966.
- ArtsCanada, 1978, XXV, 4-26.
- Barlach/Kollwitz. Catalogue of exhibition. The Peter Stuyvesant Trust for the Development of the Arts, Australia, 1976-1978.
- Beaver, Magazine of the North, The, 1958, Spring, 40-47.
- British Columbia Art Teachers Association Journal for Art Teachers, June 1983, 23(3).
- Canadian Eskimo Art. Ottawa: Queen's Printer, 1966.
- Connaissance des arts, 1981, 17, 32-41.
- Connaissance des arts, 1981, 21, 86-88.
- Eskimo Art Calendar, 1970. Vancouver: Grant-Mann Lithographers Ltd., 1969.
- Eskimo Art Calendar, 1971. Vancouver: Grant-Mann Lithographers Ltd., 1970.
- Human Form in Contemporary Art, The. Catalogue of exhibition by R. Beck and R.A. Miller. Durham: The Duke University Museum of Art, 1971.
- Indian Masterpieces from the Walter and Marianne Koerner Collection of the Museum of Anthropology. Vancouver: The University of British Columbia, 1975.
- Living American Artists and the Figure. Catalogue of exhibition Nov. 2 - Dec. 22, 1974. Museum of Art, The Pennsylvania State University.
- Nackte Mensch, Aspekte der Aktdarstellung in der Kunst, Der. Exhibition at Kunsthalle Bremen, 1979.
- Northwest Coast Indian Artifacts from the H.R. MacMillan Collections of the Museum of Anthropology. Vancouver: The University of British Columbia Press, 1975.
- Silver Jubilee Exhibition of Contemporary British Sculpture 1977, A. London: Mathews Miller Dunbar, 1977.

Treasures of Tutankhamun, 1977, The. Calendar. New York:
The Metropolitan Museum of Art, 1976.

Treasures of Tutankhamen, The. Desk diary. New York:
Ballentine Books, 1979.

Weisberg, G.P., & Janson, H.W. Traditions and Revisions,
Themes from the History of Sculpture. Cleveland:
Exhibition held at The Cleveland Museum of Art, 1975.

Werke Europäischer Plastik. Catalogue of exhibition at Haus der
Kunst Munich, Munich: Carl Gabler, 1950.

APPENDIX 1

APPENDIX 1

April 1980

NEEDS ASSESSMENT - SCULPTURE SURVEY

PLEASE FILL OUT THIS QUESTIONNAIRE AND LEAVE AT THE REGISTRATION DESK IN THE BOX PROVIDED FOR IT.

This information is requested by me, Agness Philipps, art teacher at Alpha Secondary School in Burnaby, and graduate student at U.B.C. Art Education Department.

Your input will be utilized in my Masters Thesis and could further art education in this province. You need not reveal your name and where you teach, unless you want to, then you may be contacted by me at a later date.

Please indicate the grade levels you teach, and answer with "yes" or "no."

Thank you for your cooperation.

NAME _____

ADDRESS _____

GRADE LEVELS TAUGHT _____

SCHOOL _____

I. In your opinion,

1. Should sculpture be taught in

- elementary grades _____
- secondary grades _____
- all grades _____
- specific secondary courses _____

2. Why? _____

3. In which way could students benefit from an experience in sculpture which other forms of the Visual Arts do not provide?

4. Does sculpture take more time per unit
 - than available in public schools _____
 - than other areas such as painting _____
5. Does sculpture need special facilities and equipment?
 - Are they available in secondary schools? _____
 - Are they obtainable? _____
6. Do you have adequate facilities and equipment to teach sculpture in your school? _____
 - Did you obtain it yourself? _____

II. Methods and Materials

1. Do you teach sculpture as part of ceramics? _____
 2. Do you teach it as an independent unit, not related to ceramics? _____
 3. Do you introduce it using visual aids such as slides, films, filmstrips? _____
 - If so, are they oriented to:
 - how sculpture is made _____
 - famous sculptors' work for discussion _____
 - sculpture as part of the history of art _____
 - sculpture examples from all cultures of the world _____
 - sculpture examples for Western civilization _____
 4. Do you conduct field trips to study local sculpture (if any)? _____
 5. Do you deal with sculptural concepts, such as mass, shape, form, monumentality? _____
 - if so, how? _____
-
6. Do you teach both methods, the build-up and take-away process? _____
 7. What materials do you use in your teaching?
 - clay (terra-cotta, unglazed) _____
 - plaster of Paris to cast _____
 - plaster of Paris to carve _____

- plastics
- Papier mâché
 - with armature
 - without armature
- construction with wire
- construction with paper
- construction with balsa
- any other

III. Quick Quiz

1. Do you know what an armature is?
2. Do you know how to make a piecemold?
3. Do you know why one makes a piecemold?
4. Can you cast a wastemold?
5. Can you finish plaster to make it look like bronze?
6. Can you teach repoussé?
7. Can you teach welded sculpture?
8. Can you carve from a block of
 - plaster?
 - stone?
 - wood?

IV. Important Generalities

1. Do you believe that art teacher training should include preparation for the teaching of sculpture?
2. Do you feel adequately trained for teaching of sculpture?
 - in junior grades?
 - in senior grades?
3. Would you be interested in more
 - in-service in sculpture
 - hands-on workshops
 - lesson plans
 - visual aids
 - summer courses
 - evening courses

- Curriculum for junior secondary
 - Curriculum for senior secondary
-
-

4. Additional pertinent comments you may wish to make, please note below.

Thank you.

APPENDIX 2

APPENDIX 2

EVALUATION

British Columbia Art Teachers' Annual Conference
February 1983

"IDEAS AND THREE APPROACHES TO THE TEACHING OF SCULPTURE IN
SECONDARY SCHOOLS."

Agness Philipps, Alpha Secondary School, Burnaby, B.C.

Evaluation/Recommendation Form

1. One of the valuable aspects of this session was: _____

2. Do you think that ideas gained from this session and the
hand-outs on unit plans based on the human figure could be
transferred to the teaching of other areas of sculpture?

3. In terms of ideas for teachers, further attention should be
given to the following aspects of sculpture: _____

4. You did not ask Agness, but you should know that: _____

APPENDIX 3

431 coloured slides in Special Collections, University of
British Columbia Library.

Address: Library - Special Collections
1956 Main Mall
University of British Columbia
Vancouver, B.C.
Canada V6T 1Y3