Study Guide to Accompany
Meggs’ History of Graphic Design
Fourth Edition

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| Part One | The Prologue to Graphic Design: The visual message from prehistory through the medieval era |
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Chapter 18  The International Typographic Style
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Chapter 22  National Visions within a Global Dialogue
Chapter 23  Postmodern Design
Chapter 24  The Digital Revolution and Beyond

Answer Key
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Professor Merritt teaches undergraduate and graduate courses in the School of Art, Design, and Art History at San Diego State University. She is a design principal at CWA, Inc. in San Diego, and co-founder, with business partner Calvin Woo, of the Design Innovation Institute, a nonprofit organization committed to interdisciplinary design research and education. Professor Merritt is also co-author, with Jack Davis, of *The Web Design Wow! Book*, and has served on the board of the San Diego chapter of the American Institute of Graphic Arts (AIGA), on the chapter’s advisory board, its education committee, and as curriculum director for AIGA's national Creativity Kits Project. She is the founder of the AIGA student group at SDSU, and a Friend of the International Council of Graphic Design Associations (ICOGRADA). SM Friend is a “membership” category. Technically, individuals cannot be members since only organizations are members. Everyone knows the organization as ICOGRADA.

Professor Merritt was a graduate student from 1971 to 1976 at the Kunstgewerbeschule-Basel (Basel School of Design), where she studied with Armin Hofmann, Wolfgang Weingart, André Gürtler, and Kurt Hauert. While living in Europe for six years, and later in Hawaii for five years, where she was on the faculty of the University of Hawaii at Manoa, Professor Merritt developed a deep appreciation for different cultures and their communities. She continues to travel and research the role of visual communication design within the context of culture, with an emphasis on consumer packaging design. While at Basel, Professor Merritt became interested in letterpress printing, which spawned an interest in book arts. She spent a month in residence at the Hamilton Wood Type and Printing Museum in Two Rivers, Wisconsin, where she studied the museum’s collection of historical wood type, and printed broadsides, on the museum’s letterpresses.
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Pictograph, page 4
Substrate, page 4
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Ziggurat, page 6
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Hammurabi, page 8
Dr. Thomas Young, page 10, (Fig. 1-17)
Jean-François Champollion (A.D. 1790–1832), page 10
Study Test
Multiple Choice

1. It is not known precisely when or where the biological species of conscious, thinking people, *Homo sapiens*, emerged. It is believed that we evolved from a species that lived in the southern part of __________.
   A. Europe
   B. Africa
   C. Australia
   D. China

2. These early hominids ventured out onto the grassy plains and into __________ as the forests slowly disappeared in that part of the world. In the tall grass, they began to stand erect and their hands developed an ability to carry food and hold objects.
   A. canyons
   B. caves
   C. trees
   D. mountains

3. Found near Lake Turkana in __________, a nearly three-million-year-old stone that had been sharpened into an implement proves the thoughtful and deliberate development of a technology—a tool—which may have been used to dig for roots or to cut away flesh from dead animals for food.
   A. Kenya
   B. Spain
   C. France
   D. Turkey

4. A number of quantum leaps provided the capacity to organize a community and gain some measure of control over human destiny. Speech—the ability to make sounds in order to communicate—was an early skill developed by the species on the long evolutionary trail from its archaic beginnings. __________ is the visual counterpart of speech.
A. Talking
B. Painting
C. Writing
D. Drawing

5. The invention of writing brought people the luster of civilization and made it possible to preserve hard-won knowledge, experiences, and thoughts. The development of visible language had its earliest origins in ___________.

A. letterforms
B. abstract color fields
C. simple pictures
D. hieroglyphs

6. From the early Paleolithic to the Neolithic period (35,000–4000 B.C.), early Africans and Europeans left paintings in caves, including the Lascaux caves in France and ___________.

A. the grassy plains of southern Africa
B. Lake Turkana in Kenya
C. Altamira in Spain
D. the Persian Gulf region

7. These early cave drawings were probably created for three of the reasons below. Which does NOT belong? __________

A. art
B. ritual
C. survival
D. utility

8. The animals and objects painted on the caves are ___________elementary pictures or sketches representing the things depicted.

A. petroglyphs
B. ideographs
C. phonograms
D. pictographs
9. Throughout the world, from Africa to North America to the islands of New Zealand, prehistoric people left numerous ________, which are carved or scratched signs or simple figures on rocks.
   A. petroglyphs  
   B. ideographs  
   C. phonograms  
   D. pictographs

10. Some of the carved or scratched signs on the rocks may be ________, or symbols to represent ideas or concepts.
   A. petroglyphs  
   B. ideographs  
   C. phonograms  
   D. pictographs

11. By the late Paleolithic period, some ________ had been reduced to the point that they almost resembled letters.
   A. petroglyphs and phonograms  
   B. petroglyphs and pictographs  
   C. phonograms and pictographs  
   D. petroglyphs and ideographs

12. Until recent discoveries indicated that early peoples in Thailand may have practiced agriculture and manufactured pottery at an even earlier date, archaeologists had long believed that the ancient land of ________, “the land between rivers,” was the cradle of civilization.
   A. Kenya  
   B. Mesopotamia  
   C. Egypt  
   D. Turkey

13. In “the land between rivers,” early humans ceased their restless nomadic wanderings and established a village society. Around 8000 B.C., wild grain was planted, animals were domesticated, and agriculture began. By the year 6000 B.C., objects were being hammered from copper. The Bronze Age was ushered in about 3000 B.C., when copper was alloyed with tin to make durable tools and
weapons; the invention of the wheel followed. The leap from village culture to high civilization occurred after the __________ people arrived near the end of the fourth millennium B.C.

A. Hittite
B. Babylonian
C. Persian
D. Sumerian

14. Of the numerous inventions that launched people onto the path of civilization, the invention of ____________ brought about an intellectual revolution that had a vast impact upon social order, economic progress, and technological and future cultural developments.

A. a system of gods
B. architecture
C. writing
D. a god-man relationship

15. Writing may have evolved in Sumeria because ancient temple chiefs needed __________.

A. ornament for the ziggurat
B. to employ scribes
C. to keep records systematically
D. intellectual stimulation

16. The __________ may be the oldest extant artifact combining words and pictures on the same surface.

A. Rosetta stone
B. Blau monument
C. Code of Hammurabi
D. Sarcophagus of Aspalta

17. The stele of Hammurabi, who reigned from 1792–1750 B.C., is an artifact of the Babylonian culture written in careful cuneiform. The text contains __________.

A. a code of laws and consequences for violating them
B. a narrative about Hammurabi’s military conquests
C. annual records of crop production from the late eighteenth century B.C.

D. a calendar of important Babylonian holy days

18. Two natural byproducts of the rise of village culture were the ownership of property and the specialization of trades or crafts. Both made visual identification necessary. Proprietary marks and __________ were first developed so that ownership could be established.

A. cattle brands
B. printing
C. symbols
D. contracts

19. In Mesopotamia, ________________ provided a forgery-proof method for sealing documents and proving their authenticity. Images and writing were etched into their surfaces. When they were rolled across a damp clay tablet, a raised impression of the depressed design, which became a “trademark” for the owner, was formed.

A. finger prints
B. cylinder seals
C. adhesive made from papyrus
D. Persian chalcedony stamps

20. All but one of the scripts listed below is found on the Rosetta Stone. Which does NOT belong? __________

A. Greek
B. Latin
C. hieroglyphic
D. demotic

21. The third phase in the evolution of __________ was the Book of the Dead.

A. biographies
B. papyri
C. funerary texts
D. written communication
22. Three of the following are characteristics of ancient Egyptian illustrated manuscripts. Which does **NOT** belong? ___________

A. Important persons were shown in larger scale than other persons.
B. One or two horizontal bands, usually colored, ran across the top and bottom of the manuscript.
C. Images were inserted on separate pages opposite the text they illustrated.
D. A sheet was sometimes divided into rectangular zones to separate text and images.

23. The ancient Egyptians inherited the use of ___________ from the Sumerians.

A. papyrus
B. identification seals
C. books of the dead
D. writing palettes

**Matching**

I. Match the following terms with their correct definition:

   1. determinatives ____
   2. cartouche ____
   3. hieroglyphics ____
   4. homonyms ____
   5. ankh ____
   6. obelisk ____

   A. This hieroglyph of a cross surmounted by a loop had modest origins as the symbol for a sandal strap yet gained meaning as a symbol for life and immortality.
   B. Having the same name
   C. Egyptian pictograms that depict objects or beings
   D. Signs that indicate how the preceding glyph should be interpreted
E. A tall, geometric, totem-like Egyptian monument

F. Bracket-like plaques containing the glyphs of important names, such as Ptolemy and Cleopatra

II. Match the following terms with their correct definition:

1. demotic _____
2. papyrus _____
3. recto _____
4. hieratic _____
5. verso _____

A. A paperlike substrate for manuscripts made from a plant that grew along the Nile in shallow marshes and pools

B. The upper surface of horizontal fibers of the finished sheets of this Egyptian substrate

C. The bottom surface of vertical fibers of the finished sheets of this Egyptian substrate

D. A simplification of the hieroglyphic book hand developed by priests for religious writings, from the Greek word “priestly”

E. An abstract script of the hieroglyphic book hand that came into secular use for commercial and legal writing, from the Greek word for “popular”

III. Match the following terms with their correct definition:

1. edduba _____
2. ziggurat _____
3. phonograms _____
4. rebus _____
5. stele _____
6. cuneiform _____
A. An inscribed or carved stone or slab used for commemorative purposes

B. An abstract sign writing style from the Latin for “wedge shaped”

C. A multistory stepped brick temple constructed as a series of recessed levels that were smaller toward the top

D. Pictures representing words and syllables with the same or similar sound as the object depicted

E. A writing school or “tablet house”

F. Graphic symbols representing sounds

**Image Identification**

I. Identify the title and the date of the following images:

1. Fig. 1-1 ____________________________
2. Fig. 1-5 ____________________________
3. Fig. 1-10 ____________________________
4. Fig. 1-12 ____________________________
5. Fig. 1-16 ____________________________
6. Fig. 1-26 ____________________________
7. Figs. 1-27 and 1-28 ____________________________

II. Match each of the images shown with the correct name of the writing style used.

1. Fig. 1-2 ____
2. Fig. 1-11 ____
3. Fig. 1-23 ____

   A. hieroglyphs
   B. petroglyphs
   C. cuneiform
Chapter 2 – Alphabets

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Crete, page 18, (Fig. 2-2)
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Cadmus of Miletus (dates unknown), page 22
Etruscans, page 26, (Fig. 2-16)
Spurius Carvilius (c. 250 B.C.), page 26
Ptolemy V of Alexandria (ruled c. 205–181 B.C.), page 28
King Eumenes II of Pergamum (d. 160/159 B.C.), page 28
Sejong (A.D. 1397–1450), page 29
Multiple Choice

1. Early visual language systems were complex and required knowledge of hundreds of signs and symbols, whereas an alphabet, a set of visual symbols or characters that represent the elementary __________ of a spoken language, require only twenty or thirty easily learned signs.
   A. vowels
   B. sounds
   C. consonants
   D. concepts

2. Unearthed in Crete in 1908, the __________ contains pictographic and seemingly alphabetic forms imprinted on both sides in spiral bands.
   A. Greek signature seal
   B. Greek allotment token
   C. Phaistos Disk
   D. Etruscan Bucchero vase

3. During the second millennium B.C., the __________ became seafaring merchants whose ships linked settlements throughout the Mediterranean region. Influences and ideas were absorbed from other areas, such as cuneiform from Mesopotamia in the west and Egyptian hieroglyphics and scripts from the south.
   A. Greeks
   B. Etruscans
   C. Romans
   D. Phoenicians

4. Around 1500 B.C., Semitic workers in Egyptian turquoise mines in the Sinai desert developed an acrophonic adaptation of Egyptian hieroglyphics called Sinaitic script. In an acrophonic system, pictorial symbols or hieroglyphs are used to represent __________.
A. the most important words in a sentence
B. the most important vowel sound in a word
C. the initial sound of the object depicted
D. an abstract idea

5. The Phoenician alphabet was adopted by the ancient Greeks and spread through their city-states around 1000 B.C. The Greeks changed five consonants to vowels and, most importantly, they modified the Phoenician characters by making them __________.
   A. resemble animal forms in nature
   B. more geometrically structured
   C. resemble cuneiform characters
   D. calligraphic and gestural

6. When the Greeks adopted Phoenician writing, they developed a writing method called boustrophedon, which means __________.
   A. alternating left to right and right to left
   B. left to right
   C. right to left
   D. bottom to top

7. Writing tools and substrates influenced written forms. For example, as early as the second century A.D., Greek scribes made their pens from hard reeds cut into nibs and split at the tip to aid ink flow. These pens gave their writing style a different character than writing by Egyptian scribes, who used soft reeds to brush ink onto the substrate. The Greeks developed a more rounded writing style called __________, which could be written more quickly because the rounded letters were formed with fewer strokes.
   A. uncialis
   B. Capitalis Monumentalis
   C. Capitalis Rustica
   D. Capitalis Quadrata

8. In the fourth century B.C., Alexander the Great expanded Greek culture throughout the ancient world, including Egypt, Mesopotamia, and India. Reading and writing had become more important by this time because __________.
A. Alexander the Great wished to build vast libraries in distant countries
B. military leaders required a means of transferring information across geographic areas
C. an oral culture no longer had the capacity to contain and document knowledge and information
D. demand rose for Greek philosophical and dramatic works

9. The Greek alphabet fathered three of the following alphabets. Which one does **NOT** belong? __________
   A. Latin
   B. Cyrillic
   C. Phoenician
   D. Etruscan

10. The Latin alphabet came to the Romans from Greece by way of the_______, who dominated the Italian peninsula in the first millennium B.C.
   A. Ionians
   B. Spartans
   C. Etruscans
   D. Corinthians

11. Around the first century B.C., the Roman alphabet—the forerunner of the contemporary English alphabet—contained twenty-three letters. The letters J, V, and W were added __________. The J is an outgrowth of the I, which was lengthened to indicate use with consonantal force, particularly as the first letter of some words. Both U and W are variants of V, which was used for two different sounds in England.
   A. after the advent of the printing press
   B. during the Middle Ages
   C. by seventeenth-century Greek scholars
   D. when they were rediscovered in the first century A.D.

12. The __________, a revolutionary design format, came to be used increasingly in Rome and Greece beginning about the time of Christ. The durability and permanence of this format appealed to Christians because their writings were considered sacred. The Christians also sought this format as a means to distance themselves from pagan formats.
A. codex
B. rotulus
C. scroll
D. disk

13. The Roman letter _______________ was designed by Spurius Carvilius around 250 B.C. to replace the Greek zeta, which at the time was of little value to the Romans. After this addition, the Latin alphabet contained twenty-one letters.
   A. W
   B. G
   C. J
   D. Y

14. The Aramaic alphabet is a major early derivation from the North Semitic script. It is the predecessor of hundreds of scripts, including modern Hebrew and Arabic. _______________, a bold inscriptional Arabic lettering with extended, thick characters, was widely used on coins, manuscripts, and inscriptions on metal and stone. It is still used for titles and decorative elements.
   A. Sinaitic
   B. Naskhi
   C. Ras Shamra
   D. Kufic

15. King Eumenes II of Pergamum developed the process of making __________ to overcome an embargo placed by Ptolemy V during a fierce rivalry.
   A. paper
   B. codices
   C. parchment
   D. papyrus

16. The Hangul alphabet, which was introduced by the Korean monarch Sejong by royal decree in A.D. 1446, consists of fourteen consonants represented by __________.
   A. abstract depictions of the mouth and tongue
   B. acrophonic symbols
Matching

I. Match the key words with the correct definitions.

1. vellum ____
2. serifs ____
3. signature ____
4. Capitalis Quadrata ____
5. Capitalis Monumentalis ____
6. parchment ____
7. Capitalis Rustica ____

A. Rome took great pride in its imperial accomplishments and conquests, and created these letterforms for architectural inscriptions celebrating military leaders and their victories.

B. The most important form of the Roman written hand, this style, which was written carefully and slowly with a flat pen, was widely used from the second century A.D. until the fifth century.

C. Small lines extending from the ends of the major strokes of Roman letterforms

D. Another form of the Roman written hand, these condensed letterforms, which were written quickly and saved space, were widely used from the second century A.D. until the fifth century.

E. A writing surface made from the skins of domestic animals, particularly calves, sheep, and goats

F. The finest of writing surfaces, made from the smooth skins of newborn calves

G. G. Two, four, or eight sheets gathered then folded, stitched, and bound

True/False
1. The invention of the alphabet and the subsequent spread of literacy had a leveling effect on society; it eventually diminished the power of priest/scribes found in earlier societies. 

2. The Hangul writing system—the Korean alphabet—is based on the Chinese writing system but is more complex. 

3. Around 2000 B.C., the Phoenicians developed an early alphabetic writing system called sui generis, which was a script devoid of any pictorial meaning. 

4. Capitalis Quadrata were capitals of the Roman Latin alphabet created for architectural inscriptions celebrating military leaders and their victories. 

5. The modern book format, which replaced the scroll in Rome and Greece beginning at the time of Christ, was made by gathering parchment into signatures and binding them to form codices. 

Image Identification

I. Identify the title and the date of the following images.

1. Fig. 2-2 ________________________________

2. Fig. 2-11 ________________________________

3. Fig. 2-12 ________________________________

4. Fig. 2-16 ________________________________

II. Match each of the images shown with the correct writing style.

1. Fig. 2-18 ____

2. Fig. 2-19 ____

3. Fig. 2-20 ____

A. Capitalis Quadrata

B. Capitalis Monumentalis

C. Capitalis Rustica
Chapter 3 – The Asian Contribution

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The invention of movable type, 40

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Chiaku-wen (bone-and-shell script), page 31, (Figs. 3-1 and 3-2)
Oracle bones, page 31
Chin-wen (bronze script), page 31, (Fig. 3-3)
Hsiao chuan (small-seal style), page 32, (Fig. 3-1)
Chen-shu or kai-shu (regular style), page 32, (Fig. 3-4)
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Chop, page 35, (Fig. 3-8)
Cinnabar, page 35
Woodblock printing, page 36
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**Key People and their Major Contributions** (in order of appearance; the first page number of their appearance is listed)

Ts-ang Chieh, page 31
Prime Minister Li Ssu (c. 280–208 B.C.), page 32
Li Fangying, page 32, (Fig. 3-6)
Shitao Yuanji (A.D. 1630–c. 1707), page 34, (Fig. 3-7)
Ts'ai Lun, page 34
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Chapter 3 – Study Questions

Multiple Choice

1. Legend suggests that by the year 2000 B.C., a culture was evolving in China in virtual isolation from the pockets of civilization in the West. Three innovations developed by the ancient Chinese that changed the course of human events are listed below. Which does NOT belong? __________

   A. oil paint
   B. gunpowder
   C. paper
   D. the compass

2. About 1800 B.C., __________ was inspired to invent Chinese writing by claw marks of birds and footprints of animals. Elementary pictographs of things in nature were highly stylized and composed of a minimum number of lines.

   A. Shih Huang Ti
   B. Li Ssu
   C. Ts-ang Chieh
   D. Li Fangying

3. There is no direct relationship between the spoken and written Chinese languages. Written Chinese was never broken down into syllabic or alphabetic signs for elementary sounds. The Chinese calligraphic writing system consists of __________, graphic signs that represent an entire word.

   A. pictographs
   B. logograms
   C. cartouches
   D. ideograms

4. The earliest known Chinese writing, called __________, was in use from 1800 to 1200 B.C. and was closely bound to the art of divination, an effort to foretell future events through communication with the gods or long-dead ancestors. It
was also called bone-and-shell script because it was incised on tortoise shells and the flat shoulder bones of large animals, called oracle bones.

A. chin-wen  
B. hsaio chuan  
C. chen-shu  
D. chiaku-wen

5. In earlier times, the Chinese wrote on bamboo slats or wooden strips using a bamboo pen and dense, durable ink. After the invention of woven silk cloth, it, too, was used as a writing substrate; however, it was very costly. __________, a Chinese high government official, is credited with the invention of paper in A.D. 105, and was deified as the god of the papermakers. His process for making paper from natural fibers continued almost unchanged until papermaking was mechanized in nineteenth-century England.

A. Ts'ai Lun  
B. Li Tsu  
C. Chu-Yun-Ming  
D. Yuan Chao Meng-fu

6. One theory about the origins of relief printing in China focuses on chops, seals made by carving calligraphic characters into a flat surface of jade, silver, gold, or ivory. Another theory focuses on the practice of making __________ from inscriptions carved in stone.

A. inked rubbings  
B. impressions in soft clay  
C. playing cards  
D. calligraphy

7. The oldest surviving printed manuscript is the ________, which was printed by one Wang Chieh to honor his parents and widely distributed in A.D. 868. It consists of seven sheets of paper pasted together to form a scroll. Six sheets of the text convey Buddha’s revelations to his elderly follower Subhuti.

A. Album of Eight Leaves  
B. Yuan Chao Meng-fu (A Goat and Sheep)  
C. Mountain and River Landscape scroll  
D. Diamond Sutra
8. China became the first society in which ordinary people were in daily contact with printed images. In addition to block prints of religious images and texts, paper ____________ began to be designed and printed around A.D. 1000 due to an iron shortage.

A. charms, called dharani,
B. playing cards
C. money
D. medical herbals

9. In China beginning in the ninth or tenth century A.D., the scroll evolved into a paged format. Instead of rolling the scroll, it was folded ____________. In the tenth or eleventh century, stitched books were developed: two pages of text were printed from one block; the sheet was folded down the middle, then the sheets were gathered and sewn to make a codex-style book.

A. European-style
B. accordion-style
C. like a letter
D. in half

10. When making a woodblock print in China, the wood around each character is painstakingly cut away. Around A.D. 1045, the Chinese alchemist Pi Sheng extended this process by developing the concept of ____________, an innovative printing process that was never widely used in Asia because the sheer number of characters made the process too tedious.

A. stamping
B. relief printing
C. casting type
D. moveable type

11. The painting of bamboo from the ____________ by Li Fangying shows how vividly descriptive strokes made with a bamboo brush join calligraphy, painting, poem, and illustration into a unified communication.

A. bamboo scrolls
B. *Mountain and River Landscape* scroll
C. *Album of Eight Leaves*
D. Diamond Sutra
Matching

I. Match the key term with the correct definition.

1. chin-wen ____
2. hsaio chuan ____
3. k’ai-shu ____
4. chia-ku-wen ____

A. This phase in Chinese calligraphy is called bronze script because it consisted of inscriptions on cast-bronze objects, such as food and water vessels, musical instruments, weapons, coins, and seals.

B. When one wished to consult an exalted ancestor or a god, the royal diviner was asked to inscribe the message on a polished animal bone. This writing was called bone-and-shell script.

C. Small seal script was a new writing style designed by Prime Minister Li Ssu during the reign of emperor Shih Huang Ti. This graceful, flowing style is much more abstract than other styles.

D. The final step in the evolution of Chinese calligraphy, regular script is considered the highest art form in China, more important even than painting.

True/False

1. Chinese calligraphy is a purely visual language. _____
2. The Chinese calligraphic system consists of about forty characters. _____
3. In contrast to Western writing, Chinese calligraphic strokes express spiritual states and deep feelings. _____
4. The Chinese were immediately receptive to the use of paper in its early decades because of its greater elitist appeal. _____
5. During the Han Dynasty, seals, called chops, were made by carving the background away from a calligraphic character. The resulting print was a red character on a white background. _____
6. In the tenth century A.D., Prime Minister Feng Tao ordered the use of wood blocks to print Confucian classics so that they would be available to the masses.

7. Relief printing is the process of removing the negative spaces surrounding an image and then inking the raised surface, which is rubbed onto paper.

8. The pages of the Pen Ts’ao medical herbal were assembled as a folded accordion-style book, which replaced the scroll format in the ninth and tenth centuries A.D.

**Image Identification**

I. Identify the title and date of the following images.

1. Fig. 3-6 ________________________________
2. Fig. 3-8 ________________________________
3. Fig. 3-15 ________________________________

II. Match each of the images shown with the correct writing style.

1. Fig. 3-2 ____
2. Fig. 3-3 ____
3. Fig. 3-4 ____

A. Chiaku-wen (bone-and-shell script)
B. Chen-shu (regular style calligraphy)
C. Chin-wen (bronze script)
Chapter 4 – Illuminated Manuscripts

Introduction, 42
The classical style, 43
Celtic book design, 44
The Caroline graphic renewal, 47
Spanish pictorial expressionism, 51
Romanesque and Gothic manuscripts, 54
Judaic manuscripts, 56
Islamic manuscripts, 56
Late medieval illuminated manuscripts, 58

Key Terms (in order of appearance; the first page number of their appearance is listed)

Illuminated manuscript, page 42
Gold leaf, page 42
Scriptorium, page 42
Scrittori, page 42
Copisti, page 42
Illuminator, page 42
Colophon, page 42
Musical notation, page 42
Frontispiece, page 43
Classical style, page 43, (Fig. 4-1)
Medieval, page 43
Uncials, page 44, (Fig. 4-2)
Uncia, page 44
Semi-uncials or half-uncials, page 44, (Fig. 4-3)
Majuscules, page 44
Minuscules, page 44
Ascenders, page 44
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Celtic style, pages 44–47, (Fig. 4-4 through 4-9)
Carpet pages, page 45, (Fig. 4-6)
Interlace, page 45, (Fig. 4-4)
Lacertines, page 45,
Diminuendo, page 45, (Fig. 4-5)
Scriptura scottia (insular script), page 46, (Fig. 4-5) (Fig. 4-9)
Carolingian or Caroline miniscule, page 42, (Fig. 4 -10)
Turba scriptorium, page 49
Labyrinth page, page 52, (Fig. 4-12)
Apocalypse, page 53, (Figs. 4-13 and 4-14)
Textura, page 54, (Fig. 4-15)
Haggadot, page 56, (Fig. 4-17)
Qur’an or Koran, page 56
Aniconism, page 57
Book of Hours, page 58

**Key People and their Major Contributions** (in order of appearance; the first page number of their appearance is listed)

Charlemagne (c. 742 or 747–814), pages 47–49, (Fig. 4-10)
Multiple Choice

1. Production of illuminated manuscripts in the scriptorium, or writing room, included the head of the scriptorium, called the scrittori, a well-educated scholar who understood Greek and Latin and functioned as both an editor and art director. The __________ was a production letterer who spent his days bent over a writing table penning page after page in a trained lettering style.
   A. colophon
   B. scrittori
   C. copisti
   D. illuminator

2. The Vatican Virgil, completely Roman and pagan in its conception and execution, is an example of the __________ manuscript style. This volume, created in the late fourth or early fifth century A.D., contains two major poems by Rome’s greatest poet, Publius Vergilius Maro: the Aeneid and the Georgics. The illustrations combine rustic capitals with echoes of the rich colors and illusionist space of the wall frescoes of Pompeii.
   A. classical
   B. Celtic
   C. Mozarabic
   D. Gothic

3. __________ design, as seen in the Book of Durrow, is abstract and extremely complex; geometric linear patterns weave, twist, and fill the space with thick visual textures, and bright, pure colors are used in juxtaposition.
   A. Classical
   B. Carolingian
   C. Celtic
   D. Gothic
4. A radical design innovation in Celtic manuscripts was using __________ to separate strings of letters into words allowing readers to recognize them more quickly.
   A. punctuation
   B. lacertine animals
   C. diminuendo
   D. word spaces

5. Charlemagne, King of the Franks, who was declared emperor of the Holy Roman Empire by Pope Leo III on Christmas Day, A.D. 800, fostered a revival of learning and the arts. He recruited __________ to come to his palace at Aachen and establish a school and a scriptorium where master copies of important religious texts were prepared.
   A. a *turba scriptorium*
   B. the scribe Florentius
   C. the English scholar Alcuin of York
   D. the Limbourg brothers

6. Charlemagne mandated reform by royal edict in A.D. 789 and succeeded in reforming the alphabet with the use of four guidelines, ascenders, and descendents. The resulting uniform script, called __________, is the forerunner of our contemporary lowercase alphabet.
   A. Caroline miniscules
   B. Celtic unicials
   C. diminuendo
   D. Celtic semi-unicials

7. Many examples of Moorish-influenced manuscripts from Spain, such as the *Four Horsemen of the Apocalypse* from the Beatus of Fernando and Sancha, in which arrows pierce the hearts of nonbelievers, are texts on __________.
   A. prayers and calendars of saints’ days
   B. the Book of Revelation
   C. the Qu’ran
   D. classical literature from ancient Rome
8. During the Romanesque period (A.D. c. 1000 to 1150), which saw renewed religious fervor and even stronger feudalism, universal design characteristics seemed possible because ___________.
   A. travel increased due to the crusades and pilgrimages
   B. isolated villages had minor skirmishes
   C. barbaric tribes became nomadic
   D. feudal lords increased their territories

9. The *textura* lettering style (from the Lain *texturum*, meaning woven fabric or texture) seen in Gothic manuscripts—composed of vertical strokes capped with pointed serifs—was also called by other terms, which were misleading and vague. Which name was the preferred name during its time? __________
   A. *littera moderna*
   B. *lettre de forme*
   C. black letter
   D. old English

10. Muhammad called upon his followers to learn to read and write, and calligraphy quickly became an important tool for government business and religion. Islamic manuscript decoration is characterized by all but one of the elements below. Which does NOT belong? __________
    A. Rosettes drawn to separate verses
    B. Intricate geometric and arabesque designs
    C. Ornate vowel marks
    D. Figurative illustrations

11. In the early 1400s, the__________, a private devotional text that contained religious texts, prayers, and calendars listing the days of the important saints, became Europe’s most popular book.
    A. *Commentary of Beatus*
    B. Book of Hours
    C. *Apocalypse*
    D. *Four Gospels*

12. In the early scriptorium, the_______ was responsible for the execution of ornament and image in visual support of the text.
13. The ____________ of a manuscript or book is an inscription, usually at the end, containing facts about its production.
   A. colophon
   B. frontispiece
   C. copisti
   D. illuminator

14. Manuscripts in the ____________ style were often lettered in rustic capitals in one wide column on each page, with illustrations of the same width as the text column framed in bright bands of color.
   A. Celtic
   B. medieval
   C. classical
   D. Renaissance

15. So named because they were written between two guidelines that were one inch apart, ____________ were rounded, freely drawn letters more suited to rapid writing.
   A. miniscules
   B. uncial
   C. descenders
   D. majuscules

16. In the early fifteenth century, the Limbourg brothers created their masterpiece, ____________, which included an illustrated calendar depicting the seasonal activities of each month crowned with graphic astronomical charts. They sought a convincing realism as atmospheric perspective pushed planes and volumes back in deep space.
   A. the Vatican Virgil
   B. the Book of Kells
C. *Les très riches heures du Duc de Berry*

D. *the Ormesby Psalter*

**Matching**

I. Match the key term with the correct definition.

A. Gothic ____
B. classical style ____
C. Celtic ____

A. This manuscript style was lettered in rustic capitals in one wide column on each page, usually above or below an illustration.

B. This manuscript style originated in Ireland and used ornate initials, diminuendo, carpet pages, and half-uncial script.

C. This manuscript style used *textura* lettering, often in two columns. Illustrations were divided into segments by elaborate framing; figures were elongated and wore fashionable clothing.

**True/False**

1. Illuminated manuscripts in the Middle Ages were costly and time consuming to produce. In addition to expensive minerals for ink, the skins of up to five animals were often required to make parchment for one text. _____

2. The illustrations and decorations in illuminated manuscripts were intended to educate the reader as well as beautify the book. _____

3. The frontispiece of a manuscript is the front cover, usually made of ivory or precious metals encrusted with semiprecious gems. _____

4. Illustrations in late medieval illuminated manuscripts from the fifteenth century are characterized by elongated, vertical figures and increased naturalism. _____

5. The Haggadot are Judaic texts containing Jewish historical accounts and proverbs. _____

6. A diminuendo is the transition from large introductory script into the smaller text. _____
7. In manuscripts that were created in the Renaissance style, such as the *Vatican Virgil*, the text is lettered in crisp rustic capitals. Illustrations could be positioned either at the top, middle, or bottom of a page, usually adjacent to a single column of text. 

8. Aniconism was a common theme used in Islamic manuscripts. 

9. The invention of musical notation has also been attributed to scribes working in medieval monasteries. 

**Image Identification**

I. Identify the title and the date of the following images.

1. Fig. 4-6 __________________________________________________

2. Figs. 4-7 through 4-9 ______________________________________

3. Fig. 4-10 _________________________________________________

4. Fig. 4-11 _________________________________________________

5. Fig. 4-13 _________________________________________________

6. Fig. 4-19 _________________________________________________

7. Figs. 4-20 and 4-21 _______________________________________

II. Match each of the images shown with the correct style of the design.

1. Fig. 4-5

2. Fig. 4-16

3. Fig. 4-18

A. Islamic book design

B. Celtic book design

C. Gothic manuscript
Chapter 5 – Printing Comes to Europe

Introduction, 64
Early European block printing, 64
Movable typography in Europe, 69
Copperplate engraving, 77

**Key Terms** (in order of appearance; the first page number of their appearance is listed)

- Xylography, page 64
- Typography, page 64
- Watermark, page 64
- Block print, page 64
- *Ars moriendi*, page 65
- Block book, page 65
- *Biblia Pauperum*, page 67, *(Fig. 5-8)*
- *Forty-two Line Bible*, page 69, *(see Fig. 5-13)*
- *Textura*, page 69
- Ligature, page 70
- Punch, page 70, *(Fig. 5-10a)*
- Matrix, page 70, *(Fig. 5-10b)*
- Letters of indulgence, page 71, *(Fig. 5-12)*
- Rubrication, page 71
- Psalter, page 73
- Colophon, page 73
Copperplate engraving, page 77

**Key People and their Major Contributions** (in order of appearance; the first page number of their appearance is listed)

Procopius Waldfoghel, page 69
Johann Fust (c. 1400–1466), page 71
Peter Schoeffer (c. 1425–1502), page 71
Fust and Schoeffer, page 71
Master of the Playing Cards, page 77, (Fig. 5-17)
Chapter 5 – Study Questions

Multiple Choice

1. ___________, which ranged in size from small enough to fit in a person’s hand to about 10 by 14 inches, were the first known European block printings with a communications function. Image and lettering were cut from the same block of wood and printed as a complete word-and-picture unit.
   A. Devotional prints of saints
   B. Block books
   C. Playing cards
   D. Paper monetary bills

2. Death was an ever-present preoccupation in fourteenth-century Europe. The great cycles of bubonic plague, called the Black Death, claimed one fourth of Europe’s inhabitants during the fourteenth century and caused thousands of villages to either vanish totally or become critically depopulated. ___________ was a type of block book that offered advice on preparing for death and how to meet one’s final hour.
   A. The Book of Hours
   B. The Psalter
   C. The Ars Moriendi
   D. The Biblia Pauperum

3. Several factors created a climate in fifteenth-century Europe that made typography feasible: an insatiable demand for books, an emerging literate middle class, students in the rapidly expanding universities who had seized the monopoly on literacy from the clergy and created a vast new market for reading material, and the slow, expensive, process of bookmaking, which had changed little in one thousand years. However, without _____________, which reached Europe by way of a six-hundred-year journey, the speed and efficiency of printing would have been useless.
   A. writing
   B. the alphabet
   C. moveable type
4. Printers in Germany, the Netherlands, France, and Italy sought after the mechanization of book production by such means as movable type. It was ______________ of Haarlem in Holland who explored the concept of movable type first by cutting out letters or words from his woodblocks for reuse.

A. Laurens Janszoon Coster
B. Procopius Waldfoghel
C. Johann Gensfleisch von Gutenberg
D. John Baskerville

5. In Avignon, France, goldsmith ______________ was involved in the production of “alphabets of steel” around 1444, but with no known results.

A. Laurens Janszoon Coster
B. Procopius Waldfoghel
C. Johann Gensfleisch von Gutenberg
D. John Baskerville

6. Around 1450, Johann Gutenberg was the first to bring together the complex systems and subsystems necessary to print a typographic book, including a thick, tacky ink that could be smoothly applied and did not run off the metal type; a strong, sturdy press; and a metal alloy that was soft enough to cast yet hard enough to hold up for thousands of impressions. But the key to his invention was the __________ used for casting the individual letters.

A. brass matrix
B. antimony
C. type mold
D. steel punch

7. Johann Gutenberg adopted __________, the style of manuscript lettering commonly used by German scribes of his day, as the model for his type, because early printers sought to compete with calligraphers by imitating their work as closely as possible.

A. rustic capitals
B. square capitals
C. half uncials
8. Early surviving examples of typographic design and printing include a German poem on the Last Judgment, four calendars, and a number of editions of a Latin grammar by Aelius Donatus. The earliest dated examples of typographic printing are the ____________, issued in Mainz, Germany in 1454.

A. “Letters of Indulgence” by Pope Nicholas V
B. “Ninety-Five Theses” by Martin Luther
C. Decameron stories by Boccacio
D. Shipping News broadsheets for Venetian merchants

9. A heroic effort was required to produce the Forty-two Line Bible, so-named because the first nine pages have forty lines per column, the tenth page has forty-one lines per column, and the remaining pages have forty-two lines per column. The increase of two lines per column saved an additional sixty pages. Gutenberg’s original format included three characteristics below. Which does NOT belong? ____________

A. 1,282 pages in two volumes
B. 11-3/4-by-15-inch pages
C. 418 full-page illustrations
D. Blank spaces for decorative initials to be drawn in later by a scribe

10. At the same time (and in the same area of Europe) that Johann Gutenberg invented moveable type, an unidentified artist called the Master of the Playing Cards created the earliest known __________.

A. printed materials using wooden printing blocks
B. copperplate engravings
C. special ink that would not rub off on card players’ hands
D. heavy paper that was used for making playing cards

11. In papermaking, a translucent emblem, or ______________, can be produced by pressure from a raised design on a mold. It is visible when a sheet of paper is held up to light. These were used in Italy as early as 1282, and as they grew in popularity, they began to be used to designate sheet and mold sizes as well as paper grade.

A. heraldic shield
B. watermark
C. ligature
D. matrix

12. The magnificent Latin Psalter published by _________ on August 14, 1457, was the first book to bear a printer’s trademark and imprint, printed date of publication, and colophon. In addition, the Psalter had large red and blue initials printed from two-part metal blocks that were inked separately, reassembled, and either printed with the text in one press impression, or stamped after the text was printed. These famous decorated two-color initials were a major innovation.

A. Johann Gutenberg
B. Johann Fust and Peter Schoeffer
C. Jost Amman
D. Procopius Waldfoghel

Matching

I. Match the key terms with the correct definition.

A. punch ____
B. xylography ____
C. matrix ____
D. engraving ____
E. typography ____

A. A printing process during which the image is incised or cut down into the printing surface
B. The technical term for the relief printing from a raised surface that originated in Asia
C. In casting type, a steel bar with a character engraved into the top, which is then pressed into a softer metal to make a negative impression of the character
D. Printing with independent, movable, and reusable bits of metal or wood, each of which has a raised letterform on one face
E. In casting type, the negative impression of a character is pressed into this, then filled with a molten lead alloy that creates the finished piece of type.

**True/False**

1. The press Johann Gutenberg used for printing was based on the cheese or wine press, familiar in the Rhine wine-producing area of Germany. _____

2. Although Johann Fust loaned money to Johann Gutenberg, he later foreclosed on Gutenberg and confiscated his printing equipment. _____

3. According to one account, Johann Fust attempted to sell printed Bibles in Paris as manuscripts. _____

4. Printers left the city of Mainz, Germany in 1462 because of an outbreak of the plague. _____

5. The *Biblia Pauperum* was a block book intended to instruct the faithful in Old and New Testament parallel narratives. _____

6. Copperplate printing, like typographic printing, is a relief process. _____

7. In addition to the rapid spread of knowledge, the invention of the typographic press is also directly responsible for increased literacy in the fifteenth century. _____

8. With his moveable type, Johann Gutenberg used an ink made from boiled linseed oil colored with lampblack. _____

9. In early block books, woodblock images were cut separately from the wood type and could be set in different arrangements on the page. _____

10. Fust and Shoeffer's *Rationale divinorum officiorum* (*Rationale of Holy Duties*) was an important innovation because it was the first typographic book to use a small-sized type style to conserve space. _____

11. The printing of classics from antiquity spurred interest in ancient Greek and Roman culture. The fusion of the medieval with the classical became a catalyst for the creation of the modern world. _____

**Image Identification**

I. Identify the title and the date of the following images.

1. Fig. 5-2 ________________________________

2. Fig. 5-5 ________________________________
II. Match each of the images shown with the name of its designer.

1. Fig. 5-11 ____
2. Fig. 5-13 ____
3. Figs. 5-14 and 5-15 ____

A. Jost Amman
B. Fust and Schoeffer
C. Johann Gutenberg
Chapter 6 – The German Illustrated Book

Introduction, 78
Origins of the illustrated typographic book, 79
Nuremberg becomes a printing center, 81
The further development of the German illustrated book, 89
Typography spreads from Germany, 91

**Key Terms** (in order of appearance; the first page number of their appearance is listed)

*Incunabula*, page 78
Broadsheet, page 78
Broadside, page 78
Incipit, page 79
*Ex libris*, page 79
Nuremberg, page 81
Exemplar, page 83
*Criblé*, page 93
Polyglot, page 93

**Key People and their Major Contributions** (in order of appearance; the first page number of their appearance is listed)

Martin Luther (c. 1483–1546), page 79
Albrecht Pfister (c. 1420–c.1470), page 79, ([Fig. 6-2](#))
Günther Zainer (d. 1478), page 79, (Fig. 6-3)

Johann Zainer, page 79, (Figs. 6-4 and Fig. 6-5)

Erhard Reuwich, page 81, (Fig. 6-6)

Anton Koberger (c. 1440–1513), page 81, (Figs. 6-7 through 6-10)

Michael Wolgemuth (1434–1519), page 81, (Figs. 6-11 and 6-12)

Wilhelm Pleydenwurff (d. 1494), page 83, (Figs. 6-11 and 6-12)

Albrecht Dürer (1471–1528), page 83, (Figs. 6-13 through 6-16)

Hans Schäufelein (c. 1480–c.1540), page 89, (Fig. 6-18)

Lucas Cranach the Elder (1472–1553), page 89, (Fig. 6-19)

Hans Cranach (d. 1537) and Lucas Cranach the Younger (1515–1586), page 91, (Figs. 6-20 and 6-21)

Conrad Sweynheym (d. 1477) and Arnold Pannartz (d. 1476), page 91, (Fig. 6-22)

William Caxton (c. 1421–1491), page 91, (Fig. 6-23)

Phillipe Pigouchet, page 93, (Fig. 6-25)
Chapter 6 – Study Questions

Multiple Choice

1. The Renaissance innovators altered the perception of information by creating two visual systems: painting and typography. Typography created a sequential and repeatable ordering of information and space, as well as three of the following situations. Which one does NOT belong? ____________

   A. Typography led people toward linear thought and logic.
   B. Typography led people toward a categorization and compartmentalization of information that formed the basis of empirical scientific enquiry.
   C. Typography evoked illusions of the natural world on flat surfaces through such means as the fixed viewpoint.
   D. Typography fostered individualism, a dominant aspect of Western society since the Renaissance.

2. After Johann Gutenberg’s invention of moveable type, typographic printing spread rapidly. By 1500, printing was practiced in over 140 towns throughout Europe. In addition to books, a vast array of ephemera, including religious tracts, pamphlets, and broadsides, were printed during this period. Books printed from Gutenberg’s invention of typography until the end of the fifteenth century are referred to as ____________ texts, a Latin word that means “cradle” or “rebirth.”

   A. exemplars
   B. ex libris
   C. incunabula
   D. broadsheets

3. Early printers followed the manuscript custom of putting the title and author at the top of the first page, in the same size and style lettering as the text. A short space was skipped, then Incipit, the Latin term for “__________,” launched the book.

   A. in God we trust
   B. dedicated to the glory of God
   C. here begins
D. in your honor

4. Woodcut artists and typographic printers in Germany during the last half of the fifteenth century collaborated to develop the illustrated typographic book. A favored page proportion was the golden rectangle, whose ratio is _______________.
   A. 3:4
   B. 1:1
   C. 2:3
   D. 1:1.618

5. At his press in Ulm, ____________ used woodblock prints in many of his books that were not completely enclosed with rectangular borders, allowing the white space from the margins to flow into the pictures. This approach can be seen in the 175 woodcuts of the 1479 edition of Aesop’s *Vita et fabulae* (*Life and Tales*).
   A. Anton Koberger
   B. Albrecht Pfister
   C. Johann Zainer
   D. Erhard Reuwich

6. Erhard Reuwich was the first __________ to be identified as such in a book for his work in *Peregrinationes in Montem Syon* (*Travels in Mount Syon*), which was printed with Peter Schoeffer’s types in 1486.
   A. printer
   B. illustrator
   C. papermaker
   D. typesetter

7. Published in German and Latin versions in 1493, this six-hundred-page book was an ambitious history of the world from the biblical dawn of creation until 1493. The title page for the index is a full-page woodblock of calligraphy attributed to the scribe George Alt. The book contained 1,809 woodcut illustrations in its complex, carefully designed, 18-by-12-inch pages and is considered one of the masterpieces of graphic design from this period.
   A. Nuremberg Chronicle
   B. *Polyglot Bible*
   C. *Peregrinationes in montem Syon* (*Travels in Mount Syon*)
D. *Aesop’s Vita et fabulae (Aesop’s Fables)*

8. This Renaissance artist, whose godfather was Anton Koberger, became well known at age twenty-seven for his detailed woodcuts in the Latin and German editions of *The Apocalypse*. The woodcuts have an unprecedented emotional power and graphic expressiveness. __________ became a major influence in the cultural exchange that saw the Renaissance spirit filter into Germany. He believed German artists and craftsmen were producing work inferior to that of the Italians because they lacked theoretical knowledge. This inspired his first book, *Underweysung der Messung mit dem Zirkel und Richtscheit* (*A Course in the Art of Measurement with Compass and Ruler*), which included theoretical discussions of linear geometry, two-dimensional geometric construction, and clear instructions for constructing beautifully proportioned Roman capitals.

   A. Michael Wolgemuth
   B. Martin Kranz
   C. Ulrich Gering
   D. Albrecht Dürer

9. Martin Luther found a loyal friend and follower in __________, who had been called to Wittenberg by the electors of Saxony. He operated a studio as well as a printing office, a bookshop, and a paper mill. He furthered the cause of the Protestant Reformation by portraying the reformers and their cause in books and broadsides. Ironically, he also regularly accepted commissions for Madonnas and Crucifixions from Catholic clients, and many of the woodcuts he produced for the Luther Bible were also used in a subsequent Catholic edition.

   A. Anton Koberger
   B. Johann Schoensperger
   C. Lucas Cranach the Elder
   D. Adolph of Mainz

10. Italy was at the forefront of Europe’s transition from the feudal medieval world to one of cultural and commercial renaissance. Italy sponsored the first printing press outside of Germany when Cardinal Turrecremata of the Benedictine monastery at Subiaco invited two printers, ____________, to establish a press. The types that they designed marked the first step toward a Roman-style typography based on letterforms that had been developed by Italian scribes. They created a typographic “double alphabet” by combining the capital letters of ancient Roman inscriptions with the rounded minuscules that had evolved in Italy from the Caroline minuscule.

   A. Hans Cranach and Lucas Cranach the Younger
B. Hans Schaufelein and Vincent Rockner
C. William Caxton and Colard Mansion
D. Arnold Pannartz and Conrad Sweynheym

11. William Caxton left his native land for the textile center of Bruges in the Low Country, where he set up his own business as a merchant and diplomat. In the early 1470s, while spending a year and a half in Cologne, he learned printing. Upon returning to Bruges, he set up a press. The typographic works of William Caxton are significant for three of the reasons listed below. Which does **NOT** belong? ______________

A. They were elegant and refined.
B. They unified various dialects spoken in the British Isles.
C. They encompassed major English literature to 1500.
D. They stabilized written language.

12. Philippe Pigouchet’s *Horae* (*Book of Hours*) established the graphic excellence of this popular book form, such as his 1498 *Horae Beatus Virginis Mariae* (*Hours of the Blessed Virgin Mary*). The dense complexity of illustration, typography, and ornaments compressed into the space is typical of Pigouchet’s book design. He is credited with introducing *criblé*, a technique for woodblock printing that features __________.

A. line illustrations that were not completely enclosed with rectangular borders
B. white dots punched into black areas to create tone
C. cross-hatching to create tone
D. line drawings that combined textured areas with some solid blacks

13. A single leaf of paper printed on both sides is frequently called a __________.

A. newspaper
B. broadsheet
C. broadside
D. pamphlet

14. Handmade model layouts and manuscript texts, such as the Latin version created for the *Nuremberg Chronicle* by Michael Wolgemuth and Wilhelm Pleydenwurff, were used as guides for the woodcut illustrations, typesetting,
page design, and makeup of books. These _______________ provide rare insights into the design and production process during the fifteenth century.

A. matrices
B. indulgences
C. exemplars
D. block books

True/False

1. Printing with moveable type was a technological advancement eagerly welcomed by artisans involved in book production throughout Europe. _____

2. Rubrication, decoration, and illumination were almost always done by hand in the period just following Gutenberg’s invention of moveable type due to the difficulties of color printing and, possibly, because of political pressure. _____

3. Albrecht Pfister’s edition of Johannes von Tepl’s Der Ackerman aus Böhmen (Death and the Plowman) is an example of popular literature, in contrast to the theological and scholarly texts published by many contemporary printers of his time. _____

4. By the 1490s, most German printers had abandoned large page sizes for their books. _____

5. In Italy, empty space was left for initial capitals to be hand rendered. Sometimes the initial letter was never added, and eventually the blank space alone indicated a paragraph. _____

6. Martin Luther’s “Ninety-five Theses” spread word of the Protestant movement through Europe quickly due to the innovations in typography and printing. _____

7. Arñao Guillen de Brocar’s Polyglot Bible was a uniquely Spanish masterpiece because it was the first book printed solely in the Spanish language. _____

Matching

1. Match the key term with the correct definition.

   1. *ex libris* ____
   2. *fraktur* ____
   3. *broadside* ____
4. exemplar ____

A. A single leaf of paper printed on one side only
B. Textura-style type designed by court calligrapher Vincenz Rockner for Melchior Pfintzing’s Teuerdank, distinguished by its flowing calligraphic curves
C. Layout for illustrated books or broadsides
D. Book plate

**Image Identification**

I. Identify the designer, title, and date of the following images.

1. Fig. 6-4 ________________________________
2. Fig. 6-9 ________________________________
3. Fig. 6-14 ________________________________
4. Fig. 6-20 ________________________________
5. Fig. 6-25 ________________________________

II. Match each of the images shown with the name of its designer.

1. Fig. 6-7 ____
2. Fig. 6-15 ____
3. Fig. 6-21 ____

A. Lucas Cranach the Younger
B. Albrecht Dürer
C. Anton Koberger
Chapter 7 – Renaissance Graphic Design

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Graphic design of the Italian Renaissance, 94
Italian writing masters, 103
Innovation passes to France, 103
Basel and Lyons become design centers, 110
The seventeenth century, 113

Key Terms (in order of appearance; the first page number of their appearance is listed)

Renaissance, page 94
Trademarks, page 95
Reversed designs, page 97
Type specimen sheet, page 99
Fleurons (printer’s flowers), page 99
Humanism, page 100
Pocket book, page 101
Cancelleresca, page 101
Renaissance man, page 104
Headpiece, page 110
Tailpiece, page 110
Imagines Mortis (The Dance of Death), page 111
Arabesque, page 112
Bracketing, page 116
Key People and Their Major Contributions (in order of appearance; the first page number of their appearance is listed)

Johannes de Spira (d. 1470), page 94, (Fig. 7-1)
Nicolas Jenson (c. 1420–1480), page 94, (Fig. 7-2)
Erhard Ratdolt (1442–1528), page 95, (Fig. 7-6) (Fig. 7-9)
Johannes Nicolai de Verona, page 99
Aldus Manutius (1450–1515), page 100, (Figs. 7-15 through 7-17)
Francesco da Bologna, surnamed Griffò (1450–1518), page 100, (Fig. 7-14)
Ludovico Arrighi (d. c. 1527), page 103, (Fig. 7-20)
Henri Estienne (d. 1520), page 103, (Fig. 7-21)
Simon de Colines (d. 1546), page 103,
Robert Estienne (1503–59), page 103, (Fig. 7-22)
Geoffroy Tory (1480–1533), page 104, (Figs. 7-27 and 7-28)
Claude Garamond (c. 1480–1561), page 104, (Fig. 7-32)
Oronce Finé (1494–1555), page 108, (Fig. 7-33)
Johann Froben (1460–1527), page 110
Hans Holbein the Younger (1497–1543), page 110, (Figs. 7-36 and 7-37)
Johann Oporinus (1507–1568), page 111, (Fig. 7-38)
Jean de Tournes (1504–1564), page 111, (Fig. 7-39)
Robert Granjon (d. 1579), page 112, (Fig. 7-40)
Christophe Plantin (1514–1589), page 112, (Fig. 7-41)
Stephen Daye (c. 1594–1668), page 113, (Fig. 7-43)
Christoffel van Dyck (1601–1669), page 116, (Fig. 7-46)
Chapter 7 – Study Questions

**Multiple Choice**

1. ____________, the center of commerce and Europe’s gateway to trade with the eastern Mediterranean nations, India, and the Orient, led the way in Italian typographic book design.
   
   A. Milan  
   B. Rome  
   C. Florence  
   D. Venice  

2. A goldsmith from Mainz, Germany, _______________ was given a five-year monopoly on printing in Venice. He printed the first typographic book with page numbers, the 1470 edition of *De civitate dei*, and designed an innovative and handsome Roman type that cast off some of the Gothic qualities found in earlier fonts.
   
   A. Johannes de Spira  
   B. Henri Estienne  
   C. Christophe Plantin  
   D. Ludovico Arrighi  

3. _______________, who had been master of the Royal Mint of Tours, France, was a highly skilled cutter of the dies used for striking coins. He established Venice’s second press. One of history’s greatest typeface designers and punch cutters, his fonts were characterized by extreme legibility and established a new standard of excellence, with wider letterforms, lighter tone, and a more even texture of black strokes on the white background.
   
   A. Erhard Ratdolt  
   B. Nicolas Jenson  
   C. Geoffroy Tory  
   D. Hans Holbein the Younger  

4. Fear and superstition were swept away as scientists began to understand natural phenomena, leading to a shift in content for graphic design. In Erhard Ratdolt’s
sixty diagrams printed in black and yellow were used to scientifically explain solar and lunar eclipses. The understanding of eclipses moved from black magic to predictable fact, and the book contains a three-part mathematical wheel for calculating solar cycles.

A. Geometriae elementa
B. Calendarium
C. Lune Solarium
D. Ars Moriendi

Robert Valturio’s manual on warfare, De re militari (About Warfare), which is identified as having been printed by Johannes Nicolai de Verona, includes examples of the fine-line style of woodblock illustration that became popular in Italian graphic design later in the fifteenth century. This extraordinary book is a compendium of contemporary techniques and devices for scaling walls, catapulting missiles, ramming fortifications, and torturing enemies. The text is set in a tight column with wide margins, and the freely shaped images are spread across the pages in dynamic, __________ layouts.

A. symmetrical
B. asymmetrical
C. reversed
D. bordered

A new concern for human potential and value characterized Renaissance humanism, a philosophy of human dignity and worth that defined man as capable of using reason and scientific inquiry to achieve an understanding of the world and self-meaning. This new spirit was accompanied by a renewed study of classical writings. __________ was an important humanist and scholar of the Italian Renaissance who established Aldine Press and published major works of the great thinkers of the Greek and Roman cultures.

A. Robert Granjon
B. Nicolas Jenson
C. Aldus Manutius
D. Ludovico Arrighi

In 1501, the Aldine Press published Virgil’s Opera (Works), which was the prototype of the ________ book. This edition had a 3.75-by-6-inch page size and was set in the first italic type font. Between the smaller type size and the narrower width of italic characters, a 50 percent gain in the number of characters
per line of a given measure was achieved over Nicolas Jenson’s and Francesco Griffo’s types.

A. type specimen
B. abecedarian
C. pocket
D. incunabula

8. _______________ was a brilliant typeface designer and punch cutter who cut Roman, Greek, Hebrew, and the first italic types for Aldine Press editions. His initial project in Venice was a Roman face for De Aetna by Pietro Bembo in 1495, which survives as the book text face Bembo. He researched pre-Caroline scripts to produce a Roman type that was more authentic than Nicolas Jenson’s designs.

A. Erhard Ratdolt
B. Johannes de Spira
C. Aldus Manutius
D. Francesco Griffo (Francesco da Bologna)

9. The publication of Ludovico Arrighi’s small volume of 1522 entitled La Operina da Imparare di scrivere littera cancellerescha was the first of many sixteenth-century _____________ manuals and marked the beginning of a new era that ended the exclusive domain of the scriptorium.

A. illustration
B. printing
C. reading
D. writing

10. With the sack of Rome, the Italian Renaissance began to fade and eventually innovation in book design and printing passed to ___________, where two brilliant graphic artists, Geoffroy Tory and Claude Garamond, created visual forms that were embraced for two hundred years.

A. The Netherlands
B. France
C. England
D. Spain
11. A true renaissance man, Geoffroy Tory’s accomplishments include the following. Which does NOT belong? ________________
   A. Translating, editing, and publishing Latin and Greek texts
   B. Introducing the apostrophe, accent, and cedilla to the French language
   C. Issuing the first printer’s type specimen sheet
   D. Writing books on the proportions of roman letters.

12. ___________, the first punch cutter who worked independently of printing firms, established his type foundry to sell cast type that was ready to distribute into compositors’ cases. The fonts he cut during the 1540s achieved a tighter fit that allowed closer word spacing and a harmony of design between capitals, lowercase letters, and italics.
   A. Francesco Griffo
   B. Geoffroy Tory
   C. Antoine Augereau
   D. Claude Garamond

13. A mathematics professor and author, his abilities as a graphic artist complemented his scientific publications. __________ illustrated his own mathematics, geography, and astronomy books and worked closely with printers, particularly Simon de Colines, in the design and production of his books. The border on the title page for his 1533 book Arithmetica used carefully measured strapwork, symbolic figures representing areas of knowledge, and a criblé background. This border, combined with de Coline’s typography, created a masterpiece of Renaissance graphic design.
   A. Hans Holbein
   B. Oronce Finé
   C. Robert Estienne
   D. Jacques Kerver

14. When a serious arm injury ended Christophe Plantin’s bookbinding career in the early 1550s, he changed his occupation to printing, and the Netherlands found its greatest printer. His company became the world’s largest and strongest publishing house and printed a full range of material, including classics and Bibles, herbals and medicine books, music and maps. Plantin’s main design contribution was the use of __________ to illustrate his books.
   A. stylized renderings
B. copperplate engravings
C. delicate arabesques
D. contour-line woodblock prints

15. A ____________ is a word, phrase, symbol, or design—or a combination of words, phrases, symbols, or designs—that identifies and distinguishes the source of the goods or services of one party from those of others.
   A. colophon
   B. criblé
   C. fleuron
   D. trademark

16. In 1639, ____________, a Bristish locksmith and his son, designed and printed the first book in the English American colonies, The Whole Booke of Psalms (now called The Bay Psalm Book). The design and production of this book understandably lacked refinement. In spite of strong censorship and a stamp tax on newspapers and advertising, printing grew steadily in the colonies.
   A. Stephen and Matthew Daye
   B. Robert and Henri Estienne
   C. Hans Holbein the Elder and Hans Holbein the Younger
   D. Robert Granjon and Christophe Plantin

**True/False**

1. The Medicis, a wealthy family in Florence, embraced humanism but rejected the technology of printing. _____

2. The Aldine Press trademark, designed around 1500, consisted of a lion and a shield that signified the epigram, “Make haste slowly.” _____

3. Aldus Manutius designed new capitals for his book Hypnerotomachia Poliphili (The Strife of Love in a Dream or The Dream of Poliphilus), which used a one-to-ten stroke weight to height proportion advanced by leading mathematicians of the era and made the height of the lowercase ascenders taller than the capitals to correct an optical color problem that had plagued earlier Roman fonts. _____

4. The 1476 book entitled Calendarium (Record Book) by Regiomontanus contained the first complete title page used to identify a book. _____
5. The *pot cassé* trademark Geoffroy Tory used on the sign of his bookseller’s shop in Paris was symbolic of the death of his daughter. _____

6. Tory’s *Champ Fleury* was the author’s attempt to analyze, describe, and prescribe rules of the French language, both spoken and written. _____

7. Hans Holbein the Younger created a series of forty-one woodcuts illustrating *Imagines Mortis (The Dance of Death)*, in which skeletons are depicted leading the living to their graves. _____

8. Not much innovation occurred in typography during the seventeenth century in Europe. Since there was an abundance of stock ornaments, punches, matrices, and woodblocks, there was little incentive for printers to commission new graphic material. _____

**Matching**

I. Match the key terms with the correct definitions.

1. bracketing _____
2. *fleurons* _____
3. headpiece _____
4. tailpiece _____
5. trademarks _____
6. type specimen sheet _____

   A. An emblem designed to identify a book produced by a certain printer
   B. Decorative elements cast like type
   C. The connecting curves that unify a serif with the main stroke of a letter
   D. An ornamental design at the top of a page
   E. An ornamental design at the bottom of a page
   F. Displays a range of typographic sizes and styles—Erhard Ratdolt issued the first one upon his return to Augsburg, Germany from Venice

II. Match the key people with their accomplishments.
1. Francesco da Bologna, surnamed Griffo

2. Claude Garamond

3. Robert Granjon

4. Nicolas Jenson

5. Aldus Manutius

6. Geoffroy Tory

A. A master of the Royal Mint of Tours, France, he was a highly skilled cutter of the dies used for striking coin. He established Venice’s second press shortly after Johannes de Spira’s death, and became one of history’s greatest typeface designers and punch cutters, whose ability to design the spaces between the letters and within each form created an even tone throughout the page. The characters in his fonts aligned more perfectly than those of any other printer of his time. His types first used in Eusebius’s De praeparatione evangelica (Evangelical Preparation) present the full flowering of Roman type design.

B. An important humanist and scholar of the Italian Renaissance, he founded the Aldine Press, which published major works of the great thinkers of the Greek and Roman worlds and the prototype of the pocket book, which addressed the need for smaller, more economical books. Especially noteworthy is Aldine’s 1499 edition of Fra Francesco Colonna’s Hypnerotomachia Poliphili (The Strife of Love in a Dream or The Dream of Poliphilus), a masterpiece of graphic design that achieved an elegant harmony of typography and illustration that has seldom been equaled.

C. A brilliant typeface designer and punch cutter at Aldine Press whose initial project in Venice was a roman face for De Aetna by Pietro Bembo, in 1495, which survives today as the book text face Bembo.

D. A true renaissance man who introduced the apostrophe, the accent, and the cedilla to the French language and developed a uniquely French Renaissance school of book design and illustration, as seen in Champ Fleury (subtitled The art and science of the proper and true proportions of the attic letters, which are otherwise called antique letters, and in common speech roman letters). In Champ Fleury, first published in 1529, he discusses the history of roman letters and compares their proportions with the ideal proportions of the human figure and face, which influenced a generation of French printers and punch cutters. He became the most influential graphic designer of his century.
E. A typeface designer and punch cutter who was the first to work independently of printing firms, he established his type foundry to sell cast type ready to distribute into compositors’ cases. The types he cut during the 1540s achieved a mastery of visual form and a tighter fit that allowed closer word spacing and a harmony of design between capitals, lowercase letters, and italics. The influence of writing as a model diminished in his work, for typography was evolving into a language of form rooted in the processes of making steel punches, casting metal type, and printing instead of imitating forms created by hand gestures.

F. He created delicate italic fonts featuring beautiful italic capitals with swashes to replace regular capitals that were being used with italic lowercase letters. The *fleurons* he designed were modular and could be put together in endless combinations to make headpieces, tailpieces, ornaments, and borders.

**Image Identification**

I. Identify the designer, title, and date of the following images.

A. Fig. 7-7 and 7-8 _________________________________

B. Fig. 7-9 _________________________________

C. Figs. 7-16 and 7-17 _________________________________

D. Fig. 7-25 _________________________________

E. Fig. 7-27 _________________________________

F. Fig. 7-28 _________________________________

G. Fig. 7-37 _________________________________

H. Fig. 7-38 _________________________________

II. Match each of the images shown with the name of its designer.

1. Fig. 7-9 ____

2. Fig. 7-31 ____

3. Fig. 7-43 ____

   A. Simon de Colines
B. Erhard Ratdolt

C. Stephen and Matthew Daye
Chapter 8 – An Epoch of Typographic Genius

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Graphic design of the rococo era, 117
Caslon and Baskerville, 121
Origins of information graphics, 125
The imperial designs of Louis-René Luce, 125
The modern style, 126
The illuminated printing of William Blake, 128
The epoch closes, 130

Key Terms (in order of appearance; the first page number of their appearance is listed)

Romain du Roi, page 117
Folio, page 117
Old style, page 117
Pouce, page 117
Point, page 117
Type family, page 118
Engraving, page 119
Packing, page 123
Paper with laid finish, page 124
Paper with wove finish, page 124
Calendaring paper, page 124
Analytic geometry, page 125
Axes, page 125
Cartesian coordinates, page 125
Line (or fever) graph, page 125
Modern, page 127
Neoclassicism, page 127, (Fig. 8-17)
Maigre (thin), page 127
Gras (fat), page 127
Pied de roi, page 127
Stereotyping, page 128
Éditions du Louvre, page 128
Romanticism, page 129
Wood engraving, page 130

**Key People and Their Major Contributions** (in order of appearance; the first page number of their appearance is listed)

Pierre Simon Fournier le Jeune (1712–1768), page 117, (Figs. 8-4 through 8-7)
George Bickham the Elder (d. 1769), page 119, (Fig. 8-8)
John Pine (1690–1756), page 119, (Fig. 8-9)
William Caslon (1692–1766), page 121, (Fig. 8-10)
John Baskerville (1706–1775), page 122, (Figs. 8-11 through 8-13)
René Descartes (1596–1650), page 125,
William Playfair (1759–1823), page 125, (Fig. 8-14)
Louis-René Luce (d. 1773), page 125, (Fig. 8-15)
Giambattista Bodoni (1740–1813), page 126, (Figs. 8-16 through 8-18)
François Didot (1689–1757), page 127
Françoise-Ambroise Didot (1730–1804), page 127, (Fig. 8-19)
Pierre Didot (1761–1853), page 127, (Fig. 8-20)
Firmin Didot (1764–1836), page 127
William Blake (1757–1827), page 128, (Fig. 8-21)
William Bulmer (1757–1830), page 130, (Fig. 8-23)
Thomas Bewick (1753–1828), page 130, (Fig. 8-22)
Chapter 8 – Study Questions

Multiple Choice

1. In 1695, Louis Simonneau created large engraved copperplate prints of the master alphabets for France’s Imprimerie Royale, the royal printing office. These copperplate engravings were intended to establish graphic standards for the new typeface, which was called ____________.
   A. Garamond
   B. Romain du Roi
   C. Bodoni
   D. Baskerville

2. The Romain du Roi types began a new category of types called ____________ roman. The new typeface had increased contrast between thick and thin strokes, sharp horizontal serifs, and an even balance to each letterform.
   A. old style
   B. fraktur
   C. modern
   D. transitional

3. Pierre Simon Fournier le Jeune was influenced by the Romain du Roi and by the ornate French rococo style. Fournier le Jeune and his contemporary, Louis-René Luce, contributed to the French monarchy’s graphic expression of authority and opulence through their type designs and series of letterpress borders, ornaments, trophies, and other devices. Fournier le Jeune’s other typographic innovations include three of the following. Which one does NOT belong? __________
   A. The idea of a type family of various weights and widths, and roman and italic faces
   B. Moveable type
   C. Single-, double-, and triple-ruled lines up to 35.5 cm (about 14 inches)
4. The renowned English writing master and engraver ___________ was the most celebrated penman of his time. In 1743, he published *The Universal Penman*.

   A. John Baskerville  
   B. George Bickham  
   C. William Caslon  
   D. William Playfair

5. Englishman John Pine printed independent books such as *Opera Horatii* (*Works of Horace*), in which he ____________, resulting in the serifs and thin strokes of letterforms being reduced to delicate lines. The contrast in the text was dazzling and inspired imitation by typographic designers.

   A. included delicate copperplate engravings with typographic text  
   B. printed both the illustrations and text from one copper plate for each page  
   C. combined woodcuts and copperplate prints to illustrate the text  
   D. hand colored the neoclassical woodblock prints

6. In 1722, William Caslon, an engraver of gunlocks and barrels, designed Caslon Old Style and its italic version. ______________ introduced the typeface Caslon into the American colonies, where it was used extensively, including for the official printing of the Declaration of Independence.

   A. George Washington  
   B. William Blake  
   C. George Bickham  
   D. Benjamin Franklin

7. A native of rural Worcestershire, John Baskerville had “admired the beauty of letters” as a boy; as a young man, he became a master writing teacher and stonecutter. After making a fortune manufacturing japanned ware, he returned to his first love, the art of letters, and began to experiment with printing. His refined printing resulted from three of the four elements listed below. Which does **NOT** belong? _________

   A. elegant type  
   B. ink made of boiled linseed oil with resin  
   C. paper formed by a mold with fine, woven wires  
   D. arabesques in headpieces and tailpieces
8. Baskerville’s type design represents the zenith of the _________ style. His types are wider, the contrast between the weight of the thick and thin strokes greater, and the serifs flow smoothly out of the major strokes and terminate in fine points.

A. modern
B. old
C. transitional
D. Egyptian

9. ______________, the Scottish author and scientist who converted statistical data into symbolic graphics, introduced the first “divided circle” diagram (called a pie chart today) in his 1805 English translation of The Statistical Account of the United States of America. He created a new category of graphic design, now called information graphics.

A. John Baskerville
B. William Bewick
C. William Playfair
D. François Didot

10. The revolt against the French monarchy led to rejection of the lush designs that were popular during the reigns of Louis XV and XVI. All areas of design required a new approach to replace the outmoded rococo style. Giambattista Bodoni led the way in evolving new _________ and page layouts.

A. typefaces
B. bookbinding methods
C. papermaking methods
D. printing equipment

11. Giambattista Bodoni was asked to take charge of the Stamperia Reale, the official press of Ferdinand, Duke of Parma. He accepted, became the private printer of the court, and printed official documents and publications as well as projects he conceived and initiated himself. Bodoni redefined roman letterforms, giving them a more mathematical, geometric, and mechanical look. He reinvented the serifs by making them hairlines that formed sharp right angles to the upright strokes; the thin strokes of his letterforms were the same weight as the hairline serifs. His typeface design exemplifies the ________________.

A. old style
B. modern style
C. transitional style
D. sans-serif style

12. Late works printed by Giambattista Bodoni, such as Virgil’s *Opera (Works)* reflect the contemporary late eighteenth-century ___________ style, which demonstrated a return to “antique virtue.”

A. baroque
B. rococo
C. neoclassical
D. romantic

13. Giambattista Bodoni had planned a monumental type specimen book presenting three hundred type fonts that he had designed. After his death, his widow and foreman published the two-volume __________ in 1818. This massive work celebrated Bodoni’s genius and is a milestone in the history of graphic design.

A. *Éditions du Louvre*
B. *Essai d’une Nouvelle Typographie*
C. *Manuel Typographique*
D. Manuale Tipografico

14. The Didot family type foundry revised Pierre Simon Fournier le Jeune’s system of type measurement and created the ___________ system, which divided a French inch into seventy-two points. Type size was identified by the measure of the metal type body in points. In 1886, the Didot system was revised to suit the English inch and adopted as a standard point measure by American type foundries.

A. pied de roi
B. point
C. maigre
D. petit romain

15. Pierre Didot l’Aîné printed the *Éditions du Louvre* from the printing office once occupied by the Imprimerie Royale, The *Éditions du Louvre* series included ___________.

A. novels by Balzac
B. classics by Virgil
C. plays by Molière and Beaumarchais
D. essays by Voltaire and Rousseau

16. The process of __________ involves casting a duplicate of a relief printing surface by pressing a molding material (such as damp paper pulp, plaster, or clay) against it to make a matrix, then pouring molten metal into the matrix to form a duplicate printing plate. This achievement of Firmin Didot’s made longer press runs possible.
   A. stereotyping
   B. duplicate engraving
   C. packing
   D. double casting

17. British national pride led to the establishment of the ______________ in 1786, which printed editions of equal quality to the folio volumes of Paris and Parma.
   A. Tudor Press
   B. Oxford Editions
   C. Shakespeare Press
   D. London Editions

18. William Blake’s illustrations for his poetry are in the style known as ____________, which contrasted with the styles of layout and typography of Bodoni and Didot.
   A. the baroque
   B. the rococo
   C. neoclassicism
   D. romanticism

**True/False**

1. Old style typefaces retain calligraphic qualities and have bracketed serifs. _____

3. The wove finish paper used by John Baskerville had a textural pattern of horizontal lines created by heavier wire woven into a screen of thinner wire.

4. Cartesian coordinates on an x- and y-axis represent use a pair of numbers to represent a point in space and are named after the French philosopher, mathematician, and scientist René Descartes.

5. Types designed for the Imprimerie Royale brought about an upgrade of printing throughout Paris when they appeared in booksellers’ shops.

6. Louis-René Luce, who had designed letterpress borders and ornaments for the Imprimerie Royale, found that his designs were being used in political tracts after the French Revolution.

7. The rococo style of art, closely associated with the reign of King Louis XV, is best represented in the graphic designs of the Didot family of printers.

8. Thomas Bewick in England developed a “white line” technique of engraving, which came to be used as an illustration method in letterpress printing until it was replaced by the halftone printing method.

9. William Caslon modified Nicolas Jenson’s type designs for his own types.

10. Giambattista Bodoni was an important innovator in typographic design and processes, more so than the Didot family in Paris. They were rivals, and therefore were never influenced by each other.

**Image Identification**

I. Identify the designer, title, and date of the following images.

1. Fig. 8-1 and 8-2

2. Fig. 8-8

3. Fig. 8-9

4. Fig. 8-16

5. Fig. 8-20

II. Match each of the images shown with the name of its designer.

1. Fig. 8-7

2. Fig. 8-12
3. Fig. 8-14 ____

A. John Baskerville
B. William Playfair
C. Pierre Simon Fournier le Jeune
Introduction, 134
Innovations in typography, 135
The wood-type poster, 139
A revolution in printing, 140
The mechanization of typography, 141
Photography, the new communications tool, 142
The inventors of photography, 143
The application of photography to printing, 147
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**Key Terms** (in order of appearance; the first page number of their appearance is listed)

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Fat faces, page 135, (Fig. 9-2)
Egyptian type, page 137, (Fig. 9-3)
Bracket, page 137, (Fig. 9-5)
Clarendon typeface, page 137, (Fig. 9-6)
Tuscan-style letters, page 137, (Fig. 9-7)
Sans-serif type, page 138, (Fig. 9-12)
Wood type, page 139
Compositor, page 139
Fourdrinier machine, page 141
Linotype machine, page 141, (Figs. 9-17 and 9-18)
Monotype machine, page 142
Phototypography, page 142
Camera obscura, page 142, (Fig. 9-19)
Bitumen of Judea, page 143
Heliogravure, page 143, (Figs. 9-20 and 9-21)
Daguerreotype, page 144, (Fig. 9-22)
Photogenic drawings, page 145, (Fig. 9-23)
Photograms, page 145, (Fig. 9-23)
Negative, page 145, (Fig. 9-24)
Positive, page 145, (Fig. 9-25)
Photography, page 145
Calotype, page 145
Talbotype, page 145
The Pencil of Nature, page 145, (Fig. 9-26) (Fig. 9-40)
Collodion, page 145
Kodak camera, page 147, (Fig. 9-27)
Gelatin emulsion, page 147,
Halftone screen, page 147, (Figs. 9-31 and 9-32)
First photographic separation, page 149,
First photographic interview, page 149, (Fig. 9-36)
Victorian Era, page 152, (Fig. 9-40)
Great Exhibition or Crystal Palace Exhibition, page 153
Lithography, page 153
Planographic printing, page 153
_Chromolithographie_, page 153
Rotary lithographic press, page 153
Scrap, page 155
Toy books, page 159, (Fig. 9-54)
_Harper’s Illuminated and New Pictorial Bible_, page 161, (Fig. 9-57)
Electrotyping, page 161
_Harper’s New Monthly Magazine_, page 161, (Fig. 9-58)
_Harper’s Weekly_, page 161, (Fig. 9-59)
_Harper’s Bazaar_, page 161
_Harper’s Young People_, page 161
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**Key People and Their Major Contributions** (in order of appearance; the first page number of their appearance is listed)

Joseph Jackson (1733–1792), page 135
Thomas Cotterell (d. 1785), page 135, (Fig. 9-1)
Robert Thorne (d. 1820), page 135, (Fig. 9-2)
William Thorowgood (d. 1877), page 135
Vincent Figgins (1766–1844), page 137, (Fig. 9-3) (Fig. 9-13)
William Caslon IV (1781–1869), page 138, (Fig. 9-12)
Darius Wells (1800–1875), page 139
William Leavenworth (1799 –1860), page 139
Lord Stanhope, page 140, (Fig. 9-15)
Friedrich Koenig (1774–1883), page 140, (Fig. 9-16)
William Cowper (1731–1800), page 141
Nicolas-Louis Robert (1761–1828), page 141
John Gamble, page 141
Ottmar Mergenthaler (1854–99), 141, (Fig. 9-17)
Tolbert Lanston (1844–1913), page 142
American Type Founders Company (ATF), page 142
Joseph Niepce (1765–1833), page 143, (Figs. 9-20 and 9-21)
Louis-Jacques Daguerre (1799–1851), page 144, (Fig. 9-22)
William Henry Fox Talbot (1800–1877), page 145, (Fig. 9-23) (Fig. 9-26) (Fig. 9-40)
Sir John Herschel (1792–1871), page 145, (Figs. 9-24 and 9-25)
Frederick Archer (1813–1857), page 145
George Eastman (1854–1932), page 147, (Fig. 9-27)
John Calvin Moss (b. 1838), page 147, (Fig. 9-28)
Stephen H. Horgan (1854–1941), page 147, (Figs. 9-31 and 9-32)
Frederick E. Ives (1856–1937), page 149
Max Ives and Louis Levy, page 149
David Octavius Hill (1802–1870), page 149, (Fig. 9-33)
Robert Adamson (1821–1848), page 149, (Fig. 9-33)
Julia Margaret Cameron (1815–1879), page 149, (Fig. 9-34)
Frenchman F. T. Nadar (1820–1910), page 149, (Figs. 9-35 and 9-36)
Mathew Brady (c. 1823–1896), page 149, (Fig. 9-37)
Eadweard Muybridge (1830–1904), page 151, (Fig. 9-39)
Queen Victoria (1819–1901), page 152
A. W. N. Pugin (1812–1852), page 152, (Fig. 9-41)
Owen Jones (1809–1874), page 153, (Fig. 9-42)
Richard M. Hoe (1812–1886), page 153, (see Fig. 9-47)
John H. Bufford (d. 1870), page 153, (Figs. 9-43 and 9-44)
Louis Prang (1824–1909), page 154, (Figure 9-45)
L. Prang and Company, page 154
Walter Crane (1845–1915), page 159, (Fig. 9-54)
Randolph Caldecott (1846–1886), page 160, (Fig. 9-55)
Kate Greenaway (1846–1901), page 160, (Fig. 9-56)
James (1795–1869) and John (1797–1875) Harper, page 160
Wesley (1801–1870) and Fletcher (1807–1877) Harper, page 160
Harper and Brothers, page 160, (Fig. 9-57) (Fig. 9-58)
Thomas Nast (1840–1902), page 161, (Fig. 9-60)
Charles Dana Gibson (1867–1944), page 163, (Fig. 9-61)
Howard Pyle (1853–1911), page 163, (Fig. 9-62)
Volney Palmer, page 164
N. W. Ayer and Son, page 164
MacKellar, Smiths & Jordan Foundry, page 165, (Fig. 9-64)
Chapter 9 – Study Questions

Multiple Choice

1. During the Industrial Revolution—a radical process of social and economic change that occurred in England between 1760 and 1840—the role of graphic design and graphic communications expanded due to three the following situations. Which does NOT belong? __________

   A. Factory output increased and designers were needed to help market goods.
   B. Signage was needed to guide residents through the streets of fast-growing cities.
   C. Greater human equality sprang from the French and American Revolutions and led to increased public education and literacy.
   D. The production of printed materials increased due to advances in technology, which lowered per-unit costs.

2. During the Industrial Revolution, the range of typographic sizes and letterform styles exploded, and type grew steadily bolder. Around 1803, Robert Thorne of England created a major category of type design called __________, roman faces whose contrast and weight were increased by expanding the thickness of the heavy strokes. The ratio of the stroke width to the capital height was 1 to 2.5 or even 1 to 2.

   A. sans-serif faces
   B. Tuscan style faces
   C. Egyptian faces
   D. fat faces

3. A second major innovation of nineteenth-century type design were the antique faces, also known as __________, which convey a bold, machine-like feeling through slablike serifs, an even weight throughout the letters, and short ascenders and descenders. Vincent Figgins displayed a full range of antiques in his 1815 printing specimens.

   A. sans-serif faces
   B. Tuscan-style faces
   C. Egyptian faces
D. fat faces

4. A third major innovation of nineteenth-century type design were the __________ faces, which were introduced in an 1816 specimen book issued by William Caslon IV. The specimen looked a lot like an Egyptian face with its serifs removed, which is probably how Caslon designed it.

   A. sans-serif
   B. Tuscan-style
   C. Egyptian
   D. fat

5. Vincent Figgins’s 1815 printing specimens also showed the first nineteenth-century version of __________ letters whose serifs are extended and curved, sometimes with bulges, cavities, and ornaments.

   A. sans-serif
   B. Tuscan-style
   C. Egyptian
   D. fat-face

6. Each designer and foundry assigned its own name to type without serifs: William Caslon called them “Doric,” William Thorowgood named them “grotesque,” Stephenson Blake named its version “sans-surrph,” and in the United States, the Boston Type and Stereotype Foundry called them “Gothic.” But __________ called them “sans serif” in his 1832 specimen in recognition of the style’s most apparent feature, and the name stuck.

   A. Robert Thorne
   B. Vincent Figgins
   C. Woods and Sharwoods
   D. Robert Besley

7. An American printer named __________ experimented with hand-carved wooden types and in 1827 invented a lateral router that enabled the economical mass manufacture of wood types for display printing.

   A. Friedrich Koenig
   B. William Leavenworth
   C. William Cowper
8. In 1834, ___________ combined the pantograph with the router, making it so easy to introduce new wood-type fonts that customers were invited to send a drawing of one letter, based on which the manufacturer would design and produce the entire font—without any additional charge.

A. Friedrich Koenig

B. William Leavenworth

C. William Cowper

D. Darius Wells

9. In the late nineteenth century, poster houses specialized in letterpress display materials, and wood and metal types were used together freely in the design of handbills, posters, and broadsheets. Designers had access to a broad range of type sizes, styles, weights, and novel ornaments, and the design philosophy was to use it all. However, there was a practical reason for the extensive mixing of styles: the ___________.

A. desire to emphasize particular words

B. competition among printers for virtuoso designs

C. need to command the viewer's attention

D. limited number of characters in each font

10. Many people, including the writer Mark Twain, invested millions of dollars in the search for automatic typesetting. Ottmar Mergenthaler, a German immigrant working in a Baltimore machine shop, demonstrated his Linotype machine on July 3, 1886, in the office of the New York Tribune. The Linotype allowed the operator to compose an entire line of type by operating a keyboard that released a__________ for a particular character.

A. metal type

B. brass matrix

C. steel punch

D. wood type

11. ___________, the first person credited with producing a photographic image, was a lithographic printer of popular religious images who was searching for a new way to make printing plates other than by drawing.

A. Eadweard Muybridge
B. Sir John Herschel
C. Louis-Jacques Daguerre
D. Joseph Niepce

12. On January 7, 1839, Louis-Jacques Daguerre presented his process to the French Academy of Sciences. The members marveled at the clarity and minute detail of Daguerre’s early daguerreotype prints, one-of-a-kind images of predetermined size with polished surfaces that had a tendency to produce glare. In the daguerreotype “Paris Boulevard,” the Paris street appears almost empty because Daguerre made the image _________.

A. at daybreak when little activity took place on the streets
B. after a Paris uprising, and many residents had fled to rural areas
C. with a long exposure time, so moving subjects, such as carriages and pedestrians, were not recorded
D. after arranging a time with local residents, who cleared the streets

13. An adventurous photographer who lived in San Francisco and photographed Yosemite National Park, Alaska, and Central America, Eadweard Muybridge helped settle a $25,000 bet by documenting a trotting horse and demonstrating that the horse lifted all four feet off the ground simultaneously. The development of _________ was a logical extension of Muybridge’s innovation.

A. anatomical studies for surgeons
B. motion picture photography
C. train design
D. mechanical engineering (machines based on natural forms)

14. A ________ changes continuous tones into dots of varying sizes. Squares are formed by horizontal and vertical rules etched on pieces of glass. The amount of light that passes through each square determines the size of each dot.

A. photogram
B. daguerreotype
C. halftone screen
D. photoengraving

15. Victoria became queen of the United Kingdom of Great Britain and Ireland in 1837, and her reign spanned two-thirds of the nineteenth century. Three of the
following advances in graphic design occurred during the Victorian era. Which does NOT belong? ____________

A. An influential approach to children’s graphics through the development of toy books
B. The beginning of the monthly pictorial magazine and the weekly periodical news magazine
C. The first use of sans-serif typography as a running book text
D. The development of advertising agencies and conventions of persuasive selling

16. Graphics from the Victorian era can be identified by their ____________.

A. unified harmony
B. angry aggression
C. aesthetic confusion
D. playful classicism

17. The English designer, author, and authority on color ______________ became a major design influence in the mid-nineteenth century. During his mid-twenties, he traveled to Spain and the Near East and made systematic studies of Islamic design. He introduced Moorish ornament to Western design in his 1842–1845 book Plans, Elevations, Sections, and Details of the Alhambra, but his main influence was through his widely studied 1856 book of large color plates, The Grammar of Ornament. This catalog of design possibilities from Eastern and Western cultures, “savage” tribes, and natural forms became the nineteenth-century designer’s bible of ornament.

A. A. W. N. Pugin
B. Louis Prang
C. Owen Jones
D. William Sharp

18. Based on the simple chemical principle that oil and water do not mix, ____________ is the process of printing color pictures and lettering from a series of stone or zinc printing plates. Each color requires a separate stone or plate and a separate run through the press.

A. Letterpress
B. Chromolithography
C. Electrotyping
D. Wood engraving

19. The Victorians developed a more tender attitude toward children, and this was expressed through the development of colorful picture books for preschool children called ____________.
   A. toy books
   B. abecedarians
   C. illuminated Bibles
   D. nursery rhymes

20. As a teenager, ____________ apprenticed as a wood engraver and was twenty years old when Railroad Alphabet, a children’s picture book, was published in 1865. Breaking with the tradition of earlier children’s books, this illustrator sought to entertain rather than teach or preach to the young. His inspiration came from the flat color and flowing contours of Japanese woodblock prints.
   A. Randolph Caldecott
   B. Kate Greenaway
   C. Howard Pyle
   D. Walter Crane

21. ____________ developed a passion for drawing, possessed a unique sense of the absurd, and had an ability to exaggerate movement and facial expressions of both people and animals: dishes and plates are personified, cats make music, children are at the center of society, and adults become servants. This illustrator's humorous drawing style became a prototype for children's books and later, animated films.
   A. Randolph Caldecott
   B. Kate Greenaway
   C. Howard Pyle
   D. Walter Crane

22. James and John Harper launched a New York printing firm in 1817 and by mid-century, Harper and Brothers had become the largest printing and publishing firm in the world. With the rapid expansion of the reading public and the economies resulting from new technologies, publishers focused on large press runs and modest prices. In 1859, the firm opened the era of the pictorial magazine. Which of the following does NOT fall into this category? ____________
A. Harper’s New Monthly Magazine
B. Harper’s Illuminated and New Pictorial Bible
C. Harper’s Weekly
D. Harper’s Young People

23. Dissatisfied with the thin modern typefaces used in one of the magazines that his firm printed, Theodore Low De Vinne commissioned Linn Boyd Benton to design a blacker, more readable typeface that was slightly extended, with thicker thin strokes and short slab serifs. This typeface is called __________.

   A. Columbus
   B. Century
   C. Jenson Old Style
   D. Houghton

24. The development of advertising agencies such as N. W. Ayer and Son not only placed advertisements in periodicals but also provided additional services. Which services below did advertising agencies during the Victorian period NOT offer? __________

   A. market research
   B. art direction
   C. media selection
   D. copywriting

**True/False**

1. During the Industrial Revolution, the unity that had existed between design and production ended, and the specialization of the factory system fractured graphic communications into separate design and production components. _____

2. During the Industrial Revolution, type foundries modified letterforms and proportions and applied all manner of decoration to their alphabets because the mechanization of manufacturing processes made the application of decoration more economical and efficient. _____

3. The basic organizing principle of the wood-type poster was horizontal and vertical emphasis, which resulted from the need to lock all elements tightly on the press. _____
4. During the Industrial Revolution, inventors applied mechanical theory to the design of printing presses, and new presses with cast-iron parts eventually replaced the wooden hand presses, increasing efficiency and the size of the impression.

5. The Fourdrinier machine, from which an unending sheet of paper can be manufactured, is still in use today. It is a mechanized papermaking process that pours a suspension of fiber and water in a thin stream upon a vibrating wire-mesh conveyer belt.

6. The Linotype led to a surge in the production of periodicals and illustrated weeklies, including the *Saturday Evening Post* and *Collier’s*.

7. The typographic poster houses that produced letterpress posters began to decline after 1870, in part because of the increased use of colorful lithographic posters and the decline of traveling entertainment shows.

8. Before early experiments with photography, the camera obscura was used by artists to capture images without the use of a drawing utensil.

9. William Henry Fox Talbot’s calotypes were sharp and clear, in contrast to daguerreotypes.

10. In 1844, William Henry Fox Talbot began publishing *The Pencil of Nature*, which included twenty-four photographs in each issue.

11. In 1888, George Eastman, an American dry-plate manufacturer, introduced the Minolta camera, which allowed ordinary citizens to create images and preserve a graphic record of their lives and experiences.

12. Victorian type and hand-drawn lettering were characterized by simplicity with few embellishments.

13. In the four decades from 1860 to 1900, lithography was the dominant printing medium for advertising posters.

14. Scrap refers to printer’s proofs that lithographers discard after the plates of colors have been approved for the final printing.

15. During the nineteenth century, product packaging was printed in reverse on thin paper, then transferred to tin under great pressure. The paper backing was soaked off, leaving printed images on the tin plate.

16. Charles Dana Gibson’s images of young women, called Gibson Girls, were featured in *Scribner’s* magazine posters and established a canon of physical beauty in the mass media. Gibson was as meticulous in his selection of type as he was in his renderings of idealized beauty.
Matching

I. Match the key people with their major contributions.

1. William Henry Fox Talbot ____
2. Sir John Herschel ____
3. Stephen H. Horgan ____
4. Julia Margaret Cameron ____
5. Mathew Brady ____

A. Sent a score of his photographic assistants to document the American Civil War, which had a profound impact upon the public’s romantic ideas about war. His 1862 photograph “Dunker Church and the Dead” was shot in the aftermath of the Battle of Antietam, the bloodiest battle of the Civil War.

B. An eminent astronomer and chemist, was the first to use sodium thiosulfate to fix the photographic image on paper, thereby halting the action of light. He also named the process of photography (from the Greek photos graphos, meaning “light drawing”).

C. Invented the halftone screen.

D. Pioneered a process of making images without the use of a camera by holding objects over paper treated with silver compounds and exposing it to light. He called these images photogenic drawings, and they formed the basis for both photography and photographic printing plates.

E. Received a camera and the equipment for processing collodion wet plates as a forty-ninth birthday present and extended the artistic potential of photography through portraiture that recorded “faithfully the greatness of the inner man as well as the features of the outer man.”

Image Identification

I. Identify the designer, title, and date of the following images.

1. Fig. 9-2 ________________________________________________
2. Fig. 9-18 _______________________________________________
3. Fig. 9-22 _______________________________________________
II. Match each of the images shown with the name of its designer.

1. Fig. 9-21 ____  
2. Fig. 9-39 ____  
3. Fig. 9-61 ____

A. Joseph Niepce  
B. Charles Dana Gibson  
C. Eadweard Muybridge
Chapter 10 – The Arts and Crafts Movement and Its Heritage

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The Century Guild, 169
The Kelmscott Press, 172
The private press movement, 176
A book-design renaissance, 180

**Key Terms** (in order of appearance; the first page number of their appearance is listed)

The Elements of Euclid, page 167, (Fig. 10-2)
Arts and crafts movement, page 167
Red House, page 168
Societies and guilds, page 169
*The Century Guild Hobby Horse*, page 169
*Wren’s City Churches*, page 171, (Fig. 10-6)
Private press movement, page 171
Golden typeface, page 172, (Fig. 10-15) (see Fig. 7-2)
Troy typeface, page 172, (Fig. 10-17)
Chaucer typeface, page 172
*The Works of Geoffrey Chaucer*, page 172, (Figs. 10-18 and 10-19)
*Essex House Psalter of 1902*, page 176, (Fig. 10-22)
*Doves Press Bible*, page 177, (Fig. 10-23)
Brook typeface, page 179, (Fig. 10-26)
Netherlands arts and crafts, page 180
Lutetia typeface, page 181, (Fig. 10-30)
Camelot typeface, page 185
Graphic designer, page 186
Caledonia typeface, page 186
Centaur typeface, page 187, (Fig. 10-40)
Cloister family, page 188, (Fig. 10-44)
Cheltenham family, page 188
Century Schoolbook typeface, page 188, (Fig. 10-44)

**Key People and Their Major Contributions** (in order of appearance; the first page number of their appearance is listed)

William Pickering (1796–1854), page 167, (Fig. 10-1) (Fig. 10-2)
William Morris (1834–1896), page 167, (Fig. 10-3) (Fig. 10-4) (Fig. 10-16) (Fig. 10-15) (Figs. 10-18 and 10-19)
John Ruskin (1819–1900), page 167
Edward Burne-Jones (1833–1898), page 168, (Figs. 10-18 and 10-19)
Philip Webb (1831–1915), page 168
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Arthur H. Mackmurdo (1851–1942), page 169, (Fig. 10-5) (Fig. 10-6) (Fig. 10-7) (Fig. 10-8) (Fig. 10-9)
Selwyn Image (1849–1930), page 169, (Figs. 10-10 and 10-11)
Herbert Horne (1864–1916), page 169, (Fig. 10-12) (Fig. 10-14)
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Walter Crane, page 172, (Fig. 10-17), (Fig. 10-20)
Arts and Crafts Exhibition Society, page 172
Kelmscott Press, page 172, (Fig. 10-16) (Fig. 10-17) (Figs. 10-18 and 10-19)
William H. Hooper (1834–1912), page 172
Charles R. Ashbee (1863–1942), page 176
Essex House, page 176
Essex House Press, page 176
T. J. Cobden-Sanderson (1840–1922), page 177, (Fig. 10-23)
Doves Press, page 177, (Fig. 10-23)
Edward Johnston (1872–1944), page 177, (Fig. 10-23)
Ashendene Press, page 177, (Fig. 10-24)
C. H. St. John Hornby, page 177, (Fig. 10-24)
Elbert Hubbard (1856–1915), page 179
Lucien Pissarro (1863–1944), page 179, (Fig. 10-26) (Fig. 10-27)
Ergagny Press, page 179, (Fig. 10-27)
Sjoerd H. De Roos, page 180, (Fig. 10-28)
Jan van Krimpen (1892–1958), page 181, (Fig. 10-29) (Fig. 10-30)
Charles Nypels (1895–1952), page 181, (Fig. 10-31) (Fig. 10-32)
A. A. M. (Sander) Stols (1900–1973), page 182, (Fig. 10-33)
Jean François van Royen (1878–1942), page 183, (Fig. 10-34)
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De Kunera Pers, page 185
Rudolph Koch (1876–1934), page 185, (Fig. 10-35) (Fig. 10-36)
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Frederic W. Goudy (1865–1947), page 185, (Fig. 10-37) (Fig. 10-38)
Camelot Press, page 185
Booklet Press, page 185
Village Press, page 185, (Fig. 10-37)
Village Letter Foundry, page 186

William Addison Dwiggins (1880–1956), page 186, (Fig. 10-39) (Fig. 10-40) (Fig. 10-41) (Fig. 10-42)

Riverside Press, page 186

Beatrice Warde, page 187

American Type Founders Company (ATF), page 188, (Fig. 10-43)

Morris F. Benton (1872–1948), page 188, (Fig. 10-43) (Fig. 10-44)

Thomas Maitland Cleland (1880–1964), page 188, (Fig. 10-43)

Bertram Goodhue (1869–1924), page 188
Chapter 10 – Study Questions

Multiple Choice

1. William Pickering played an important role in the separation of graphic design from printing production. Pickering’s 1847 edition of Oliver Byrne’s *The Elements of Euclid*, a geometry text, marked a break from tradition because ______________.
   A. color was used to identify the lines and shapes in the diagrams
   B. it used sans-serif type
   C. it was bound in a soft cover
   D. it was commissioned by a national school system

2. John Ruskin, an English social critic, writer, and artist inspired the philosophy of the arts and crafts movement. He rejected the mercantile economy and pointed toward the union of __________ and labor in service to society as exemplified in the design and construction of the medieval Gothic cathedral.
   A. art
   B. religion
   C. the Renaissance guilds
   D. the factory system

3. As a twenty-six-year-old architect, Arthur Mackmurdo met William Morris and was inspired by his ideas and accomplishments in applied design. He led the group that established the Century Guild, which aimed to elevate the design arts. They incorporated Renaissance and __________ design ideas into their work. Their designs provide one of the links between the arts and crafts movement and the floral stylization of art nouveau. Some of their swirling organic forms, in fact, seem to be pure art nouveau in their conception and execution.
   A. medieval
   B. Mesopotamian
   C. incunabula
   D. Japanese
4. William Morris, a pivotal figure in the history of design, was concerned about the problems of industrialization and the factory system and tried to implement John Ruskin’s ideas. Committed to recapturing the beauty of incunabula books, Morris established the Kelmscott Press and designed three typefaces for use in books printed at the press. Two were based on incunabula types, but ___________ was based on Nicolas Jensen’s Venetian roman faces, which were designed between 1470 and 1476.

A. Chaucer
B. Troy
C. Golden

5. The private press movement, which included Kelmscott, Doves, and Essex House Presses, was most concerned with ___________.

A. quick production to meet consumer needs
B. the integration of industrial technologies to improve printing
C. the promotion and dissemination of great literature
D. regaining high standards of design, materials, and workmanship

6. ___________, architect, graphic designer, jeweler, silversmith, and follower of John Ruskin, established a workshop in 1888 called the Guild of Handicraft, which was inspired by socialism and the ideals of the arts and crafts movement. In 1890, the guild leased Essex House and formed the Essex House Press, where its design masterpiece, the Essex House Psalter of 1902, was produced. The Psalter was based on a unique graphic program for each psalm that consisted of a roman numeral, the Latin title in red capitals, an English descriptive title in black capitals, an illustrated woodcut initial, and the body of the psalm.

A. William Morris
B. Charles R. Ashbee
C. T. J. Cobden-Sanderson
D. Emery Walker

7. Kelmscott Press’s The Works of Geoffrey Chaucer included all of the following EXCEPT: ___________

A. Eighty-seven woodcut illustrations from drawings by Edward Burne-Jones
B. Fourteen large borders and eighteen small frames designed by William Morris
C. The use of seven different colors of ink

D. The Chaucer typeface, developed specifically for the book by William Morris

8. The long-range effect of William Morris’s body of work was _______ throughout the world.

A. an angry rejection of machine production

B. a revival of interest in the medieval past

C. a significant upgrade of book design

D. interest in one-of-a-kind works of art

9. The most important of the German type designers during the early twentieth century was Rudolf Koch, who designed the Neuland typeface. He was deeply mystical, medieval in his viewpoints, and a devout Catholic who felt that the _________ was a supreme spiritual achievement of humanity.

A. alphabet

B. book

C. Bible

D. printing press

10. In America, the arts and crafts movement had an influence on the revitalization of typography and book design. Frederic W. Goudy had a passionate love of letterforms and, inspired by the Kelmscott Press, he established the Camelot Press and then designed Camelot, his first typeface. Goudy went on to design a total of 122 typefaces, many of which were based on ___________ type designs.

A. German incunabula

B. Morris’s Kelmscott

C. transitional

D. Venetian and French Renaissance

11. In the 1920s, ___________ was the first to use the term “graphic designer” to describe his professional activities. He was a book designer who established a house style for the Alfred A. Knopf publishing company, where he designed hundreds of books. He also designed Caledonia, one of the most widely used book faces.

A. Frederic Goudy
12. Inspired by Kelmscott Press books, the interest of ___________ shifted toward the total design of books. He joined the Riverside Press of the Houghton Mifflin Company in 1896 and designed books with a strong arts and crafts influence. In 1900, Riverside established a special department for high-quality limited editions, and he was the designer for sixty limited editions over the next twelve years. Centaur, his 1915 typeface design, is one of the finest of the numerous fonts inspired by Nicolas Jenson. He applied the ideal of the beautifully designed book to commercial book production and set the standard for twentieth-century book design.

A. Frederic Goudy  
B. William Addison Dwiggins  
C. Albert Bruce Rogers  
D. Morris Benton  

13. The head of typeface development at the American Type Founders Company, Morris F. Benton designed important revivals of many typefaces, including one of Nicolas Jenson’s, under the name Cloister. He carefully studied human perception and reading comprehension to develop ___________ Schoolbook, a type designed for and widely used in textbooks.

A. Franklin Gothic  
B. Souvenir  
C. Cheltenham  
D. Century  

14. This company established an extensive typographic research library and produced revivals of past typeface designs, such as Bodoni and Garamond.

A. Morris and Company  
B. The Century Guild  
C. American Type Founders Company (ATF)  
D. Klingspor Type Foundry
15. __________ established Eragny Press, where both the past and the present inspired them. They collaborated on designing, wood engraving, and printing. Their books combined the traditional sensibilities of the private press movement with an interest in the blossoming art nouveau movement and expressionism.
   A. Bruce Rogers and Beatrice Warde
   B. Lucien and Esther Pissarro
   C. T. J. Cobden-Sanderson and Emery Walker
   D. Arthur H. Mackmurdo and Herbert Horne

16. In the Netherlands, the traditional vanguard, led by Sjoerd H. De Roos and __________, the preeminent book designer of his generation, sought to revive the printing arts through a return to traditional standards. Their guidelines included symmetrical layouts, tranquil harmony and balance, careful margin proportions, proper letter and word spacing, single traditional typefaces in as few sizes as possible, and skillful letterpress printing. They believed the typographer should first serve the text and otherwise remain in the background.
   A. Jean François van Royen
   B. Charles Nypels
   C. A. A. M. Stols
   D. Jan van Krimpen

17. In 1912, Type Foundry Amsterdam issued __________, the first typeface designed and produced in the Netherlands for over a century. Designed by Sjoerd H. de Roos, the text face was based on fifteenth-century Venetian types. This was followed by eight more type designs from de Roos.
   A. Hollandsche Mediaeval
   B. Stymie Medium
   C. Centaur
   D. Cloister

True/False

1. According to John Ruskin, art and society separated after the Renaissance. Industrialization and technology brought the separation to a critical stage. _____

2. John Ruskin, along with other artists, believed that beautiful things were valuable simply because they were beautiful. _____
3. William Morris, whose own family was poor, sought quality goods for all. _____

4. The first book to be printed in Morris’ Kelmscott Press was the 556-page *The Works of Geoffrey Chaucer*. _____

5. The Doves Press Bible is best known for its exquisite line illustrations and decorative elements. _____

6. The art of calligraphy was greatly influenced by the research and teachings of Edward Johnston, who gave up his medical studies for the life of a scribe. _____

7. William Morris strongly supported the Guild of Handicraft, Charles Ashbee’s program to unify the teaching of design with workshop experience. _____

8. In a *Hobby Horse* article, Selwyn Image defined art as painting and crafts as applied arts such as printing. _____

9. Ironically, while William Morris was returning to printing methods of the incunabula, he used modular, interchangeable, and repeatable elements; he applied industrial production methods to the printed page. _____

10. Lucien and Esther Pisarro of Eragny Press were best known for purely typographic books, which contained no illustrations or decorations. _____

11. Elbert Hubbard’s Roycrofters arts and crafts center in upstate New York brought relatively high-quality products to ordinary people who could not likely have afforded them otherwise. _____

12. Those involved in the Dutch book design movement at the turn of the twentieth century viewed the Industrial Revolution as a blessing and soon adopted the fully automated methods of printing. _____

**Image Identification**

1. Identify the designer, title, and date of the following images.

   1. Fig. 10-2 __________________________________________________  
   2. Fig. 10-6 __________________________________________________  
   3. Fig. 10-10 __________________________________________________ 
   4. Fig. 10-22 __________________________________________________ 
   5. Fig. 10-23 __________________________________________________ 
   6. Fig. 10-37 __________________________________________________ 

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II. Match each of the images shown with the name of its designer.

1. Fig. 10-18 ____
2. Fig. 10-32 ____
3. Fig. 10-36 ____

A. Charles Nypels
B. William Morris
C. Rudolf Koch
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Klingspor Foundry, page 217, (Fig. 11-71; see also Fig. 12-32)

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Chapter 11 – Study Questions

Multiple Choice

1. During Japan’s Tokugawa period, the country adopted an official policy of national seclusion. This was a time of economic expansion, internal stability, and flourishing cultural arts. The entertainment districts of major cities were called “the floating world,” and became the focus of inspiration for many artists. The earliest Japanese ukiyo-e (“pictures of the floating world”) were __________ depicting these entertainment districts of urban Japan.

   A. lithographic prints
   B. screen paintings
   C. stone engravings
   D. copper reliefs

2. Katsushika Hokusai apprenticed as a woodblock engraver before turning to drawing and painting. During seven decades of artistic creation, he produced an estimated thirty-five thousand works that spanned the gamut of ukiyo-e subjects, including album prints, genre scenes, historical events, illustrations for novels, landscape series, nature studies, and privately commissioned prints for special occasions called surimono. He is perhaps best known for ______________, his series of prints that depicts the external appearances of nature and symbolically interpret the vital energy forces found in the sea, winds, and clouds surrounding Japan’s famous twelve-thousand-foot volcano.

   A. Hokusai Soga
   B. Famous Places in Edo: A Hundred Views
   C. Fifty-three Stages of the Tokaido
   D. Thirty-six Views of Mount Fuji

3. Although art nouveau artists did not use a historicist approach to their designs, they were influenced by past as well as contemporary art. All but one of the examples below were influences on art nouveau. Which does NOT belong?

   __________

   A. Japanese decorative designs
   B. the rococo style
4. Jules Chéret, the father of the modern poster, featured beautiful young women in his posters. At a time when options for women were limited, these self-assured, happy women were depicted enjoying life to the fullest, wearing low-cut dresses, dancing, drinking wine, and even smoking in public. Dubbed ___________, these female archetypes became the new role model for women in the late Victorian period.

A. Victorianettes  
B. “fallen women”  
C. Chérettes  
D. les enfants terribles

5. Upon viewing Aubrey Beardsley’s illustrations in a new edition of Thomas Malory’s Morte d’Arthur, ___________ was so angry that he considered legal action because he believed Beardsley had vulgarized the design ideas of the Kelmscott style by replacing the formal, naturalistic borders with more stylized, flat patterns.

A. Walter Crane  
B. William Morris  
C. Jan Toorop  
D. Edward Burne-Jones

6. In 1894, Oscar Wilde’s Salomé received widespread notoriety for the obvious erotic sensuality of ___________’s illustrations. Late-Victorian English society was shocked by the celebration of evil, which reached its peak in an edition of Aristophanes’s Lysistrata. Banned by English censors, it was widely circulated on the Continent.

A. Eugène Grasset  
B. Charles Ricketts  
C. Jan Toorop  
D. Aubrey Beardsley

7. There is an affinity between the posters and prints of Théophile-Alexandre Steinlen and his friend and sometime rival, Henri de Toulouse-Lautrec. Steinlen’s first commissions were drawings for ___________. He had a mania for cats and during the 1880s and 1890s became a prolific illustrator. His radical political
views, socialist affiliations, and anticlerical stance led him toward asocial realism, and he chose to depict poverty, exploitation, and the working class.

A. the Moulin Rouge
B. Le Chat Noir
C. the actress Sarah Bernhardt
D. the printer Charles Verneau

8. On Christmas Eve 1894, the young Czech artist Alphonse Mucha was at the Lemercier’s printing company correcting proofs for a friend when the printing firm’s manager burst into the room, upset because the famous actress Sarah Bernhardt was demanding a new poster for the play Gismonda by New Year’s Day. Mucha was the only artist available, so he received the commission. He used the basic pose from an earlier poster of Bernhardt in Joan of Arc that had been done by __________.

A. Jules Chéret
B. Eugène Grasset
C. Henri de Toulouse-Lautrec
D. Théophile Alexandre Steinlen

9. During an 1895 visit to the Boston Public Library, Will Bradley studied the collection of small, crudely printed books from colonial New England called chapbooks. These inspired a new direction in graphic design that became known as the chapbook style. All of the following traits except one apply. Which does NOT apply? ______________

A. Caslon types with wide letter spacing
B. a mix of roman, italic, and all-capital type
C. yellow covers
D. sturdy woodcuts and plain rules

10. Many trademarks of art nouveau origin have been in continuous use since the 1890s, such as those of General Electric and Insel-Verlag, both of which are characterized by __________.

A. geometric ordering of space
B. being contained in squares
C. the use of sans serif type
D. swirling organic lines
11. A member of the Flemish Group of Twenty, Henri van de Velde had enormous influence on design and architecture. His only poster design was for Tropon, ____________, for which he created labeling and advertisements in 1899. Rather than communicating information about the product or depicting people using it, van de Velde engaged the viewer with symbolic form and color.

A. a salad oil  
B. a concentrated food supplement  
C. a coffee concentrate  
D. a cocoa powder

12. In his teaching and writings, Belgian designer Henri van de Velde became a vital source for the development of twentieth-century architecture and design theory. He taught that all branches of art share a common language of form and are of equal importance to the human community. He demanded ____________. He saw ornament not as decoration but as a means of expression that could achieve the status of art.

A. appropriate materials, functional forms, and a unity of visual organization  
B. machine-made objects that appeared to be handmade  
C. abolishing the past and starting anew  
D. a lot of decoration and ornament

13. The Dutch book design style of Nieuwe Kunst spanned roughly the fourteen years between 1892 through 1906. After 1895, mathematics was seen as a creative source in itself, with symmetry and rationalism each playing a part. Some of the special qualities of the movement’s book design are described below. Which one does NOT apply? ____________

A. unpredictable  
B. eccentric  
C. geometric  
D. illustrative

14. One of Dutch designer Jan Toorop’s biggest sources of inspiration was ____________, which can be seen especially in his use of silhouette, his linear style, and the forms, expressions, and hair styles of his female figures.

A. Renaissance era use of space  
B. Javanese culture
C. geometry  
D. medieval illustration

15. While German Jugendstil shared common characteristics with French and English art nouveau, one distinction was that it reflected the German interest in ____________, as can be seen in the blending of contradictory influences in Eckmannsschrift by Otto Eckmann.
   A. medieval letters  
   B. landscapes in deep space  
   C. value gradients and shading for volume  
   D. traditional figurative subjects

16. The new art had different names in different countries. Which of the following was NOT one of them? ____________
   A. Nieuwe Kunst  
   B. Jugendstil  
   C. Sezessionstil  
   D. Surimono

True/False

1. *Ukiyo-e* refers to an art movement beginning in the seventeenth century and ending in the nineteenth century, a time period when Japan actively sought trade with Western European countries. _____

2. In Japan, *ukiyo-e* practitioners were considered mere artisans, but they captivated European artists, who drew inspiration from their calligraphic line drawing, abstraction and simplification, flat color and silhouettes, unconventional use of black shapes, and decorative patterns. _____

3. The late-nineteenth-century Western mania for all things Japanese is called *japanned ware*. _____

4. Unlike contemporary literary artists, visual artists working in the art nouveau style rejected realism in favor of the metaphysical and the sensuous. _____

5. Eugène Grasset, like his rival Jules Chéret, incorporated exuberant women in his poster illustrations. _____
6. The coloring book style of Aubrey Beardsley used a thick black contour drawing to lock forms into flat areas of color in a manner similar to medieval stained-glass windows. 

7. Although Charles Ricketts’s page designs were influenced somewhat by William Morris, his work tended to be much lighter, more open, and geometric. 

8. The Netherlands’ relationship with the Dutch East Indies (Indonesia) allowed Dutch designers to access the traditional craft of batik. Its introduction as a contemporary design medium was one of Holland’s important contributions to the international art nouveau movement. 

9. Henri de Toulouse-Lautrec developed a journalistic, illustrative style that captured the nightlife of La Belle Époque (“The Beautiful Era”)—a term used to describe late-nineteenth-century Paris. 

10. Art nouveau was first seen in America on Harper’s magazine covers illustrated by Will Bradley, one of the two major American practitioners of art nouveau–inspired graphic design and illustration. 


12. Ethel Reed became the first woman in England to achieve national prominence for her work as a graphic designer and illustrator. 

13. Henri van de Velde’s works are early examples of the modernist integration of form and function; their forms communicated their uses objectively and clearly. 

14. Eckmannschrift, designed by Otto Eckmann, attempted to revitalize typography by combining fraktura with modern type. 

15. Jugendstil artist Otto Eckmann abandoned painting in order to turn his full attention to the applied arts. 

16. Jugend, an art nouveau–style magazine popular in Germany, allowed each week’s cover designer to design a different logotype to match his or her own illustration. 

17. Italian turn-of-the-century posters were characterized by sensuous exuberance and elegance like that of France’s La Belle Époque. 

**Image Identification**

1. Identify the designer, title, and date of the following images.

   1. Fig. 11-7
II. Match each of the images shown with the name of its designer.

1. Fig. 11-3 _____
2. Fig. 11-5 _____
3. Fig. 11-11 _____
4. Fig. 11-20 _____
5. Fig. 11-32 _____
6. Fig. 11-43 _____
7. Fig. 11-65 _____

A. Jules Chéret
B. Katsushika Hokusai
C. Aubrey Beardsley
D. Alphonse Mucha
E. Kitagawa Utamaro
F. Will Bradley
G. Otto Eckmann
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The Glasgow School (The Four), page 222, (Figs. 12-2 through 12-4)
Sezessionstil (The Vienna Secession), page 225, (Figs. 12-9 through 12-16) (Fig. 12-23)
Ver Sacrum (Sacred Spring) (Ver Sacrum), page 225, (Figs. 12-11 through 12-16)
Line and Form, page 231, (Fig. 12-24)
Wiener Werkstätte (Vienna Workshops), page 231, (Figs. 12-29 through 12-31)
Celebration of Life and Art: A Consideration of the Theater as the Highest Symbol of a Culture, page 234, (Fig. 12-33)
Berthold Foundry, page 235, (Fig. 12-35)
Akzidenz Grotesk, page 235, (Fig. 12-35)
Behrensschrift, page 235, (Fig. 12-36)
Deutsche Werkbund (German Association of Craftsmen), page 237
Gesamtkultur, page 238
Sachlichkeit, page 238
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Frank Lloyd Wright (1867–1959), page 221, (Fig. 12-1)
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J. Herbert McNair (1868–1955), page 221, (Fig. 12-3)
Jessie Marion King (1876–1949), page 225, (Fig. 12-5)
Talwin Morris (1865–1911), page 225, (Figs. 12-6 through 12-8)
Gustav Klimt (1862–1918), page 225, (Fig. 12-9)
Joseph Maria Olbrich (1867–1908), page 225
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Koloman Moser (1868–1918), page 225, (Fig. 12-10) (Fig. 12-13) (Fig. 12-16) (Figs. 12-22 and 12-23) (Fig. 12-19)
Adolf Loos (1870–1933), page 229
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J. L. Mathieu Lauweriks (1864–1932), page 236, (Fig. 12-38)
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Frank Pick (1878–1941), page 242, (Fig. 12-51)
Edward Johnston (1872–1944), page 243, (Figs. 12-50 and 12-51)
Chapter 12 – Study Questions

Multiple Choice

1. As the nineteenth century drew to a close and the twentieth century began, designers across the disciplines of architectural, fashion, graphic, and product design searched for new forms of expression. Technological and industrial advances fed these concerns. The artists and designers discussed in Chapter 12 moved away from the floral and curvilinear elements of art nouveau toward a more____________ style of composition.

   A. Victorian
   B. international
   C. geometric
   D. Celtic

2. During the final years of the nineteenth century, American architect ____________ was becoming known to European artists and designers not only for his architecture, but for his design interests in furniture, fabrics, wallpapers, and stained-glass windows. He rejected historicism and saw space as the essence of design. His repetition of rectangular zones and use of asymmetrical spatial organization were adopted by other designers.

   A. Robert Venturi
   B. Frank Lloyd Wright
   C. Charles Rennie Mackintosh
   D. J. Herbert McNair

3. “The Studio” and its reproductions of work by Aubrey Beardsley and Jan Toorop had a strong influence on a young group of Scottish artists who became friends at the Glasgow School of Art. The students began to collaborate and were soon christened ____________. The rising verticality and integration of flowing curves with a rectangular structure are hallmarks of their mature works, as shown here in Margaret Macdonald’s 1896 bookplate design (Fig. 12-2).

   A. Hobbyhorses
   B. Dadaists
   C. Futurists
4. Among those who drew inspiration from the Glasgow School were ________________, whose medieval-style fantasy illustrations accompanied by stylized lettering influenced fiction illustration throughout the twentieth century, and ________________, who became the art director of the Glasgow publishing firm Blackie’s, which provided a forum for applying the geometric spatial division and lyrical organic forms of the Glasgow group to mass communication.

A. Josef Hoffmann and J. Herbert McNair  
B. Joseph Maria Olbrich and Adolf Loos  
C. Jessie Marion King and Talwin Morris  
D. Frances Macdonald and Charles Rennie Macintosh

5. Financed by industrialist Fritz Wändorfer, the ______________ was an outgrowth of Sezessionstil and sought a close union of the fine and applied arts in the design of lamps, fabrics, books, greeting cards, and other printed matter. The goal was to offer an alternative to poorly designed, mass-produced articles and trite historicism. Decoration was used only when it served these goals.

A. Wiener Werkstätte (Vienna Workshops)  
B. Deutsche Werkbund (German Association of Craftsmen)

6. The most beautiful of the turn-of-the-century magazines was the Vienna Secession’s elegant ______________, published from 1898 until 1903. A continuously changing editorial staff, design responsibility handled by a rotating committee of artists, and unpaid contributions of art and design were all focused on experimentation and graphic excellence. The publication was more of a design laboratory than a magazine and enabled designers to experiment with innovative graphics as they explored the merger of text, illustration, and ornament into a lively unity.

A. Jugend  
B. The Chap-Book  
C. Black and White  
D. Ver Sacrum

7. The German artist, architect, and designer ______________ played a major role in charting a course for design in the first decade of the twentieth century. He sought typographic reform and was an early advocate of sans-serif typography. In 1900, he set the twenty-five-page booklet *Celebration of Life and Art: A Consideration of the Theater as the Highest Symbol of Culture* in sans-serif type. The German typographic historian Hans Loubier believed this booklet may
represent the first use of sans-serif type as running book text. His work pushed twentieth-century design toward rational geometry as an underlying system for visual organization. He introduced the concept of *Gesamtkultur* (total design) to industry with the first comprehensive visual identification system that included graphic design, architecture, and product design.

A. Charles Rennie Mackintosh  
B. Peter Behrens  
C. Talwin Morris  
D. Josef Hoffmann

8. ____________ is a sans-serif typeface designed by the Berthold Foundry. Ten variations were designed: four weights plus three expanded and three condensed versions, which allowed compositors to achieve contrast and emphasis within one family of typefaces. This was a major step in the evolution of the unified and systemized type family.

A. Behrenschrift  
B. Akzidenz Grotesque

9. In 1916, dissatisfaction with typography on Underground materials prompted Frank Pick to commission the eminent calligrapher __________ to design an exclusive, patented typeface for the world’s first underground electric railway system, which had opened in London in 1890. Railway Type is a sans-serif typeface whose strokes have consistent weight; however, the letters have the basic proportions of classical Roman inscriptions. The designer achieved absolute functional clarity by reducing the characters to the simplest possible forms: the M is a perfect square whose forty-five degree diagonal strokes meet in the exact center of the letter. The O is a perfect circle. All of the letters have a similar elemental design. The lowercase I has a tail to avoid confusion with the uppercase I.

A. Alfred Roller  
B. Peter Behrens  
C. Edward Johnston  
D. Walter Crane

10. Three schools that were influential in the evolution of graphic design and design education were introduced in Chapter 12. Which one does not belong? __________

A. Glasgow School of Art in Scotland  
B. The Bauhaus in Germany
C. Vienna School for the Applied Arts in Austria
D. Düsseldorf school of Arts and Crafts in Germany

**True/False**

1. Dutch architect J. L. Mathieu Lauweriks, who was fascinated with geometric form, developed grids that began with a square circumscribed around a circle and made numerous permutations by subdividing and duplicating this basic structure. _____

2. The Berthold Foundry designed a family of ten sans-serif typefaces that were variations on one original font, Akzidenz Grotesk (called Standard in the United States). This marked a major step in the evolution of the unified and systematized type family and had a major influence on twentieth-century typography. _____

**Image Identification**

I. Identify the designer, title, and the date of the following images.

1. Fig. 12-5 ____________________________________________________________________________
2. Fig. 12-6 ____________________________________________________________________________
3. Fig. 12-19 ____________________________________________________________________________
4. Fig. 12-20 ____________________________________________________________________________
5. Fig. 12-26 ____________________________________________________________________________
6. Fig. 12-30 ____________________________________________________________________________
7. Fig. 12-33 ____________________________________________________________________________

II. Match each of the three images shown with the correct name of the designers.

1. Fig. 12-23 ____
2. Fig. 12-27 ____
3. Fig. 12-46 ____

A. Alfred Roller
B. Peter Behrens
C. Koloman Moser
Chapter 13 – The Influence of Modern Art

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**Key Terms** (in order of appearance; the first page number of their appearance is listed)

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Synthetic cubism, page 249
Futurism, page 250
Manifesto, page 250
*Parole in libertà*, page 251, *(Figs. 13-8 through 13-12)*
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Artist’s book, page 256
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Salvador Dali (1904–1989), page 264, (Fig. 13-44)
Käthe Schmidt Kollwitz (1867–1945), page 265, (Fig. 13-46)
Wassily Kandinsky (1866–1944), page 265, (Fig. 13-47)
Paul Klee (1879–1940), page 265, (Fig. 13-48)
Henri Matisse (1869–1954), page 266
Francis Bruguière (1880–1945), page 266
Alvin Langdon Coburn (1882–1966), page 266, (Fig. 13-50)
Man Ray (1890–1976), page 266
Multiple Choice

1. Which form of cubism depicted the essence of an object rather than a representation of the subject matter based on its outward appearance? _______
   
   A. Analytical cubism
   
   B. Synthetic cubism

2. ______________ moved cubism away from the initial impulses of its founders and took Paul Cézanne’s famous dictum, “treat nature in terms of the cylinder and the sphere and the cone,” far more seriously than any other cubist. The letterforms in his graphic work, such as those shown in Fig. 13-7, pointed the way toward geometric letterforms. His flat planes of color, urban motifs, and the hard-edged precision of his machine forms helped define the modern sensibility after World War I.
   
   A. Juan Gris
   
   B. Fernand Léger
   
   C. Georges Braque
   
   D. Pablo Picasso

3. Futurism was launched when the Italian ______________ Filippo Marinetti published his “Manifesto of Futurism” in the Paris newspaper Le Figaro on February 20, 1909. His stirring words established futurism as a revolutionary movement through which all artists could test their ideas and forms against the new realities of a scientific and industrial society.
   
   A. painter
   
   B. sculptor
   
   C. poet
   
   D. businessman

4. Dada artists claim to have invented photomontage, the technique of manipulating found photographic images to create jarring juxtapositions and chance associations. ______________ created outstanding work in the medium.
A. Pablo Picasso
B. Annie French
C. Fernand Léger
D. Hannah Höch

5. Guillaume Apollinaire’s unique contribution to graphic design was the 1918 publication of a book entitled ____________, poems in which the letterforms are arranged to form a visual design, figure, or pictograph, such as the poem entitled “Il Pleut.”
   A. La Fin du Monde
   B. Line and Form
   C. Merz
   D. Calligrammes

6. A Die Brücke artist, ____________ had great empathy for the suffering of women and children. Her figurative paintings and woodblock prints were forged with thick, raw strokes, often becoming bold statements about alienation, anxiety, and despair.
   A. Hannah Höch
   B. Jessie Marion King
   C. Margaret Macdonald
   D. Käthe Kollwitz

7. “Der Blaue Reiter” artists sought a spiritual reality beyond the outward appearance of nature and explored problems of form and color. Two founding members of this group included Russian émigré ____________ and the Swiss artist ____________.
   A. Fortunato Depero and Hugo Ball
   B. Wassily Kandinsky and Paul Klee
   C. Tristan Tzara and Jean Arp
   D. Salvador Dali and Max Ernst

8. ____________ used the harsh disjunctions of photomontage as a propaganda weapon and was an innovator in the preparation of mechanical art for offset printing. A Berlin Dadaist, he held revolutionary political beliefs and oriented many of his artistic activities toward visual communications to raise public consciousness and promote social change. In a 1930 poster, he attacked the
press: a head wrapped in newspaper appears over the headline, "Whoever reads the bourgeois press turns deaf and blind...." His montages are the most urgent in the history of the photomontage.

A. Max Ernst
B. Kurt Schwitters
C. John Heartfield
D. Marcel Duchamp

9. ____________ frequently made photographic exposures with moving beams of light. He also used distortion, printing through textures, and multiple exposures as he searched for dreamlike images and new interpretations of time and space in his professional photography assignments, such as the poster design for the London Underground, Fig. 13-54.

A. Kurt Schwitters
B. Man Ray
C. Paul Klee
D. Wassily Kandinsky

True/False

1. Dada writers and artists were concerned with shock, protest, and nonsense. _____

2. Man Ray was the first photographer to explore the creative potential of solarization, the reversal of the tonal sequence in the denser areas of a photographic negative or print, which adds strong black contours to the edges of major shapes. _____

Matching

1. Amid the social, political, cultural, and economic turbulence of the early twentieth century, visual art and design experienced a series of creative revolutions that brought the role of art and design in society into question, along with the long-held values and approaches to organizing space. These modern movements influenced the graphic language of form and visual communications in the twentieth century. Match the descriptions of the five movements with the names of the movements listed below.
1. Expressionism ____

2. Surrealism ____

3. Cubism ____

4. Futurism ____

5. Dada ____

A. An explosive and emotionally charged poetry that defied correct syntax and grammar set this movement in motion. The movement’s leaders initiated the publication of manifestos, typographic experimentation, and publicity stunts, forcing poets and graphic designers to rethink the very nature of the typographic word and its meaning.

B. Young French writers and poets in Paris sparked this movement in 1924. They sought the “more real than real world behind the real”—the world of intuition, dreams, and the unconscious realm explored by Freud. They professed a poetic faith in man and his spirit, believing humanity could be freed from its social and moral conventions, and that intuition and feeling could be freed as well. In his 1924 manifesto, the movement’s founder imbued the world with all the magic of dreams, the spirit of rebellion, and the mysteries of the subconscious.

C. Reacting against a world gone mad, the participants in this movement claimed to be anti-art and had a strong negative and destructive element. Its writers and artists were concerned with shock, protest, and nonsense. They bitterly rebelled against the horrors of the world war, the decadence of European society, the shallowness of blind faith in technological progress, and the inadequacy of religion and conventional moral codes. Rejecting all tradition, they sought complete freedom. Through a synthesis of spontaneous chance actions with planned decisions, they further rid typographic design of its traditional precepts and continued the concept of letterforms as concrete visual shapes, not just phonetic symbols.

D. By innovating a new approach to visual composition, this movement changed the course of painting and graphic design. Its visual inventions became a catalyst for experiments that pushed art and design toward geometric abstraction and new approaches to pictorial space.

E. This movement emerged as an organized movement in Germany before World War I and was characterized by the tendency to depict not objective reality, but subjective emotions and personal responses to subjects and events. Revolting against conventional aesthetic forms and cultural norms, the movement’s leaders felt a deep sense of social crisis, especially during the years surrounding World War I. Many of its adherents rejected
the authority of the military, education, government, and the emperor; felt deep empathy for the poor and social outcasts, who were frequent subjects of their work; and believed art was a beacon pointing toward a new social order and improving the human condition.

II. Match the key words with the correct definitions.

1. collage _____
2. manifesto _____
3. pattern poetry _____
4. calligrammes _____
5. simultaneity _____
6. photomontage _____

A. A public declaration of principles, policies, or intentions
B. Concurrent existence or occurrence, such as the presentation of different views in the same work of art
C. The technique of manipulating found photographic images to create jarring juxtapositions and chance associations
D. A composition of elements glued onto a surface
E. Guillame Apollinaire’s name for poems in which the letterforms are arranged to form a visual design, figure, or pictograph
F. The futurist concept that writing and/or typography could become a concrete visual that expressed auditory effects by such devices as omitting capitalization and punctuation, varying word spacing to signify pauses, and using multiple punctuation marks for emphasis

III. Match the techniques listed below with the definitions listed at right.

1. Photomontage _____
2. Solarization _____
3. Automatism _____
A. This technique seeks uninhibited truth through stream-of-consciousness writing.

B. This technique manipulates found photographic images to create jarring juxtapositions and chance associations.

C. This technique adds strong black contours to the edges of major shapes and is achieved by giving a latent or developing photographic image a second exposure to light.

**Image Identification**

I. Identify the designer, the movement, and date of the following images.

1. Fig. 13-9 ________________________________
2. Fig. 13-29 ________________________________
3. Fig. 13-42 ________________________________
4. Fig. 13-46 ________________________________
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The poster goes to war, 274

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Post-cubist pictorial modernism, 278

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*Plakatstil* (poster style), page 270

*Sachplakat*, page 274, (Fig. 14-17)

*Mein Kampf*, page 278

Swastika, page 278

Art deco, page 279

Zigzag line, page 279

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**Key People and Their Major Contributions** (in order of appearance; the first page number of their appearance is listed)

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William Nicholson (1872–1949), page 269
Dudley Hardy (1866–1922), page 270
Lucian Bernhard (1883–1972), page 270, (Fig. 14-7)
Hans Rudi Erdt (1883–1918), page 271, (Figs. 14-8 and 14-9)
Julius Gipkens (b. 1883), page 271, (Fig. 14-10)
Julius Klinger (1876–1950), page 271, (Fig. 14-19)
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Niklaus Stoeklin (1896–1982), page 274
Herbert Leupin (1814–99), page 274
Otto Lehmann (b. 1865), page 275, (Fig. 14-24)
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A. M. Cassandre (1901–1968), page 279
Jean Carlu (1900–1989), page 283
Paul Colin (1892–1989), page 283, (Fig. 14-51)
Austin Cooper (1890–1964), page 283, (Fig. 14-52)
Joseph Binder (1898–1972), page 284
Abram Games (1914–1996), page 285
Chapter 14 – Study Questions

Multiple Choice

1. The modern-art movements and the communication needs of world war affected the approach to poster design. The shift from naturalism, which began with Henri Toulouse-Lautrec, continued with the work of James Pryde and William Nicholson during their brief advertising career. But it was Lucian Bernhard who inspired the design approach that emerged in Germany early in the twentieth century known as ______________.
   A. pictorial modernism
   B. Sachplakat
   C. Plakatstil
   D. art deco

2. Bernhard's approach, and the subsequent style that he inspired, was characterized by three of the following. Which does NOT belong? __________
   A. concept
   B. flat color
   C. product name
   D. dominant, simple images

3. Brothers-in-law James Pryde and William Nicholson, both respected academic painters, opened an advertising design studio in 1898. To protect their reputations as artists, they took on the pseudonym ____________.
   A. Priester
   B. Manoli
   C. Metropolis
   D. The Beggarstaffs

4. During their brief collaboration, James Pryde and William Nicholson developed a new technique that was later named ____________. Their 1895 poster for Harper's Magazine (Fig. 14-2) is an example that uses this technique.
   A. collage
B. *Plakatstil*

C. *Sachplakat*

D. art deco

5. In Switzerland, even after modern production procedures such as offset printing began to be used for most poster production, traditional lithographic crafts were retained in what was known as Basel realism. The works of Niklaus Stoecklin, Otto Baumberger, and Herbert Leupin, which were characterized by a simple, laconic, and sometimes hyperrealistic approach, were called ___________ because they featured individual objects as the main subject.

A. collage

B. *Plakatstil*

C. Sachplakat

D. art deco

6. The poster reached the zenith of its importance as a communications medium during World War I (1914–18). Which of the following communications goals does NOT belong to the role of the poster during this period? ______________

A. Posters were used to recruit soldiers and to boost public morale to maintain popular support for the war effort.

B. Posters helped raise money to finance the war and prevent government bankruptcy.

C. Posters rallied public support for conservation and home gardening to lessen the risk of acute shortages while resources were diverted to the war effort.

D. Posters promoted radio programs that kept listeners informed about the conditions of the war.

E. Posters assailed the enemy for its barbarism and threat to civilization.

7. A direct application of ___________ can be seen in this poster by Austin Cooper (Fig. 14-52), which attempts to spark memories of the viewer’s earlier Continental visits by presenting fragments and glimpses of landmarks.

A. futurism

B. expressionism

C. Dada

D. cubism
8. ____________ of Munich began his career as a graphic illustrator with work commissioned by *Jugend* magazine as early as 1904. James Pryde and William Nicholson were his initial inspiration; however, he applied a rich range of texture and decorative pattern to his images. During the first half of the twentieth century, his work evolved with changing social conditions. Hitler’s ideas gained a visual presence through his work as the repetition of his images reinforced Nazi propaganda. As the Nazi dictatorship consolidated its power, his work moved toward a bold, imperial, and militaristic style of tight, heavy forms and strong, tonal contrasts. His reputation as a significant graphic designer was seriously tarnished by his close collaboration with the Nazis.

   A. Edward McKnight Kauffer
   B. A. M. Cassandre
   C. Ludwig Hohlwein
   D. James Montgomery Flagg

9. During World War I, posters of the Central Powers countries (led by Germany and Austria-Hungary) differed from those of the Allied Powers countries (led by France and Great Britain and joined by the United States in 1917). Posters from the United States, for example, tended to be more ____________ than those from Germany.

   A. expressive
   B. restrained
   C. symbolic
   D. illustrative

10. All of the following but one were influences on art deco. Which one does NOT belong? __________

   A. cubism
   B. the Vienna Secession
   C. Käthe Schmidt Kollwitz
   D. Egyptian motifs

11. His love of letterforms is evidenced by an exceptional ability to integrate words and images into a total composition. He achieved concise statements by combining telegraphic copy (text), powerful geometric forms, and symbolic imagery created by simplifying natural forms into almost pictographic silhouettes. Among his well-known works are the Dubonnet advertising campaign (Fig. 14-
the 1931 poster for the ocean liner L'Atlantique, and typefaces for the Deberny and Peignot type foundry, including Bifur, a quintessential art deco display typeface. __________

A. Lord Horatio Kitchener
B. A. M. Cassandre
C. Edward McKnight Kauffer
D. James Montgomery Flagg

12. In 1924, Austin Cooper made an interesting foray into the use of pure geometric shape and __________ to solve a communications problem for the London Underground, in which he symbolized the temperature changes as one leaves the cold street in winter or the hot street in summer for the greater comfort of the underground railway.

A. color
B. solarization
C. textura typography
D. photomontage

True/False

1. In the style known as Plakatstil, which emerged during the 1920s and 1930s, streamlining, zigzag, and decorative geometry were used to express the modern era of the machine while still satisfying a passion for decoration that carried over from art nouveau. _____

2. The posters “L’Atlantique” (“The Atlantic”) and “L’Étoile du Nord” (“North Star Paris-to-Amsterdam Night Train”) include areas of value gradients (shading), which soften the severe geometry of the work. _____

3. While the poster was an important vehicle for propaganda during World War I, it was secondary to the new medium of radio. _____

Image Identification

I. Identify the designer, the style, and the date of the following images.

1. Fig. 14-3 ________________________________
2. Fig. 14-7 ________________________________
II. Match the image with the name of its designer.

1. Fig. 14-36 ____
2. Fig. 14-38 ____
3. Fig. 14-53 ____

A. Austin Cooper
B. Ludwig Hohlwein
C. Edward McKnight Kauffer
Chapter 15 – A New Language of Form

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Russian suprematism and constructivism, 287
De Stijl, 299
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Key Terms (in order of appearance; the first page number of their appearance is listed)

Cubo-futurism, page 287
Suprematism, page 287
Constructivists, page 289
Tectonics, page 289
Texture, page 289
Construction, page 289
PROUNS, page 290, (Fig. 15-8)
Novyi lef (Left Front of the Arts), page 294
Serial painting, page 295, (Fig. 15-29)
Infantilism, page 298, (Figs. 15-38 and 15-39) (Figs. 15-40 and 15-41)
De Stijl, page 299, (Figs. 15-42 through 15-44)
De Stijl journal, page 300
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Mechano-faktura theory, page 304, (Fig. 15-62)
Roklama mechano, page 307
Key People and Their Major Contributions (in order of appearance; the first page number of their appearance is listed)

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Salomon Telingater, page 295, (Fig. 15-30)
Georgii (1900–1933) and Vladimir Augustovich (1899–1982) Stenberg, page 295, (Figs. 15-31 through 15-33)
Gustav Klutsis (1895–1944), page 295, (Figs. 15-34 through 15-37)
Vladimir Vasilevich Lebedev (1891–1967), page 296, (Figs. 15-38 through 15-41)
Théo van Doesburg (1883–1931), page 299, (Fig. 15-43)
Piet Mondrian (1872–1944), page 299, (Fig. 15-42)
Bart Anthony van der Leck (1876–1958), page 299, (Figs. 15-44 and 15-45)
Vilmos Huszár (1884–1960), page 299, (Figs. 15-46 and 15-47)
Jacobus Johannes Pieter Oud (1890–1963), page 299, (Fig. 15-55)
László Moholy-Nagy (1895–1946), page 300, (Figs. 15-69 and 15-70)
Gerrit Rietveld (1888–1964), page 303, (Fig. 15-54)
Henryk Berlewi (1894–1967), page 304, (Fig. 15-62)
Ladislav Sutnar (1897–1976), page 307, (Figs. 15-64 through 15-66)
Karel Teige (1900–1951), page 307, (Fig. 15-67)
Chapter 15 – Study Questions

1. The constructivist ideal was best exemplified by ____________, who was influenced by Kasimir Malevich and applied suprematist theory to constructivism, as evident in the 1919 poster “Beat the Whites with the Red Wedge” (Fig. 15-9), in which he transformed suprematist design elements into political symbolism for communication purposes.

   A. Ilya Zdanevich
   B. El Lissitzky
   C. Vladimir Tatlin
   D. Alexander Rodchenko

2. By 1920, a deep ideological split developed in Russia concerning the role of the artist in the new communist state. Some artists argued that art should remain an essentially spiritual activity apart from the utilitarian needs of society. They rejected a social or political role, believing the sole aim of art to be realizing perceptions of the world by inventing forms in space and time. Others renounced “art for art’s sake” to devote themselves to industrial design, visual communications, and applied arts serving the new communist society. For example, ____________ turned from sculpture to the design of a stove that would provide maximum heat from minimum fuel, and ____________ gave up painting for graphic design and photojournalism.

   A. Edward McKnight Kauffer and A. M. Cassandre
   B. Vladimir Tatlin and Alexander Rodchenko
   C. Frank Lloyd Wright and Peter Behrens
   D. Kasimir Malevich and Wassily Kandinsky

3. One of the most influential book designs of the 1920s was ______________, a forty-eight-page pictorially illustrated portfolio that El Lissitzky edited with Dadaist Hans Arp. The format for this book was an important step toward the creation of a visual program for organizing information. Other important design considerations included asymmetrical balance, silhouette halftones, a skillful use of white space, and sans-serif typography with bold rules, an early expression of the modernist aesthetic.

   A. For the Voice
   B. Notes of a Poet
   C. The Isms of Art
D. Basic Concepts of Form-Making

4. ______________, the master of propaganda photomontage, referred to the medium as “the art construction for socialism.” He used the poster as a means of extolling Soviet accomplishments, as in the 1931 poster “Building Socialism Under the Banner of Lenin.” His work has been compared to John Heartfield’s powerful political posters.

   A. Vladimir Augustovich Stenberg
   B. Alexander Rodchenko
   C. El Lissitzky
   D. Gustav Klutsis

5. With the growth of the Soviet children’s book industry under Vladimir Lenin’s New Economic Policy of the 1920s, ______________ became the father of the twentieth-century Russian picture book. He cultivated “infantilism” in his work by borrowing the spontaneous and naïve techniques of children’s art. In his picture books, he illustrated Marxist parables on the superiority of the Soviet system to capitalism.

   A. Gustav Klutsis
   B. Vladimir Vasilevich Lebedev
   C. Georgii Stenberg
   D. Saloman Telingater

6. The de Stijl movement’s founder and guiding spirit ______________ was de Stijl, so it is understandable that de Stijl as an organized movement did not survive his death at age forty-seven in 1931.

   A. Théo van Doesburg
   B. Piet Mondrian
   C. Bart Anthony van der Leck
   D. Vilmos Huszár

7. After World War I, constructivist ideas were adopted by artists in other countries, including Czechoslovakia, Hungary, and Poland. In Czechoslovakia, ______________ became the leading supporter and practitioner of functional design. He advocated the constructivist ideal and the application of design principles to every aspect of contemporary life. His book jackets and editorial designs evinced an organizational simplicity and typographic clarity, giving graphic impact to the communication. A good example is the 1929 cover design for Getting Married, in
which a triangle creates a strong focal point, unifies the silhouetted figures, and becomes the main structural element in a delicately balanced composition.

A. Henryk Berlewi
B. Ladislav Sutnar
C. László Moholy-Nagy

8. In 1921, the Hungarian ___________ moved to Berlin, where El Lissitzky, Kurt Schwitters, and Théo van Doesburg were frequent visitors to his studio. He saw type as form and texture, to be composed with a rectangle, lines, and spatial intervals in order to achieve dynamic equilibrium through which clarity of communication and harmony of form could be achieved, as in his design for Arthur Lehning’s avant-garde publication _i10_ (Fig. 15-70). This is one of the purest examples of de Stijl principles applied to typography.

A. László Moholy-Nagy
B. Ladislav Sutnar
C. Henryk Berlewi

9. The Polish designer ___________ evolved his _mechano-faktura_ theory while working in Germany in 1922 and 1923. He believed that modern art was filled with illusionistic pitfalls, so he mechanized painting and graphic design into a constructed abstraction that abolished any illusions of three dimensions, as on page 6 of the 1925 _Putos Chocolates_ brochure (Fig. 16-63).

A. László Moholy-Nagy
B. Ladislav Sutnar
C. Henryk Berlewi

**Image Identification**

I. Match the figure with the name of its designer or appropriate movement.

1. **Fig. 15-18** __________
   A. El Lissitsky
   B. Théo van Doesburg
   C. Alexander Rodchenko

2. **Fig. 15-17** __________
   A. El Lissitsky
B. Théo van Doesburg
C. Alexander Rodchenko

3. **Fig. 15-23**
   A. El Lissitsky
   B. B. Théo van Doesburg
   C. Alexander Rodchenko

4. **Fig. 15-43**
   A. constructivism
   B. Dada
   C. suprematism
   D. de Stijl

5. **Fig. 15-48**
   A. Piet Mondrian
   B. Bart van der Leck
   C. Théo van Doesburg
   D. Gerrit Rietveld

II. During the postwar years, when Edward McKnight Kauffer and A. M. Cassandre were applying synthetic cubism’s planes to the poster in England and France, a formal typographic approach to graphic design emerged in Holland and Russia. Match the description of the movement listed below with the name of the movement.

1. The leaders of this movement rejected both utilitarian function and pictorial representation, instead seeking the “expression of feeling, seeking no practical values, no ideas, no promised land.” They believed that the essence of the art experience was the perceptual effect of color. Visual form became the content, and expressive qualities developed from the intuitive organization of the forms and colors. _____

2. This movement symbolized the creative process and the search for laws of visual organization. The movement’s leader developed a painting style that he called PROUNs (“projects for the establishment of a new art”), which introduced three-dimensional illusions that both receded behind the
picture plane and projected forward form the picture plane. He developed visual ideas about balance, space, and form in his paintings, which became the basis for his graphic design and architecture. He put increasing emphasis on graphic design, as he moved from private aesthetic experience into the mainstream of communal life. ____

3. This movement was launched in the Netherlands in the late summer of 1917. Working in an abstract geometric style, the leaders of this movement sought universal laws of equilibrium and harmony for art, which could then be a prototype for a new social order. They worked within a prescribed visual vocabulary that was reduced to the use of primary colors (red, yellow, and blue) with neutrals (black, gray, and white), straight horizontal and vertical lines, and flat planes limited to rectangles and squares. They advocated the absorption of pure art by applied art. The spirit of art could then permeate society through architectural, product, and graphic design. Under this system, art would not be subjugated to the level of the everyday object; the everyday object (and, through it, everyday life) would be elevated to the level of art. ____

A. de Stijl
B. suprematism
C. constructivism

III. As with earlier movements, unique publications spread ideas about suprematism, constructivism, and de Stijl. Match the descriptions of the magazines below with the titles of the publications.

1. Théo van Doesburg edited and published this journal. He designed a logo for the magazine with letters constructed from an open grid of squares and rectangles. The publication advocated the absorption of pure art by applied art and became a natural vehicle for expressing the movement’s principles through graphic design. ____

2. During the early 1920s, the Soviet government offered official encouragement to the new Russian art and even sought to publicize it through an international journal created by Ilya Ehrenburg and El Lissitzky. They saw the publication as a meeting point for new works from different nations in which parallel yet isolated art and design movements that had occurred during a seven-year period of isolation caused by revolution and war could be showcased. The title was chosen because the editors believed that art meant the creation of new objects. ____
3. Alexander Rodchenko designed this magazine for all fields of the creative arts. His design style was rooted in strong, static horizontal and vertical forms. Overprinting, kiss registration, and photomontage were used regularly. Rodchenko delighted in contrasting bold, blocky type and hard-edged shapes against the softer forms and edges of photomontages, as shown in Chapter 17 on the magazine’s cover designs. ____

A. *Novyi lef* (Left Front of the Arts)

B. *De Stijl* magazine

C. *Veshch/Gegenstand/Objet*
Chapter 16 – The Bauhaus and the New Typography

Introduction, 310
The Bauhaus at Weimar, 310
The impact of László Moholy-Nagy, 312
The Bauhaus at Dessau, 315
The final years of the Bauhaus, 317
Jan Tschichold and Die Neue Typographie (The New Typography), 319
Typeface design in the first half of the twentieth century, 323
The Isotype movement, 326
The prototype for the modern map, 327
Independent voices in the Netherlands, 328
New approaches to photography, 333

Key Terms (in order of appearance; the first page number of their appearance is listed)

The Bauhaus, page 310
Bauhaus Manifesto, page 310
Utopia, page 310
Typophoto, page 313, (Fig. 16-8)
Photoplastics, page 314, (Fig. 16-11)
Die Neue Typographie, page 319
Kabel, page 324, (Fig. 16-40) (see Fig. 10-35)
Isotype, page 326, (Fig. 16-42)
Typotekt, page 330
Key People and Their Major Contributions (in order of appearance; the first page number of their appearance is listed)

Walter Gropius (1883–1969), page 269
Johannes Itten (1888–1967), page 311
Lyonel Feininger (1871–1956), page 312
László Moholy-Nagy, page 312
Gyorgy Kepes (1906–2002), page 313
Herbert Bayer (1900–1985), page 316, (Fig. 16-19)
Joost Schmidt (1893–1948), page 317, (Fig. 16-22)
Ludwig Mies van der Rohe (1886–1969), page 318
Jan Tschichold (1902–1974), page 319
Eric Gill (1882–1940), page 323
Stanley Morison (1889–1967), page 324
Paul Renner (1878–1956), page 324
Rudolf Koch, page 324, (Fig. 16-40)
Otto Neurath (1882–1945), page 326
Marie Reidermeister (1898–1959), page 326
Gerd Arntz (1900–1988), page 326, (Fig. 16-43)
Rudolf Modley (1906–1976), page 327
Henry C. Beck (b. 1903), page 327
Piet Zwart (1885–1977), page 328, (Fig. 16-50)
Hendrik N. Werkman (1882–1945), page 331
Paul Schuitema (1897–1973), page 331
Willem Sandberg (1897–1984), page 333, (Figs. 16-57 and 16-58)
Herbert Matter (1907–1984), page 333, (Fig. 16-62)
Walter Herdeg (1908–1995), page 334, (Fig. 16-65)
Multiple Choice

1. Located in _____________ from 1919–1924, the Bauhaus was the German design school where ideas from all the advanced art and design movements were explored, combined, and applied to problems of functional design and machine production. Workshops were taught both by an artist who focused on form, and a craftsman who focused on production. At first the workshops were organized like medieval guilds—master, journeyman, and apprentice. The original slogan of the school, “A Unity of Art and Handicraft,” was later replaced by “Art and Technology, A New Unity.” A new seal designed by Oscar Schlemmer replaced the 1919 Bauhaus seal, which is attributed to Johannes Auerbach.
   
   A. Dessau, Germany
   B. Weimar, Germany
   C. Dusseldorf, Germany
   D. Ulm, Germany

2. Due to growing tension between the Bauhaus and the city government, on December 26, 1924, the director and masters of the school all signed a letter of resignation. Two weeks later the students signed a letter informing the government that they would leave with the masters. In April 1925, the Bauhaus moved to _____________. A new building complex was designed, and the curriculum was reorganized in the fall of 1926.
   
   A. Dessau, Germany
   B. Weimar, Germany
   C. Dusseldorf, Germany
   D. Ulm, Germany

3. ____________’s passion for typography and photography inspired a Bauhaus interest in visual communications and led to important experiments in the unification of these two arts. He saw graphic design, particularly the poster, as evolving toward the “typophoto.” He called this objective integration of word and image to communicate a message with immediacy “the new visual literature.” The 1923 “Pneumatik” poster is an experimental typophoto. He also believed that the photogram, because it allowed an artist to capture a patterned interplay of
light and dark on a sheet of light-sensitive paper without a camera, represented the essence of photography.

A. Herbert Bayer  
B. Walter Gropius  
C. László Moholy-Nagy  
D. Joost Schmidt

4. During the period from 1925–1932, the typography workshop at the Bauhaus taught by _____________ solicited printing orders from local businesses and made typographic design innovations along functional and constructivist lines. Sans-serif type was used almost exclusively. This professor experimented with flush-left, ragged-right typesetting; established visual hierarchy after careful analysis of content; and explored open composition on an implied grid and a system of sizes for type, rules, and pictorial images. He designed a universal type that reduced the alphabet to clear, simple, and rationally constructed forms. He argued that we print and write with two alphabets (capital and lowercase) that are incompatible in design and that two totally different signs represent the same spoken sound.

A. Walter Gropius  
B. László Moholy-Nagy  
C. Herbert Bayer  
D. Josef Albers

5. The accomplishments and influences of the Bauhaus transcend its fourteen-year life, thirty-three faculty members, and approximately 1,250 students. It created a viable, modern design movement spanning architecture, product design, and visual communications. A modernist approach to visual education was developed, and the faculty’s class preparation and teaching methods made a major contribution to visual theory. In dissolving the boundaries between fine and applied arts, the school tried to bring art into a close relationship with life by way of design, which was seen as a vehicle for social change and cultural revitalization. The _____________, which dominated the city council, canceled faculty contracts in 1932. The faculty voted to dissolve the school, and on August 10, 1933, it closed.

A. Thuringian government  
B. Nazi Party  
C. Catholic Church  
D. Bolsheviks
6. Much of the creative innovation in graphic design during the first decades of the twentieth century occurred as part of the modern-art movements and at the Bauhaus, but these explorations toward a new approach to graphic design were often seen and understood only by a limited audience outside the mainstream of society. It was ______________, the son of a designer and sign painter in Leipzig, Germany, who applied the new design approaches to a wide audience of printers, typesetters, and designers through his book Die Neue Typographie (The New Typography). He was disgusted with the “degenerate typefaces and arrangements” and sought to find a new, asymmetrical typography to express the spirit, life, and visual sensibility of the day. His objective was functional design by the most straightforward means, and he declared the aim of every typographic work to be the delivery of a message in the shortest, most efficient manner.

A. Mies van der Rohe
B. Walter Gropius
C. Herbert Bayer
D. Jan Tschichold

7. Which typeface is associated with Paul Renner? _________
   A. Times New Roman
   B. Leichte Kabel
   C. Futura
   D. Universal Alphabet

8. Which typeface is associated with Herbert Bayer? _________
   A. Times New Roman
   B. Leichte Kabel
   C. Futura
   D. Universal Alphabet

9. Which typeface is associated with Rudolph Koch? _________
   A. Times New Roman
   B. Leichte Kabel
   C. Futura
   D. Universal Alphabet
10. Which typeface is associated with Stanley Morison, the typographic advisor to the British Monotype Corporation, who supervised the design of a major twentieth-century typeface that was introduced on October 3, 1932? _________

A. Times New Roman  
B. Leichte Kabel  
C. Futura  
D. Universal Alphabet

11. An architectural apprentice dropout tutored by Edward Johnston at the turn of the nineteenth century, type designer ___________ embraced historical influences, such as the Trajan capitals, medieval manuscripts, the incunabula, Baskerville, and Caslon. He designed Golden Cockerel, which is a revitalized roman incorporating both old style and transitional qualities. He also designed Perpetua, an antique roman face inspired by the inscription on Trajan’s column but subtly reconceived to accommodate the needs of typecasting and printing. Another typeface he designed was named after him. His work for The Four Gospels (Fig. 16-36) demonstrates a synthesis of old and new.

A. Paul Renner  
B. Jakob Erbar  
C. Rudolph Koch  
D. Eric Gill

12. The important movement toward developing a “world language without words” began in the 1920s, continued into the 1940s, and still has important influences today. The ___________ concept involves the use of elementary pictographs to convey information. The originator of this effort was Vienna sociologist Otto Neurath. He felt that the social and economic changes following World War I demanded clear communication to assist public understanding of important social issues relating to housing, health, and economics. A system of elementary pictographs to present complex data, particularly statistical data, was developed.

A. pictographic  
B. Isotype  
C. Typotekt  
D. Bauhaus

13. In the Netherlands, several designers were influenced by the modern movements and the new typography. Among them was Dutch designer ____________, who combined the Dada movement’s playful vitality and de Stijl’s functionalism and formal clarity. As his work evolved, he rejected both traditional symmetrical
layouts and de Stijl’s insistence on strict verticals and horizontals. Instead, he
designed the space as a “field of tension” brought alive by rhythmic composition,
vigorous contrasts of size and weight, and a dynamic interplay between
typographic form and the background page. His personal logo is a visual/verbal
pun based on his last name.

A. Hendrik N. Werkman
B. Piet Zwart
C. Willem Sandberg
D. Paul Schuitema

14. Dutch designer _____________ is noted for his experimentation with type,
printing ink, brayers, ink rollers, and a small press to produce monoprints that he
called druksel (prints). In September 1923, he began publication of The Next
Call, a small magazine of typographic experiments and texts, in which he
explored type as concrete visual form as well as alphabetic communication. His
process of building a design from ready-made components can be compared to
the creative process of the Dadaists, particularly collage (Fig. 16-54), pages 4
and 5 of the January 24, 1924 issue of The Next Call.

A. Hendrik N. Werkman
B. Piet Zwart
C. Willem Sandberg
D. Paul Schuitema

15. Another important Dutch constructivist graphic designer, _____________
integrated objective photography with typography (Fig. 16-55). This example of a
brochure cover was for Berkel Model Z scales, one of his most important clients.
He taught at the Koninklijke Academie van Beeldende Kunsten (Royal Academy
of Fine Arts) in The Hague for thirty years, where he inspired several generations
of designers.

A. Hendrik N. Werkman
B. Piet Zwart
C. Willem Sandberg
D. Paul Schuitema

16. _____________ was the director of the Stedelijk Museum in Amsterdam from
1945 until 1963. While hiding and working for the Resistance during World War
II, he created his Experimenta Typographica, a series of probing typographic
experiments in form and space that was published in the mid-1950s. He was
fascinated by serendipity, such as the unexpected relationship that occurred
when the rough edges of torn paper were juxtaposed with crisp edges of type (Figs. 16-60 and 16-61), the cover and inside spread from *Nu (Now)* no. 2, 1968.

A. Hendrik N. Werkman  
B. Piet Zwart  
C. Willem Sandberg  
D. Paul Schuitema

17. The role of photography as a graphic communications tool was expanded by ____________. At age 25 he returned to Switzerland from Paris, where he had studied painting under Fernand Léger and worked with the Deberny and Peignot type foundry. His posters from the 1930s for the Swiss National Tourist Office use montage, dynamic scale changes, and an effective integration of typography and illustration. Photographic images become pictorial symbols that have been removed from their naturalistic environments and linked together in unexpected ways. In his travel poster proclaiming that all roads lead to Switzerland, three levels of photographic information combine in a dramatic expression of space. In the foreground, a cobblestone road photographed from ground level thrusts back into the space. Its motion is stopped by a ridge bearing the famous Swiss roadway that twists and winds over the mountains. Finally, a majestic mountain peak soars up against the blue sky.

A. Walter Herdeg  
B. Herbert Matter

18. During the depths of World War II, graphic designer Walter Herdeg launched a bimonthly international graphic design magazine called ____________. He published, edited, and designed the magazine for forty-two years and 246 issues. This magazine stimulated an unprecedented global dialogue among graphic designers and is still being published today.

A. *CA*  
B. *Graphis*  
C. *ID*  
D. *Typographische Monatsblätter*
Chapter 17 – The Modern Movement in America

Introduction, 336
Immigrants to America, 339
The Works Progress Administration Poster Project, 342
The flight from fascism, 342
A patron of design, 342
The war years, 344
After the war, 346
International and scientific graphics, 350

Key Terms (in order of appearance; the first page number of their appearance is listed)

Armory Show, page 336
Rural Electrification Administration, page 338
Works Progress Administration (WPA), page 342
Federal Art Project, page 342
Container Corporation of America (CCA), page 342, (Fig. 17-21)

Key People and Their Major Contributions (in order of appearance; the first page number of their appearance is listed)

William Addison Dwiggins (1880–1956), page 336, (Fig. 17-2)
S. A. Jacobs, page 337, (Fig. 17-3)
Merle Armitage (1893–1975), page 337, (Fig. 17-4)
Lester Beall (1903–1969), page 337, (Fig. 17-5)
Erte (Romain de Tirtoff) (1892–1990), page 339, (Fig. 17-9)
Dr. Mehemed Fehmy Agha (1896–1978), page 339
Alexey Brodovitch (1898–1971), page 339, (Figs. 17-11 through 17-14)
Alexander Liberman (1912–1999), page 339, (Fig. 17-16)
Carmel Snow (1887–1961), page 339
Martin Munkacsi (1896–1963), page 339, (Fig. 17-10)
Joseph Binder (1898–1972), page 341, (Fig. 17-45)
Herbert Bayer (1900–1985), page 342 (also see Chapter 16)
Will Burtin (1908–1972), page 342, (Fig. 17-20)
Jean Carlu (1900–1997), page 342, (Fig. 17-24)
George Giusti (1908–90), page 342
Herbert Matter (1907–1984), page 342
Ladislav Sutnar (1897–1976), page 342, (Fig. 17-48)
Walter P. Paepcke (1896–1960), page 342
Elizabeth Nitze Paepcke (1902–94), page 342
Egbert Jacobson (1890–1966), page 342
Charles Coiner (1898–1989), page 343
John Atherton (1900–1952), page 344, (Fig. 17-25)
Ben Shahn (1898–1969), page 344, (Fig. 17-28)
Art Kane (1925–1995), page 348
Multiple Choice

1. America was introduced to modernism at the 1913 ____________ but it was met by public protest and initially rejected. The same reaction awaited Jan Tschichold’s Élémentaire Typographie insert. However, a small number of American typographers and designers, such as William Addison Dwiggins, S. A. Jacobs, Merle Armitage, and Lester Beall, recognized the value of the new ideas, and modernism slowly gained ground in book design, editorial design for fashion and business magazines catering to affluent audiences, and promotional and corporate graphics. By the 1930s, modernist European design had become a significant influence in America.
   
   A. New York World’s Fair
   
   B. Armory Show
   
   C. Federal Art Project

2. The modernist approach slowly gained ground in America on several fronts. Among the transitional designers in America was _____________. After two decades in advertising, he began designing books for Alfred A. Knopf in 1926, and established Knopf’s reputation for excellence in book design. He experimented with uncommon title page layouts, two-column book formats, and collage-like stenciled ornaments that reflected the influence of cubism, as seen in the 1936 title pages from The Power of Print and Men (Fig. 17-2). He also designed eighteen typefaces for Mergenthaler Linotype, including the text face Caledonia; Electra, a modern design with reduced thick and thin contrast; and Metro, Linotype’s geometric sans-serif created to compete with Futura and Kabel.
   
   A. S. A. Jacobs
   
   B. Merle Armitage
   
   C. William Addison Dwiggins
   
   D. Lester Beall

3. The work of ____________ broke with traditional advertising layout. He understood Jan Tschichold’s new typography and the Dada movement’s random organization, the intuitive placement of elements and role of chance in the creative process. He often combined flat planes of color and elementary signs, such as arrows with photography. He admired the strong character and form of
nineteenth-century American wood types and incorporated them into his work. He sought visual contrast and a rich level of information content. In his posters for the Rural Electrification Administration, a Federal agency charged with bringing electricity to less densely populated areas of the United States, the benefits of electricity are presented through signs understandable to illiterate and semiliterate audiences.

A. Alexey Brodovitch  
B. Martin Munkácsi  
C. Lester Beall  
D. William Addison Dwiggins

4. A migratory process began slowly and reached the end of a crescendo by the late 1930s as cultural leaders from Europe, including many graphic designers, came to America. __________ became art director of Harper's Bazaar in 1934 and remained in this position until 1958. A Russian immigrant to France, he established himself as a leading contemporary designer in Paris before heading to the United States in 1930. He had a passion for white space and open pages. He rethought the approach to editorial design and sought a musical feeling in the flow of text and pictures, which was energized by the art and photography that he commissioned from major European artists. He taught designers how to use photography. His choices for cropping enlarging, and juxtaposing images, and his exquisite selections from contact sheets all relied on his extraordinary intuition. He saw contrast as a dominant tool in editorial design and paid close attention to the individual page, the spread, and the graphic movement through the editorial pages of each issue (Figs. 17-11 and 17-12).

A. A. M. Cassandre  
B. Erté  
C. Joseph Binder  
D. Alexey Brodovitch

5. On the eve of World War II, world events forced the United States to cast aside its neutrality, traditionalism, and provincialism; the new embrace of modernist design was part of this process. This 1939 poster for the New York World’s Fair by __________ (Fig. 17-17) signifies America’s embrace of modernism, technology, and global power. This designer’s strong cubist beginnings yielded to a stylized realism, and his technique became more refined, in part because he used an airbrush to achieve highly finished forms.

A. A. M. Cassandre  
B. Will Burtin
C. Joseph Binder

D. Jean Carlu

6. In 1935, as part of President Franklin Delano Roosevelt’s New Deal, the federal government created the Works Progress Administration (WPA), which provided job opportunities for the unemployed. The WPA’s _____________ enabled actors, musicians, visual artists, and writers to continue their professional careers. A poster project was included, and thousands of posters were designed and silk-screen printed for government-sponsored cultural events, including theatrical performances and art exhibitions, and public-service communications about health, crime prevention, housing, and education. The flat color characteristic of silk-screen combined with influences from the Bauhaus, pictorial modernism, and constructivism, producing a modernist result that contrasted with the traditional illustration style that dominated American graphic communication during this time.

A. Great Ideas of Western Man

B. Federal Art Project

C. Great Books of the Western World

D. World Geo-Graphic Atlas

7. A major figure in the development of modern design beginning in the 1930s was a Chicago industrialist named Walter P. Paepcke, who founded __________ in 1926. Paepcke was unique among the captains of industry of his generation, for he recognized that design could serve both a pragmatic business function and become a major cultural thrust by the corporation. The company’s ad campaign, called “Great Ideas of Western Man,” for example, separated it from its army of competitors. The campaign made the company appear somehow different to diverse audiences: a company whose management spent a portion of its advertising budget to convey great ideas must likewise possess positive social and cultural values.

A. Upjohn

B. Knoll Associates

C. Sweet’s Catalog Service

D. the Container Corporation of America

8. America’s wartime graphics, commissioned by the U.S. Office of War Information, ranged from posters to informational training materials and amateurish cartoons. Illustrator John Atherton, social realist Ben Shahn, and designers Joseph Binder, Edward McKnight Kauffer, and Herbert Bayer were among those commissioned by the Office of War Information to create posters in support of the war effort. A 1943 poster by _____________ (Fig. 17-25)
penetrates to the heart of the problem of careless talk, gossip, and discussion of troop movements as a source of enemy information.

A. John Atherton
B. Ben Shahn
C. Joseph Binder
D. Edward McKnight Kauffer
E. Herbert Bayer

9. In 1941, as America’s entry into the global conflict became more obviously inevitable, the federal government began to develop propaganda posters to promote production. This famous poster (Fig. 17-24), created by ____________ for the Office of Emergency Management, is one of the finest designs of his career. Known as the “America's answer! Production” poster, visual and verbal elements are inseparably interlocked into an intense symbol of productivity and work. Over 100,000 of these posters were distributed throughout the country and the designer was recognized with a top award by the New York Art Director’s Club Exhibition.

A. John Atherton
B. Jean Carlu
C. Joseph Binder
D. Edward McKnight Kauffer
E. Herbert Bayer

10. Working closely with Sweet’s research director Knut Lönb erg-Holm, ____________ developed a philosophy for structuring information in a logical and consistent manner. In two landmark books, Catalog Design and Catalog Design Progress, they documented and explained their approach. Informational design is defined as a synthesis of function, flow, and form. Function is utilitarian need with a definite purpose: to make information easy to find, read, comprehend, and recall. Flow means the logical sequence of information. Form refers to the arrangement of information. As he approached problems of form, static and uniform arrangements of information gave way to dynamic information patterns and clear, rational organization.

A. Will Burtin
B. Ladislav Sutnar
C. Herbert Bayer
D. Joseph Binder
11. An important milestone in the visual presentation of data was the publication in 1953 of the *World Geo-Graphic Atlas* by the Container Corporation of America. __________, the designer and editor, worked for five years on the 368-page atlas, which contained 120 full-page maps of the world and 1,200 diagrams, graphs, charts, symbols, and other graphic communications about the planet.

A. Will Burtin
B. Edward McKnight Kauffer
C. Herbert Bayer
D. Joseph Binder
E. Jean Carlu

True/False

1. During the 1920s and 1930s, graphic design in America was dominated by traditional illustration. _____

Image Identification

I. Match the figure with the name of its designer.

1. **Fig. 17-11** __________
   A. Alexey Brodovitch
   B. Erté
   C. M. Cassandre

2. **Fig. 17-9** __________
   A. Alexey Brodovitch
   B. Erté
   C. M. Cassandre

3. **Fig. 17-23** __________
   A. Alexey Brodovitch
   B. Erté
   C. M. Cassandre
4. **Fig. 17-28**
   A. Herbert Bayer
   B. Joseph Binder
   C. Ben Shahn

5. **Fig. 17-31**
   A. Herbert Bayer
   B. Joseph Binder
   C. Ben Shahn

6. **Fig. 17-45**
   A. Herbert Bayer
   B. Joseph Binder
   C. Ben Shahn
Chapter 18 – The International Typographic Style

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Pioneers of the movement, 356
Functional graphics for science, 359
New Swiss sans-serif typefaces, 361
A master of classical typography, 361
Design in Basel and Zurich, 363
The International Typographic Style in America, 370

**Key Terms** (in order of appearance; the first page number of their appearance is listed)

International Typographic Style, page 356
Art concret, page 356
Semiotics, page 357
Semantics, page 357
Syntactics, page 358
Pragmatics, page 358
Tectonic element, page 360
Univers, page 361, *(Figs. 18-13 and 18-14)*
Helvetica, page 361, *(Fig. 18-15)*
*Manuale Typographicum*, page 363, *(Figs. 18-17 and 18-18)*
The golden mean, page 365
Key People and Their Major Contributions (in order of appearance; the first page number of their appearance is listed)

Ernst Keller (1891–1968), page 356, (Fig. 18-1)
Théo Ballmer (1902–1965), page 356, (Figs. 18-2 and 18-3)
Max Bill (1908–1994), page 356, (Fig. 18-4)
Otl Aicher (1922–1991), page 357, (see Figs. 22-37 through 22-40)
Anthony Froshaug (1918–1984), page 357, (Fig. 18-6)
Max Huber (1919–1992), page 358, (Figs. 18-7 and 18-8)
Anton Stankowski (1906–1998), page 359, (Figs. 18-9 through 18-12)
Adrian Frutiger (b. 1928), page 361, (Figs. 18-13 and 18-14)
Edouard Hoffmann (d. 1980) and Max Miedinger (1910–1980), page 361, (Fig. 18-15)
Hermann Zapf (b. 1918), page 361, (Figs. 18-16 through 18-18)
Emil Ruder (1914–1970), page 363, (Fig. 18-19)
Armin Hofmann (b. 1920), page 363, (Figs. 18-20 through 18-23)
Karl Gerstner (b. 1930), page 363
Carlo L. Vivarelli (1919–1986), page 364, (Fig. 18-25)
Josef Müller-Brockmann (1914–1996), page 364, (Figs. 18-30 through 18-33)
Siegfried Odermatt (b. 1926), page 365, (Figs. 18-36 through 18-38)
Rosmarie Tissi, (b. 1937), page 370, (Fig. 18-39)
Rudolph de Harak (b. 1924), page 370, (Figs. 18-40 through 18-42)
Jacqueline S. Casey (1927–1991), page 372, (Fig. 18-43) (Fig. 18-45)
Ralph Coburn (b. 1923), page 373, (Figs. 18-44)
Dietmar Winkler (b. 1938), page 373, (Fig. 18-46)
Arnold Saks (b. 1931), page 373, (Fig. 18-47)
Chapter 18 – Study Questions

Multiple Choice

1. During the 1950s, a design movement emerged in Switzerland and Germany that has been called Swiss design or, more appropriately, the ________. The visual characteristics of this design movement include visual unity of design achieved through the asymmetrical organization of the design elements on a mathematically constructed grid; objective photography and copy that present visual and verbal information in a clear and factual manner, free from the exaggerated claims of much propaganda and commercial advertising; and sans-serif typography set flush left, ragged right. The initiators of this movement believed sans-serif typography expressed the spirit of a progressive age and that mathematical grids were the most legible and harmonious means for structuring information. This design movement won converts throughout the world and remained a major force for over two decades, and its influence continues.

   A. Dada
   B. Memphis
   C. International Typographic Style
   D. new wave

2. The emerging Swiss design gained its alphabetical expression in several sans-serif type families designed in the 1950s. The geometric sans-serif styles, mathematically constructed with drafting instruments during the 1920s and 1930s, were rejected in favor of new designs inspired by nineteenth-century Akzidenz Grotesk fonts. One of the new typefaces designed during this period was __________, which was created as a palette of twenty-one visually related fonts. All twenty-one have the same x-height and baseline, and all ascenders and descenders are the same length. Numbers replaced conventional nomenclature.

   A. Neuland
   B. Futura
   C. Helvetica
   D. Univers

3. __________ was the designer of the typeface mentioned in the preceding question, which was created as a palette of twenty-one visually-related fonts that
all have the same x-height and baseline and whose ascenders and descenders are the same length.

A. Adrian Frutiger
B. Emil Ruder
C. Karl Gerstner
D. Otl Aicher

4. Another new sans-serif was released as Neue Haas Grotesk by Edouard Hoffman and Max Miedinger. When this design was produced in Germany by the now-defunct D. Stempel AG in 1961, the face was renamed with the traditional Latin name for Switzerland. _________

A. Neuland
B. Futura
C. Helvetica
D. Univers

5. More important than the visual appearance of Swiss design is the attitude developed by early pioneers about their profession. Which of the following statements does NOT belong? ____________

A. Design is a socially useful and important activity.
B. Personal expression and eccentric solutions were rejected, while a more universal and scientific approach to design problem solving was embraced.
C. The designer is not an artist but an objective conduit for spreading important information among various components of society.
D. Ornamentation was prized for its decorative quality.
E. Achieving clarity and order is the ideal.

6. A native of Nuremberg, Germany, ____________ apprenticed as a photo retoucher and studied calligraphy after he acquired a copy of Rudolph Koch’s book Das Schreiben als Kunstfertigkeit (Writing as an Art Form). He became a freelance book designer and typographic designer, and at age twenty-two the first of his more than fifty typefaces was designed and cut for Stempel foundry. He developed an extraordinary sensitivity to letterforms in his activities as a calligrapher, typeface designer, typographer, and graphic designer. He viewed typeface design as “one of the most visible visual expressions of an age.” He designed Palatino in 1950, Melior in 1952, and Optima in 1958.
A. Adrian Frutiger
B. Max Miedinger
C. Edouard Hoffman
D. Hermann Zapf

7. ___________ was a leading design theorist and practitioner in Zurich, Switzerland. He sought absolute and universal graphic expression through an objective and impersonal presentation, communicating to the audience without the interference of the designer’s subjective feelings or propagandistic techniques of persuasion, as in his 1960 public awareness poster “Weniger Lärm” (“Less Noise”). In his celebrated concert posters, like the “Musica Viva” concert poster of 1972, the language of constructivism created a visual equivalent to the structural harmony of the music to be performed. He worked extensively with mathematical grid structures. His 1960 exhibition poster “der Film” demonstrates the universal design harmony achieved by mathematical spatial division.

A. Josef Müller-Brockman
B. Armin Hofmann
C. Siegfried Odermatt
D. Rudolph de Harak

8. The ___________ has a three-to-five ratio. A rectangle with this ratio was considered by the ancient Greeks to be the most beautifully proportioned rectangle.

A. tectonic element
B. art concret
C. golden mean
D. manuale typographicum

9. In 1950, Max Bill became involved in developing the graphic design program at the Institute of Design Institute in Ulm, Germany, which attempted to establish a center for research and training to address the design problems of the era. Otl Aicher, one of the Ulm cofounders, played an important role in establishing the graphic design program, and Anthony Froshaug set up the typography workshop. The curriculum included a study of ___________: the general philosophical theory of signs and symbols.

A. semantics
B. pragmatics
C. semiotics
D. syntactics

10. Particularly innovative in photography, photomontage, and darkroom manipulation of images, visual pattern and form were explored in ____________’s close-up photographs of common objects, whose texture and detail were transformed into abstract images. Ideas about color and form from his paintings often found their way into his graphic designs; conversely, wide-ranging form experimentation in search of design solutions seems to have provided shapes and compositional ideas for his fine art. After the war, his work started to crystallize into what was to become his major contribution to graphic design: the creation of visual forms to communicate invisible processes and physical forces.

A. Otl Aicher
B. Anthony Froshaug
C. Richard Lohse
D. Anton Stankowski

11. In his work and in his teaching, __________ sought a dynamic harmony through which all the parts of a design were unified. He saw the relationship of contrasting elements as the means of breathing life into a visual design. These contrasts included light to dark, curved lines to straight lines, form to counterform, and dynamic to static. He began teaching at the Basel School of Design in 1947, after completing his education in Zurich, Switzerland, and working as a staff designer for several studios. At the same time he opened a design studio in collaboration with his wife. He applied a deep sense of aesthetic values and understanding of form to both teaching and designing. He evolved a design philosophy based on the elemental graphic-form language of point, line, and plane. His work includes the logotype for the Stadt Theater Basel (Basel Civic Theater), 1954; the poster for the Basel Theater’s production of Giselle, 1959; and the trademark for the Swiss National Exhibition, Expo 1964.

A. Emil Ruder
B. Max Huber
C. Armin Hofmann
D. Josef Müller-Brockman

12. In 1947, Armin Hofmann began teaching graphic design at the ____________, and together with Emil Ruder, he developed an educational model linked to the elementary design principles of the Vorkurs (Preliminary Course) established in 1908. The same year, he opened a design studio in collaboration with his wife, Dorothea, where he applied deep aesthetic values and understanding of form to both teaching and designing. As time passed, he evolved a design philosophy
based on the elemental graphic-form language of point, line, and plane, replacing traditional pictorial ideas with a modernist aesthetic. In 1965, he published Graphic Design Manual, a book that presents his application of elemental design principles to graphic design.

A. School of Applied Art in Zurich, Switzerland
B. Institute of Design in Ulm, Germany
C. Basel School of Design in Basel, Switzerland

13. Siegfried Odermatt played an important role in applying the International Typographic Style to the communications of business and industry. He combined a succinct, efficient presentation of information with a dynamic visual quality, using straightforward photography with drama and impact. Ordinary images were turned into convincing and engaging photographs through the careful use of cropping, scale, and lighting, with attention to shape and texture as qualities that cause an image to emerge from the page. In the early 1960s, ______________ joined Odermatt. They loosened the boundaries of the International Typographic Style and introduced elements of chance, the development of surprising and inventive forms, and intuitive visual organization into the vocabulary of graphic design. This phase of the studio’s development marked the beginning of a break with the traditions of Swiss design.

A. Emil Ruder
B. Karl Gerstner
C. Dietmar Winkler
D. Rosmarie Tissi

14. The Swiss style was embraced in American corporate and institutional graphics during the 1960s and remained a prominent aspect of American design for over two decades. A notable example was found in the graphic design office at the Massachusetts Institute of Technology (MIT). In the early 1950s, MIT established a graphic design program enabling all members of the university community to benefit from free, professional design assistance on their publications and publicity materials. This was an early recognition of the cultural and communicative value of design by an American university. MIT based its graphic design program on a commitment to the grid and sans-serif typography. The staff was innovative in the use of designed letterforms, and manipulated words as vehicles to express content. This approach evolved in the work of ______________, the director of the Design Services Office. Letterforms became illustrations, for the design and arrangement of the letters in key words frequently became the dominant image, as in the 1974 poster for an MIT open house in which stencil letterforms announce the open house, and the open O does double duty as a concrete symbol of the opening of the campus to visitors.
A. Jacqueline Casey  
B. Ralph Coburn  
C. Dietmar Winkler  
D. Rosmarie Tissi

**Image Identification**

I. Match the figure with the name of its designer.

1. **Fig. 18-1**  
   A. Max Bill  
   B. Théo Ballmer  
   C. Ernst Keller

2. **Fig. 18-5**  
   A. Max Bill  
   B. Théo Ballmer  
   C. Ernst Keller

3. **Fig. 18-25**  
   A. Max Bill  
   B. Théo Ballmer  
   C. Ernst Keller  
   D. Carlo Vivarelli

4. **Fig. 18-25**  
   A. Josef Müller-Brockmann  
   B. Carlo Vivarelli

5. **Fig. 18-31**  
   A. Josef Müller-Brockmann  
   B. Carlo Vivarelli
Chapter 19 – The New York School

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Graphic design education at Yale University, 382
An editorial design revolution, 383
Editorial design after the decline, 386
The new advertising, 389
American typographic expressionism, 391

Key Terms (in order of appearance; the first page number of their appearance is listed)

Visual/verbal syntax, page 390
“The new advertising,” page 391
Figurative typography, page 391
Phototypography, page 392
Typogram, page 393

Key People and Their Major Contributions (in order of appearance; the first page number of their appearance is listed)

Paul Rand (1914–1996), page 374, (Figs. 19-1 through 19-7)
Bill Bernbach (1911–1982), page 375
Alvin Lustig (1915–1955), page 375, (Figs. 19-8 through 19-13)
Alex Steinweiss (b. 1916), page 377, (Fig. 19-14)
Bradbury Thompson (1911–1995), page 377, (Figs. 19-15 through 19-18)
Saul Bass (1919–1996), page 378, (Figs. 19-19 through Fig. 19-21)
George Tscherny (b. 1924), page 381, (Figs. 19-23 and 19-24)
Robert Brownjohn (1925–1970), page 381
Ivan Chermayeff (b. 1932), page 381
Thomas H. Geismar (b. 1931), page 381
Brownjohn, Chermayeff, and Geismar, page 381, (Figs. 19-25 through 19-27)
Norman Ives (1923–1978), page 383
Leo Lionni (1910–1999), page 383, (Fig. 19-32)
Alexander Liberman (1912–1999), page 383
Cipe Pineles (1910–1991), page 383, (Fig. 19-31)
Otto Storch (b. 1913), page 384, (Figs. 19-33 through 19-36)
Henry Wolf (b. 1925), page 385, (Figs. 19-37 through 19-40)
Peter Palazzo (1926–2005), page 387, (Figs. 19-42 and 19-41)
Dugald Stermer (b. 1936), page 388, (Fig. 19-43)
Bea Feitler (1938–1982), page 388, (Fig. 19-44)
Michael Salisbury (b. 1941), page 389, (Figs. 19-45 and 19-46)
Doyle Dane Bernbach Agency, page 389, (Figs. 19-47 through 19-50)
Bob Gage (b. 1919–2000), page 389
Phyllis Robinson (b. 1921), page 389
Gene Frederico (1919–1999), page 391, (Fig. 19-53)
Edward Rondthaler (b. 1905), page 393
John Alcorn (1935–1992), page 393, (Fig. 19-55)
Herb Lubalin (1918–1981), page 393, (Figs. 19-56 through 19-70)
Aaron Burns (1922–1991), page 396
International Typeface Corporation (ITC), (Figs. 19-68 through 19-70)
George Lois (b. 1931), page 397, (Figs. 19-71 through 19-73)
Chapter 19 – Study Questions

Multiple Choice

1. Although talented European immigrants who had fled totalitarianism in Europe introduced modern design in America during the 1940s, an original American approach to modernist design gained international prominence in the 1950s and continued as a dominant force in graphic design until the 1970s. An egalitarian society with capitalist values, limited artistic traditions before World War II, and a diverse ethnic heritage engendered an original approach to American modernist design. Where European design was often theoretical and highly structured, American design was pragmatic, intuitive, and less formal in its approach to organizing space. Emphasis was placed on the expression of _____________ and an open, direct presentation of information. Novelty of technique and originality of concept were much prized in this highly competitive society, and designers sought to solve communications problems while satisfying a need for personal expression.

   A. modernism
   B. ideas
   C. politics
   D. simultaneity

2. Just as Paris had been receptive to new ideas and images during the late nineteenth and early twentieth centuries, ____________ assumed that role during the middle of the twentieth century.

   A. Berlin
   B. London
   C. New York City
   D. Zurich

3. More than any other designer, ____________ initiated the American approach to modern design. He had an ability to manipulate visual form (i.e., shape, color, space, line, and value), and to skillfully analyze communications content, reducing it to a symbolic essence without making it sterile or dull. Visual contrasts marked his work: he played red against green, organic shape against geometric shape, photographic tone against flat color, cut or torn edges against
sharp forms, and the textural pattern of type against white margins. The cover
design for Direction magazine shows the important role of visual and symbolic
contrast in his designs. His 1946 book Thoughts on Design inspired a generation
of designers. His collaborations with copywriter Bill Bernbach became a
prototype for the now ubiquitous art/copy team at advertising agencies. The
emphasis of his later work was on trademark and corporate design for such
clients as IBM.

A. Alvin Lustig
B. Bradbury Thompson
C. Paul Rand
D. Saul Bass

4. ____________ emerged as one of the most influential graphic designers in
postwar America. His designs for Westvaco Inspirations, four-color publications
demonstrating printing papers, made a significant impact. A thorough knowledge
of printing and typesetting, combined with a penchant for adventurous
experimentation, allowed him to expand the range of design possibilities. He
discovered and explored the potential of eighteenth- and nineteenth-century
enggravings as design resources. Large, bold, organic and geometric shapes
were used to bring graphic and symbolic power to the page. Letterforms and
patterns, such as the details from halftone reproductions, were often enlarged
and used as design elements or to create visual patterns and movements. During
the 1960s and 1970s, he turned increasingly to a classical approach to book and
editorial format design. Readability, formal harmony, and a sensitive use of old
style typefaces marked his work for periodicals such as Smithsonian and
ARTnews.

A. Alvin Lustig
B. Bradbury Thompson
C. Paul Rand
D. Saul Bass

5. ____________ brought the sensibilities of the New York School to Los Angeles
in 1950. He frequently reduced his graphic designs to a single dominant image,
often centered in the space. The simplicity and directness of his work allowed the
viewer to interpret the content immediately. He had a remarkable ability to
identify the nucleus of a design problem and to express it with images that
became glyphs, or elemental pictorial signs, which exerted great graphic power.
The 1955 design program for Otto Preminger’s film The Man with the Golden
Arm was the first comprehensive design program unifying both print and media
graphics for a movie. In addition to his film work, he created numerous corporate-
identity programs, such as AT&T’s, the Girl Scouts’, and United Airlines’. 
6. During the 1940s, only a moderate number of American magazines were designed well. These included *Fortune*, *Harper’s Bazaar*, and *Vogue*. An art director’s assistant at *Vogue* during the 1930s, ____________ made a major contribution to editorial design during the 1940s and 1950s, first as the art director at *Glamour*, then at *Seventeen*, *Charm*, and *Mademoiselle*. Her publication designs were characterized by a lyrical appreciation of color, pattern, and form. She became the first woman admitted to membership in the New York Art Director’s Club. On a cover for *Seventeen* she designed in 1949, stripe patterns and a mirror-image reflection achieved a graphic vitality.

A. Rosmarie Tissi  
B. Jaqueline Casey  
C. Cipe Pineles  
D. Bea Feitler

7. The initial contribution of Brownjohn, Chermayeff, and Geismar to American graphic design sprang from a strong aesthetic background and an understanding of the major ideas of European modern art, which had been reinforced by their contacts with architect-teacher Serge Chermayeff, Ivan Chermayeff’s father; László Moholy-Nagy, with whom Brownjohn had studied painting and design; and Alvin Lustig, for whom Ivan Chermayeff had worked as an assistant. Solutions grew out of the needs of the client, and design problems were characterized by inventive and symbolic manipulation of imagery and forms, including letterforms and typography. Images and symbols were combined with a surreal sense of dislocation to convey the essence of the subject on posters and book jackets, such as the cover of Bertrand Russell’s *Common Sense and Nuclear Warfare*, on which the atomic blast became a visual metaphor for the brain. In 1960, Brownjohn left the partnership and moved to England, where he made significant contributions to British graphic design, especially in the area of film titles, such as for the motion picture *Goldfinger*. The firm then changed its name to Chermayeff & Geismar Associates and played a major role in the development of ____________.

A. furniture design  
B. corporate identity  
C. advertising
D. packaging

8. Many of the pioneers of the New York School were either guest lecturers or served on the faculty of ____________'s graphic design program under the direction of Alvin Eisenman and later Sheila de Bretteville, the current director. This program has contributed to the advancement of graphic design and design education throughout the world, as many of its alumni have become prominent designers and educators; the first among them to receive an MFA after Josef Spelling Albers restructured the program was Norman Ives.

A. New York University
B. the Chicago Art Institute
C. the School of Visual Arts
D. Yale University

9. Over the course of the 1950s, a revolution in editorial design occurred, and editorial design experienced one of its greatest eras. In 1953, ____________ was named the art director of McCall’s magazine and in 1958 was given a free hand to upgrade the graphics; an astounding visual approach subsequently developed. Typography was unified with photography by designing the type to lock tightly into the photographic image. Type was warped and bent, or became the illustration. He ranks among the major innovators of the period. His philosophy that idea, copy, art, and typography should be inseparable in editorial design influenced both editorial and advertising graphics.

A. Henry Wolf
B. Otto Storch

10. In 1953, Vienna-born ________________ became the art director of Esquire, and in 1958 he became art director of Harper’s Bazaar. He sought to make the magazines he designed visually beautiful. He experimented with typography, making it large enough to fill the page on one spread and then using petite headlines on other pages. His vision of the magazine cover was an exquisitely simple image conveying a visual idea. The sophistication and inventiveness of photography commissioned by Harper’s Bazaar during his tenure were extraordinary.

A. Henry Wolf
B. Otto Storch

11. During the 1960s in America, a new, smaller-format breed of periodicals emerged and thrived by addressing the interests of specialized audiences. The new editorial climate, with more emphasis on content, longer articles, and less opportunity for lavish visual treatment, necessitated a new approach to editorial design. Layout became more controlled, and the use of a consistent typographic
format and grid became the norm. Among the magazines listed below, which one became the journal of record for public opposition to the Vietnam War and for a host of other social and environmental issues? The art director, Dugald Stermer, did not commission images to illustrate the articles and topics; he used images as a separate communication to provide “information, direction, and purpose” distinct from the printed word. One cover of this magazine depicted four hands burning facsimile draft cards of Stermer and the three editors. ______________

A. New York
B. Ms.
C. Ramparts
D. Rolling Stone

12. The 1940s were a lackluster decade for advertising. On June 1, 1949, a new advertising agency opened its doors at 350 Madison Avenue in New York City. For each campaign, this agency developed strategy surrounding any important advantage, useful difference, or superior feature of the product. It combined words and images in a new way and established a synergistic relationship between visual and verbal components. It evolved the visual/verbal syntax: word and image fused into a conceptual expression of an idea so that they become completely interdependent. One of its most memorable ad campaigns was for Volkswagen, in which “strange little cars with their beetle shapes” were marketed to a public used to luxury and high horsepower as status symbols. What is the name of the agency? ___________

A. Pentagram
B. George Nelson & Associates
C. Brownjohn, Chermayeff & Geismar
D. Doyle Dane Bernbach

13. In the 1950s and 1960s, a playful direction called ____________ emerged among New York graphic designers. Letterforms became objects; objects became letterforms. Gene Federico was one of the first graphic designers who delighted in using letterforms as images, as shown in this 1953 double-page advertisement from the New Yorker magazine, in which the perfectly round Os of Futura form bicycle wheels.

A. the International Typographic Style
B. new wave
C. figurative typography
D. typogram
14. Hailed as the typographic genius of his time (1918–1981), ____________’s achievements included advertising and editorial design, trademark and typeface design, posters, and packaging. He abandoned traditional typographic rules and practice and looked at the characters of the alphabet as both visual forms and a means of communication. Words and letters could become images; images could become a word or a letter. He practiced design as a means of giving visual form to a concept or message, as in the proposed logo for *Mother and Child* magazine, in which the ampersand enforces and protects the “child” in a visual metaphor for motherly love. Among his typeface designs is Avant Garde. He was also the design director for International Typeface Corporation’s tabloid-size journal known as *U&lc*.

A. George Lois  
B. Mike Salisbury  
C. Herb Lubalin

**Image Identification**

I. Match the figure with the name of its designer.

1. **Fig. 19-1** ________
   A. Saul Bass  
   B. Ivan Chermayeff  
   C. Alvin Lustig  
   D. Paul Rand

2. **Fig. 19-45** ________
   A. Dugald Stermer  
   B. Mike Salisbury  
   C. Peter Palazzo  
   D. Bea Feitler

**Matching**

I. Match the terms with the correct definitions.

1. Phototypography ____
2. Visual/verbal syntax _____
3. Figurative typography _____
4. Typogram _____

A. The Bernbach approach—word and image fused into a conceptual expression of an idea so that they become completely interdependent—evolved during the 1950s and 1960s by Bill Bernbach at the New York advertising agency Doyle Dane Bernbach.

B. A playful direction taken by New York graphic designers during the 1950s and 1960s spearheaded by Gene Frederico, which took many forms. Letterforms sometimes became images, such as the wheels in the Frederico’s ad for Woman’s Day. Sometimes, the visual properties of words themselves, or their organization in space, were used to express an idea, such as in Don Egensteiner’s “Tonnage” advertisement, in which the visual form of the word takes on a connotative meaning.

C. The setting of type by exposing negatives of alphabet characters to photographic paper dawned in 1925 with the public announcement of the Thothmic photographic composing machine invented by E. K. Hunter and J. R. C. August of London. A keyboard produced a punched tape to control a long, opaque master film with transparent letterforms. As a given letter moved into position in front of a lens, it was exposed to photographic paper by a beam of light.

D. A brief, visual typographic form in which concept and visual form are merged into a oneness.
Chapter 20 – Corporate Identity and Visual Systems

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Design at CBS, 399

The New Haven Railroad design program, 403

Corporate identification comes of age, 404

Programmed visual identification systems, 411

The Federal Design Improvement Program, 412

Transportation signage symbols, 414

Design systems for the Olympic Games, 415

The Music Television logo, 422

Key Terms (in order of appearance; the first page number of their appearance is listed)

Proprietary marks, page 399

Logotype, page 399

Corporate identity, page 403

Annual report, page 405

Corporate identity manual, page 405

Federal Design Improvement Program, page 412

Idiom, page 419

Sonotube columns, page 419, (Figs. 20-59 and 20-60)

Key People and Their Major Contributions (in order of appearance; the first page number of their appearance is listed)
Adriano Olivetti (1901–1970), page 399
Giovanni Pintori (1912–1998), page 399, (Fig. 20-1)
Frank Stanton (b. 1908), page 399
William Golden (1911–1959), page 399, (Fig. 20-4)
Georg Olden (1920–1975), page 401, (Fig. 20-6)
Lou Dorfsman (b. 1918), page 402, (Fig. 20-8 through 20-10)
Eero Saarinen (1910–1961), page 402
Paul Rand (1914–1996), page 404, (Figs. 20-14 through 20-21)
Lester Beall (1903–1969), page 404, (Figs. 20-22 and 20-23)
Chermayeff & Geismar, page 404, (Figs. 20-24 through 20-26)
Eliot Noyes (1910–1977), page 405
Saul Bass/Herb Yeager & Associates, page 409, (Figs. 20-27 and 20-28)
Muriel Cooper (1925–1994), page 409, (Fig. 20-30)
Otl Aicher (1922–1991), page 411, (Figs. 20-31 through 20-34)
Ralph Eckerstrom (c. 1920–1996), page 411, (Fig. 20-35)
Unimark, page 411, (Fig. 20-36)
Massimo Vignelli (b. 1931), page 411
Vignelli Associates, page 412, (Figs. 20-39 and 20-40)
John Massey (b.1931) SM, page 412
American Institute of Graphic Arts (AIGA), page 414, (Figs. 20-42 and 20-43)
Thomas H. Geismar (b. 1932), page 414, (Fig. 20-42)
Roger Cook (b. 1930), page 415, (Fig. 20-43)
Don Shanosky (b. 1937), page 415, (Fig. 20-43)
Cook and Shanosky Associates, page 415, (Fig. 20-43)
Pedro Ramirez Vazquez (b. 1919), page 416
Lance Wyman (b. 1937), page 416, (Figs. 20-44 through 20-48)
Peter Murdoch (b. 1940), page 416, (Fig. 20-49)
Jerde Partnership, page 419, (Fig. 20-59)
Sussman/Prejza & Co., page 419, (Figs. 20-57 and 20-58) (Fig. 20-60)
Manhattan Design, page 422, (Figs. 20-61 through 20-64)
Chapter 20 – Study Questions

Multiple Choice

1. After World War II, the technological advances made during the war were applied to the production of _____________.
   A. military tanks
   B. bombs
   C. military airplanes
   D. consumer goods

2. _______________ was the rallying cry within the graphic design community during the 1950s, and more perceptive corporate leaders understood the need to develop corporate design programs to help shape their companies’ reputations for quality and reliability.
   A. “Design for all.”
   B. “Good design is good business.”
   C. “We start by designing the price.”

3. The visual identification systems during the 1950s went beyond ______________, which had been in use since the medieval guilds, to produce consistent design systems that projected a cohesive image for corporations with expanding national and multinational presences.
   A. ideographs
   B. logotypes
   C. trademarks
   D. pictographs

4. William Golden designed one of the most successful trademarks of the twentieth century for ____________. Two circles and two arcs form a pictographic eye. When the pictographic eye first appeared, it was superimposed over a cloud-filled sky and projected an almost surreal sense of an eye in a sky. The effectiveness of the symbol demonstrated to the larger management community
how a contemporary graphic mark could compete successfully with more traditional illustrative or alphabetic trademarks.

A. CBS
B. CBS Television Network
C. Columbia Broadcasting System
D. All of the above

5. Early black-and-white television was incapable of differentiating between subtle color and tonal contrasts, and television sets often markedly cropped the edges of the signal. Two-dimensional titles were only on the air for a few seconds, requiring rapid viewer comprehension. To overcome these problems, ______________ designed on-air graphics from the center out, using simple symbolic imagery with strong silhouettes and linear properties. Emphasis was placed on concepts that quickly captured the essence of each program, using the connotative power of simple signs, symbols, and images, such as the zippered mouth (Fig. 20-6) that becomes an immediate and unequivocal symbolic statement for the television program I've Got a Secret. This designer was the grandson of a slave from a northern Kentucky plantation and the first African American to achieve prominence as a graphic designer.

A. Lou Dorfsman
B. Giovanni Pintori
C. Georg Olden
D. William Golden

6. ______________ became the art director for CBS Radio in 1946; in 1954 he was named the director of advertising and promotion for the CBS Radio Network. After William Golden’s sudden death at age forty-eight, he became the creative director of CBS Television. He was named director of design for the entire CBS Corporation in 1964 and vice president in 1968, in keeping with CBS President Frank Stanton’s philosophy that design is a vital area that should be managed by a professional.

A. Lou Dorfsman
B. Eero Saarinen
C. Georg Olden
D. Reynolds Ruffin

7. Who designed the New York, New Haven, and Hartford Railroad trademark in 1954? The design included a geometric slab-serif capital N above an H, and a red, black, and white color scheme.
8. “A symbol is an image of a company, an institution or an idea that should convey with a clear statement, or by suggestion, the activity it represents…. The symbol, besides being memorable and legible, must be designed so that it can be used in many sizes and situations without losing its identity. The designer must distort, unify, and create a new form for the letter, so that it is unique, and yet has the necessary attributes of the letter for recognition. There is no part of a symbol that can be eliminated without destroying the image it creates. It is a true gestalt, in which the psychological effect of the total image is greater than the sum of its parts would indicate…. Who said this in 1960 about the designer’s mission in logo design?

   A. Herbert Matter
   B. Norman Ives
   C. Paul Rand
   D. Chermayeff & Geismar

9. The trademark for International Business Machines (IBM) was developed from an infrequently used typeface called City Medium, designed by Georg Trump in 1930. City Medium is a geometric slab-serif typeface. The slab serifs and square negative spaces in the B lent the trademark unity and distinction. In the 1970s, the IBM corporate trademark was updated by introducing stripes to unify the three letterforms and evoke scan lines on video terminals. Who designed this powerful logo? __________

   A. Herbert Matter
   B. Norman Ives
   C. Paul Rand
   D. Chermayeff & Geismar

10. Which designer designed the trademarks for the American Broadcasting Company (ABC) and Westinghouse? __________

   A. Herbert Matter
   B. Norman Ives
   C. Paul Rand
D. Chermayeff & Geismar

11. Chermayeff & Geismar Associates moved to the forefront of the corporate identity movement in 1960 with a comprehensive visual image program for _____________. The logo was composed of four geometric wedges rotating around a central square to form an external octagon. It was an abstract form unto itself, free from alphabetic, pictographic, or figurative connotations. Although it had overtones of security or protection because four elements confined the square, it proved a completely abstract form could successfully function as a large organization’s visual identifier.

A. NeXT
B. the International Paper Company
C. Minolta
D. Chase Manhattan Bank of New York

12. ____________ ’s mastery of elemental form can be seen in the iconic and widely imitated trademarks produced by his firm. He believed a trademark must be readily understood yet possess elements of metaphor and ambiguity that will attract the viewer again and again. Many of his trademarks became important cultural icons. Within two years after he redesigned the Bell Telephone System bell trademark, public recognition of the symbol rose from 71 to more than 90 percent. After the AT&T long-distance telephone network was split from the local Bell system telephone companies in 1984, he designed a new mark to reposition the firm as “a global communications company” rather than “the national telephone system.” This concept was expressed through a computer graphics animation with information bits circling a globe, which became the identification tag for AT&T television commercials.

A. Ivan Chermayeff
B. Saul Bass
C. Lester Beall
D. Paul Rand

13. ____________, an international design firm, was founded in Chicago by a group of partners including Ralph Eckerstrom, James K. Fogleman, and Massimo Vignelli. The firm rejected individualistic design, believing that design could be a system: a basic structure set up so that other people could implement it effectively. The basic tool for this effort was the grid, which standardized all graphic communications for dozens of large clients, including Alcoa, Ford Motor Company, JCPenney, Memorex, Panasonic, Steelcase, and Xerox. Helvetica was the preferred typeface for all their visual identity systems, as it was considered the most legible type family. Objectivity was the firm’s goal, and it
spread a generic conformity across the face of multinational corporate communications. The design programs that it created were rational and so rigorously systemized that they became virtually foolproof as long as the standards were maintained.

A. Vignelli Associates
B. Unimark
C. Chermayeff & Geismar Associates
D. Saul Bass & Associates

14. In May 1974, the U.S. government initiated the Federal Design Improvement Program in response to a growing awareness of design as an effective tool for achieving objectives. All aspects of federal design, including architecture, interior space planning, landscaping, and graphic design were upgraded under the program. The Graphics Improvement Program set out to improve the quality of visual communications and the ability of governmental agencies to communicate effectively to citizens. One of the most successful federal visual identification systems was the Unigrid system, developed in 1977 for the ______________. The Unigrid unified the hundreds of informational folders used at about 350 different locations. The standardized format of the Unigrid enabled the publications staff to focus on achieving excellence in the development and presentation of pictorial and typographic information.

A. U.S. Internal Revenue Service
B. U.S. Department of Transportation
C. U.S. National Park Service
D. U.S. Department of Labor

15. In 1974, the U.S. Department of Transportation commissioned ____________ to create a master set of thirty-four passenger- and pedestrian-oriented symbols for use in transportation facilities. This effort represented an important first step toward the goal of unified and effective graphic communications transcending cultural and linguistic barriers in a shrinking world. A 225-page book published by the Department of Transportation provides invaluable information about the design and evaluation process used to arrive at this system.

A. the American Institute of Graphic Arts (AIGA)
B. Vignelli Associates
C. John Massey
D. Chermayeff & Geismar Associates
16. By the late 1960s, the concept of comprehensive design systems had become a reality. Planners realized that comprehensive planning for large organizations and events was not only functional and desirable but actually necessary if large numbers of people were to be accommodated. This was particularly true for international events, including world’s fairs and Olympic Games, for which international and multilingual audiences had to be directed and informed. Among many outstanding efforts to develop comprehensive design systems for the Olympic Games, three of the following were cited in Chapter 20 as milestones in the evolution of graphic systems. Which one does NOT belong? ____________

A. the 1968 Mexico City Nineteenth Olympiad
B. the 1972 Munich Twentieth Olympiad
C. the 1980 Moscow Twenty-second Olympiad
D. the 1984 Los Angeles Twenty-third Olympiad

17. The concept of a logo with a constantly changing persona is contrary to the widely held belief that trademarks and visual identifiers should be absolutely fixed and used in a consistent manner. The ____________ logo changed the face, the idea, and the speed of graphic design; it played a major role in redefining visual identity in the electronic age. This logo anticipated the kinetic world of motion graphics soon to explode as cable television, video games, and computer graphics expanded the variety and range of kinetic graphic messages.

A. 1984 Los Angeles Olympiad “Star-in-Motion”
B. U.S. Department of Labor “Striped Ls”
C. Lufthansa Airlines
D. Music Television (MTV)

18. Music Television (MTV), a round-the-clock music television station, first went on the air in 1981 at a time when music videos had not yet reached their peak as a creative medium. ____________, a New York City studio noted for its independence and risk-taking experimentation, especially for music-industry clients, was commissioned to design the logo.

A. Vignelli Associates
B. Chermayeff & Geismar Associates
C. Manhattan Design
D. John Jerde Partnership

19. Who designed the United States postage stamp commemorating the one-hundredth anniversary of the Emancipation Proclamation?
A. Georg Olden
B. Massimo Vignelli
C. Lou Dorfsman
D. William Golden

Matching

I. Match the definition to the correct term.

1. A company brand mark consisting of only letterforms ____
2. A system of visual elements used in a comprehensive program to project a consistent image of the company ____
3. A publication that federal law requires all public companies to provide to their stockholders ____
4. A firm’s book of guidelines and standards for implementing its corporate identity program ____

A. annual report
B. corporate identity
C. corporate identity manual
D. logotype
Chapter 21 – The Conceptual Image

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The Polish poster, 424
American conceptual images, 428
Poster mania, 438
European visual poets, 440
The Third-World poster, 445

Key Terms (in order of appearance; the first page number of their appearance is listed)

Concept, page 424
Motif, page 424
Metaphysical, page 425
Narrative illustration, page 428
Push Pin Almanack, page 429
Push Pin Studio, page 429
Iconography, page 429
Push Pin style, page 431
Print magazine, page 437
Psychedelic posters, page 438
Twen, page 440
Grapus, page 444
Third-World poster, page 445
Key People and Their Major Contributions (in order of appearance; the first page number of their appearance is listed)

Armando Testa (1917–1992), page 424
Tadeusz Trepkowski (1914–1956), page 424, (Fig. 21-3)
Henryk Tomaszewski (b. 1914), page 424, (Figs. 21-4 and 21-5)
Jerzy Flisak (b. 1930), page 425
Franciszek Starowiejski (b. 1930), page 425
Jan Lenica (b. 1928), page 426, (Figs. 21-9 and 21-10)
Waldemar Swierzy (b. 1931), page 427, (Fig. 21-11)
Roman Cieslewicz (b. 1930–1996), page 427, (Figs. 21-13 and 21-14)
Seymour Chwast (b. 1931), page 429
Milton Glaser (b. 1929), page 429, (Fig. 21-18 and 21-19) (Fig. 21-22)
Reynolds Ruffins (b. 1930), page 429, (Fig. 21-17)
Edward Sorel (b. 1929), page 429
Barry Zaid (b. 1939), page 432
James McMullan (b. 1934), page 432
Paul Davis (b. 1938), page 433, (Fig. 21-31)
Richard Hess (1934–1991), page 433, (Fig. 21-32)
Arnold Varga (1926–1994), page 434, (Fig. 21-33)
John Berg (b. 1932), page 437, (Figs. 21-39 and 21-40)
Stan Richards (b. 1932), page 437
Woody Pirtle (b. 1943), page 437, (Figs. 21-41 and 21-42)
Robert Wesley “Wes” Wilson (b. 1937), page 438
Victor Moscoso (b. 1936), page 438, (Figs. 21-45 and 21-46)
Peter Max (b. 1937), page 438, (Fig. 21-47)
David Lance Goines (b. 1945), page 439, (Fig. 21-48)
Gunther Kieser (b. 1930), page 440, (Fig. 21-49)
Gunther Rambow (b. 1938), page 441
Robert Massin (b. 1925), page 442
Pierre Bernard (b. 1942), page 444
François Miehe (b. 1942), page 444
Gerard Paris-Clavel (b. 1943), page 444
Raúl Martínez, page 445, (Fig. 21-65)
Felix Beltrán (b. 1938), page 445, (Fig. 21-66)
Chapter 21 – Study Questions

Multiple Choice

1. During the decades after World War II, the conceptual image emerged. It dealt with the design of the entire space, including the integration of word and image, and conveyed not merely narrative information but ideas and concepts. The creation of conceptual images became a significant design approach in Poland, the United States, Germany, and Cuba. The first poster artist to emerge in Poland after World War I was ______________. His famous 1953 antiwar poster (Fig. 21-3) demonstrates his technique of distilling content to the simplest statement. A few simple shapes symbolize a devastated city, which is superimposed on a silhouette of a falling bomb. The word nie! (no!) expresses the tragedy of war.

A. Tadeusz Trepkowski  
B. Armando Testa  
C. Jerzy Flisak  
D. Henryk Tomaszewski

2. After the death of the designer referred to in the previous question, ______________, a professor at the Warsaw Academy of Fine Arts, became the spiritual head of Polish graphic design. His posters, such as the football poster for the Olympic Games in 1948, were composed of bits of torn and cut paper, then printed by the silkscreen process. He led the trend toward developing an aesthetically pleasing approach, escaping from the somber world of tragedy and remembrance into a bright, decorative world of color and shape.

A. Tadeusz Trepkowski  
B. Armando Testa  
C. Jerzy Flisak  
D. Henryk Tomaszewski

3. As photography stole illustration’s traditional function, a new approach to illustration emerged. This more conceptual approach to illustration began with a group of young New York graphic artists: Seymour Chwast, Milton Glaser, Reynolds Ruffins, and Edward Sorel banded together and shared a loft studio. Freelance assignments were solicited through a joint publication called the
Published bimonthly, it featured interesting editorial material from old almanacs illustrated by the group.

A. *Push Pin Graphic*
B. *Push Pin Almanack*
C. *Pushpin Group*
D. *Push Pin*

4. Milton Glaser’s 1967 image of the popular folk-rock singer Bob Dylan is presented as a black silhouette with brightly colored hair patterns inspired by __________ sources. Nearly six million copies of the poster were produced for inclusion in a best-selling record album. It became a graphic icon in the collective American experience. A photographer told Glaser about being on assignment on the Amazon River and seeing the Dylan poster in a hut in a remote Indian village.

A. art deco  
B. art nouveau  
C. cubism  
D. surrealism

5. ____________’s vision is very personal, yet communicates on a universal level. In his work, an absolute flatness is usually maintained. He has a love of Victorian and figurative letterforms; the ability to integrate figurative and alphabetic information has enabled him to produce unexpected design solutions. His album *cover for The Threepenny Opera* demonstrates his ability to synthesize diverse resources—the German expressionist woodcut, surreal spatial dislocations, and dynamic color found in primitive art—into an appropriate expression of the subject. From antiwar protest to food packaging and magazine covers, he has reformulated earlier art and graphics to express new concepts in new contexts.

A. Barry Zaid  
B. Reynolds Ruffin  
C. Milton Glaser  
D. Seymour Chwast

6. Both ____________ and ____________ developed a number of novelty display typefaces. Often these began as lettering for assignments that were then developed into full alphabets. Fig. 21-27 shows the logo developed for Artone Ink; the graded version of Blimp, based on old woodtypes; a geometric face inspired by the logo designed for a film studio; a typeface based on lettering first
developed for a *Mademoiselle* poster; and the Buffalo typeface, originally devised for a French product named Buffalo Gum, which was never produced.

A. James McMullen and Paul Davis  
B. Barry Zaid and Reynolds Ruffin  
C. Seymour Chwast and Milton Glaser  
D. Richard Hess and Arnold Varga

7. Illustrative, conceptual images and the influence of Push Pin Studios often mingled with Wild West, Mexican, and Native American motifs and colors in a regional school of graphic design that emerged in Texas during the 1970s and became a major force in the 1980s. The work of ______________, one of many major Texas designers who worked for the Stan Richards Group in Dallas during their formative years, epitomizes the originality of Texas graphics. His logo for Mr. and Mrs. Aubrey Hair (Fig. 21-41) evidences an unexpected wit, while his Knoll “Hot Seat” poster (Fig. 21-42) ironically combines the clean Helvetica type and generous white space of modernism with regional iconography. In 1988, he moved on to join the Manhattan office of the British design studio Pentagram.

A. John Berg  
B. Woody Pirtle  
C. Arnold Varga  
D. Richard Hess

8. The poster craze in the United States during the 1960s was a grassroots affair fostered by a climate of social activism. These posters made statements about social viewpoints rather than advertising commercial messages. The first wave of poster culture emerged from the late-1960s hippie subculture centered in the Haight-Ashbury section of San Francisco. Because the media and general public related these posters to antiestablishment values, rock music, and psychedelic drugs, they were called psychedelic posters. The graphics movement that expressed this cultural climate drew from a number of resources: the flowing, sinuous curves of ______________; intense optical color vibration associated with the brief op-art movement popularized by a Museum of Modern Art exhibition; and the recycling of images from popular culture or by manipulation that was prevalent in pop art (such as reducing continuous-tone images to high-contrast black-and-white).

A. art nouveau  
B. art deco  
C. de Stijl
D. Dada

9. A Grateful Dead poster (Fig. 21-44) designed by Robert Wesley “Wes” Wilson contains swirling lines and letterforms, which are variants of Alfred Roller’s art nouveau. Wilson was the innovator of the psychedelic poster style and created many of its stronger images. According to newspaper reports, respectable and intelligent businessmen were unable to comprehend the lettering on these posters, yet they communicated well enough to fill auditoriums with members of a younger generation who deciphered, rather than read, their messages. Other prominent members of this brief movement included Kelly/Mouse Studios and ______________, the only major artist of the movement with formal art training (Figs. 21-45 and 21-46).

A. Woody Pirtle
B. Wes Wilson
C. Milton Glaser
D. Victor Moscoso

10. A mundane advertising slogan, “End Bad Breath,” gained new life when it was combined with a blue woodcut and offset-printed green and red areas in this 1968 poster (Fig. 21-26) protesting the American bombing of Hanoi. Who is its designer? __________

A. Seymour Chwast
B. Woody Pirtle
C. Wes Wilson
D. Milton Glaser
E. Victor Moscoso

11. Lettering becomes an image, signifying a cultural and generational shift in values in this 1966 concert poster for The Association (Fig. 21-43). Who is its designer? __________

A. Seymour Chwast
B. Woody Pirtle
C. Wes Wilson
D. Milton Glaser
E. Victor Moscoso
12. The vibrant contrasting colors and Vienna Secession lettering inside of the sunglasses implies the drug culture of the period in this 1967 poster for the Chambers Brothers. Who is the designer? 

A. Seymour Chwast  
B. Woody Pirtle  
C. Wes Wilson  
D. Milton Glaser  
E. Victor Moscoso

13. Beginning in the 1960s and continuing into the 1990s, a poetic approach to graphic design emerged in Europe. It was based on imagery and its manipulation through collage, montage, and both photographic and photomechanical techniques. ______________, a German master of this movement, is a brilliant imagist who consistently demonstrated an ability to invent unexpected visual content to solve communications problems. He brings together images or ideas to create a new vitality, new arrangements, and the synthesis of disparate objects. His “Alabama Blues” poster combines two photographs, of a dove and a civil-rights demonstration, with typography inspired by nineteenth-century wood type (Fig. 21-49). His poetic visual statements always have a rational basis that link expressive forms to communicative content. It is this ability that separates him from design practitioners who use fantasy or surrealism as ends rather than means.

A. Gunter Rambow  
B. Willy Fleckhouse  
C. Gunther Kieser  
D. Michael van de Sand

14. Launched in Munich in 1959, the German periodical Twen (Fig. 21-52) derived its name by chopping the last two letters from the English word that signified the age group of sophisticated young adults to whom the magazine was addressed. The magazine featured excellent photography used in dynamic layouts by its art director, _____________.

A. Gunter Rambow  
B. Willy Fleckhouse  
C. Gunther Kieser  
D. Michael van de Sand
During the 1960s, literary and graphic design communities throughout the world were astounded and delighted by the experimental typography of French designer ______________, whose work has affinities with futurist and Dadaist typography. His designs for Eugène Ionesco’s plays combine the pictorial conventions of the comic book with the sequencing and visual flow of the cinema. The drama of La Cantatrice Chauve (The Bald Soprano) is enacted through Henry Cohen’s high-contrast photographs (Fig. 21-59). Each character is assigned a typeface for his or her speaking voice (Fig. 21-60) and is identified not by name but by a small photographic portrait. ______________

A. Pierre Bernard
B. François Miehe
C. Gerard Paris-Clavel
D. Robert Massin

Image Identification

From the end of World War II until the dismantling of the Iron Curtain in 1989, the industrialized nations formed two groups: the capitalist democracies of Western Europe, North America, and Japan, and the communist bloc led by the Soviet Union. The emerging nations of Latin America, Asia, and Africa have been called the Third World. Third-World posters address two constituencies: in their native lands, they tackle political and social issues, motivating people toward one side of a political or social struggle; a secondary audience exists in the industrial democracies, where distributors such as Liberation Graphics in Alexandria, Virginia make posters available to Westerners who feel strongly about international issues. Identify the designers of the following posters:

1. Poster honoring the Cuban people, c. 1970 (Fig. 21-65) ____
   A. Raúl Martínez
   B. Elena Serrano
   C. Felix Beltrán

2. Poster celebrating the “Day of the Heroic Guerilla”, 1968, (Fig. 21-67) ____
   A. Raúl Martínez
   B. Elena Serrano
   C. Felix Beltrán
Chapter 22 – National Visions within a Global Dialogue

Introduction, 447
Postwar graphic design in the United Kingdom, 447
The rise of Japanese design, 448
Design in the Netherlands, 456

Key Terms (in order of appearance; the first page number of their appearance is listed)

Pluralistic, page 448
Global village, page 447
Mon, page 448
House style, page 458
Fluxus, page 459
Staged photography, page 461
Closed texts, page 464
Open texts, page 464

Key People and Their Major Contributions (in order of appearance; the first page number of their appearance is listed)

Herbert Spencer (1922–2002), page 447
Alan Fletcher (b. 1931), Colin Forbes (b. 1928), and Bob Gill (b. 1931), page 447
Theo Crosby (1925–1994), page 447
Pentagram, page 447, (Figs. 22-1 through 22-4)
Ryuichi Yamashiro (b. 1920), page 448, (Fig. 22-5)
Yusaku Kamekura (1915–1997), page 449, (Figs. 22-7 through 22-12)
Masuda Tadashi (b. 1922), page 451, (Fig. 22-13)
Kazumasa Nagai (b. 1929), page 451, (Fig. 22-14)
Ikko Tanaka (1930–2002), page 451, (Figs. 22-15 and 22-16)
Takenobu Igarashi (b. 1944), page 453, (Figs. 22-17 through 22-20)
Tadanori Yokoo (b. 1936), page 453, (Figs. 22-22 and 22-23)
Shigeo Fukuda (b. 1932), page 454, (Figs. 22-24 through 22-26)
Koichi Sato (b. 1944), page 455, (Figs. 22-27 through 22-29)
Wim Crouwel (b. 1928), Frisco Kramer, and Benno Wissing (b. 1923), page 453
Total Design, page 456, (Fig. 22-31) (Figs. 22-32 and 22-33)
Pieter Brattinga (b. 1931), page 458
Jean François van Royen (1878–1942), page 458
R. D. E. Oxenaar (b. 1929), page 458
Anthon Beeke (b. 1940), page 459, (Fig. 22-37)
Hard Werken Design, page 459, (Fig. 22-45 and 22-46)
Wild Plakken, page 459, (Figs. 22-48 through 22-50)
Ghislain (Gielijn) Dapnis Escher (b. 1945), page 460, (Figs. 22-40 through 22-42)
Gert Dumbar (b. 1940), page 461, (see Fig. 22-35) (Fig. 22-43)
Chapter 22 – Study Questions

Multiple Choice

1. The 1960s saw the beginning of a global dialogue that embraced the fine arts, performing arts, and design. During the 1980s and 1990s, the rapid growth of electronic and computer technology began to change the processes and appearance of design. Overnight express mail, fax machines, global televisual communications such as the continuous Cable News Network (CNN), and direct-dial international long-distance telephone service all served to further shrink the human community into Marshall McLuhan’s “global village.” This complex world of cultural and visual diversity created an environment in which a vast global dialogue co-existed with national visions, resulting in an explosive and pluralistic era for graphic design. A design partnership, which formed in London in 1962, made significant contributions to international design. Thorough evaluation of the communications problem and the specific nature of the environmental conditions under which the design was to appear combined with British wit and a willingness to try the unexpected summarize the essence of __________ approach to graphic design.
   A. Push Pin Studios’
   B. Pentagram’s
   C. Chermayeff & Geismar Associates’
   D. Vignelli Associates’

2. __________ became an important voice in renewing British graphic design after World War II through his writing, teaching, and graphic design practice. As editor and designer of the journal Typographica and author of Pioneers of Modern Typography, an influential 1969 book that informed the postwar generation about the accomplishments of earlier twentieth-century designers, he encouraged a worldwide dialogue.
   A. Alan Fletcher
   B. Herbert Spencer
   C. Colin Forbes
   D. Theo Crosby

3. The traditional Japanese family symbol or crest, called the __________, was an important inspiration for the Japanese graphic designer. These simplified designs of flowers, birds, animals, plants, and household objects contained in a circle
were applied to belongings and clothing and have been in use for thousands of years in Japan.

A. total image  
B. house style  
C. mon  
D. Nihon Buyo

4. Plane and shape are the nucleus of ____________’s work. His work is influenced by traditional Japanese motifs and incorporates grid structures and vibrant planes of color that explore warm/cool contrast, close-valued color, and analogous color ranges. In the 1974 poster for Senei Ikenobo’s flower arrangements, mountains and waves are created by a rhythmic sequence of blue and blue-green bands under a graduated tan sky. His 1981 Nihon Buyo poster for the Asian Performing Arts Institute uses planes of color on a twelve-unit grid to define the abstracted and expressive portrait.

A. Ikko Tanaka  
B. Takenobu Igarashi  
C. Tadanori Yokoo  
D. Shigeo Fukuda

5. Takanobu Igarashi is a paradigm of the blending of Eastern and Western ideas. After graduating from Tama University in 1968, Igarashi earned a graduate degree from the University of California, Los Angeles. Upon returning to Japan, he found design firms and corporations unreceptive to a designer who had spent time abroad, so he opened his own design office in 1970. Much of his studio’s work is in trademarks, corporate identity, and environmental and product design. By 1976, Igarashi’s experiments with ____________ drawn on isometric grids were attracting clients and international recognition. In 1983, Igarashi began a ten-year project designing the Igarashi Poster Calendar, starting with five years for the Museum of Modern Art in New York.

A. Japanese crests  
B. symbols  
C. alphabets  
D. landscapes

6. The work of Japanese designer ____________ demonstrates a fascination with popular art, comic books, and mass media—television, movies, radio, and records. His 1968 poster for a printmaking exhibition entitled “Sixth International
Biennial Exhibition of Prints in Tokyo” combines a variety of techniques, including halftone, airbrush, calligraphic writing, and montage.

A. Ikko Tanaka
B. Takenobu Igarashi
C. Tadanori Yokoo
D. Shigeo Fukuda

7. Unexpected violations of spatial logic and universal order characterize the work of Japanese designer ____________. Playfulness, humor, and intentional ambiguity are abundant in his designs. In his poster “Victory 1945,” which commemorates the thirtieth anniversary of the end of World War II, the folly of war is expressed simply by turning a shell back toward a gun. The optical illusion featured in his 1975 exhibition poster for the Keio Department Store is typical of his work.

A. Ikko Tanaka
B. Takenobu Igarashi
C. Tadanori Yokoo
D. Shigeo Fukuda

8. World War II and German occupation completely disrupted Dutch society; transportation and communication came to a virtual halt, and terrible shortages developed. The postwar years were a time of rebuilding the economy and working to restore prewar cultural and social life. As Dutch design evolved, two strong currents became evident: ___________ and ___________. This duality is not surprising, for the Dutch are known as a thrifty people who favor order and structure; they are also broad-minded and tolerant of diverse political, religious, and artistic ideas.

A. pragmatic constructivism
B. graphics based on work being produced in New York
C. traditional Dutch motifs reinvented in a modernist design idiom
D. a vigorous expressionism with jolting images and spontaneous spatial syntax

9. A group known as ____________, which included graphic designer Wim Crouwel, product designer Frisco Kramer, and graphic and architectural designer Benno Wissing, was a comprehensive design firm whose goal was to conceive and implement “ideas on design in all fields, in order whenever possible to achieve a unity of thought…in these fields.” During the 1960s and 1970s, this firm played a dominant role in Dutch design. Projects included visual-identity
programs, such as the ones for the PAM petroleum company and Furness Holding, and for museum exhibitions with related graphics, book design, signage, and environments.

A. Hard Werken  
B. Wild Plakken  
C. Total Design  
D. PTT

10. Dutch designer ______________'s design philosophy was less emphatic about universal form and standardized formats than that of other Dutch designers. He emphasized the designer as an objective problem solver who finds solutions through research and analysis, simplifying the message and the means for conveying it to an audience. He believed the flood of typographic messages in contemporary society demanded clarity and simplicity.

A. Wim Crouwel  
B. Gert Dumbar  
C. Anthon Beeke  
D. Pieter Brattinga

11. Dutch designer ______________ learned all aspects of printing by working at his father’s printing company, De Jong & Co., near Amsterdam. He curated small exhibitions intended to introduce advanced art and graphic design to a wider audience. These exhibitions were held in a small gallery at the printing firm. He designed posters for these exhibitions, which were constructed on a grid of fifteen squares. One or more of these modules always appeared as an element in the design, such as the 1960 exhibition poster for “De Man Achter de Vormgeving van de PTT” (The Man Behind the Design for the Dutch Post Service). He also edited a square-format journal called Kwadraatblad (Quadrate), which was printed at De Jong and showcased the work of leading artists and designers while demonstrating printing capabilities. And he designed posters and publications for the well-known Kröller-Müller Museum in Otterlo.

A. Wim Crouwel  
B. Gert Dumbar  
C. Anthon Beeke  
D. Pieter Brattinga

12. The Provo youth movement, which emphasized individual freedom and rejected social conformity, inspired a new expressionism in Dutch graphic design, which increased dramatically during the 1970s and 1980s. Late twentieth-century
designers, such as ______________, and groups such as Studio Dumbar, Hard Werken, and Wild Plakken, pushed beyond the traditional values of harmony, unity, and order in their quests for individual meaning and subjective expression.

A. Wim Crouwel
B. Gert Dumbar
C. Anthon Beeke
D. Pieter Brattinga

13. A provocateur who pushed for maximum freedom of expression and thought, Dutch graphic designer and photographer _____________ sought unconventional solutions to visual communications assignments. Many of his works, like the 1979 theater poster for *Leonce and Lena*, contain jolting ambiguities and erotic overtones. His typographic oeuvre is unrestrained, from handwritten titles jotted onto photographs to eloquent classical typography—and sometimes both combined.

A. Wim Crouwel
B. Gert Dumbar
C. Anthon Beeke
D. Pieter Brattinga

14. More of an informal association than a structured business, _____________ embraced the contemporary art scene and rejected design refinement. The group, which included Henk Elenga, Gerard Hadders, Tom van der Haspel, Helen Howard, and Rick Vermeulen, developed a relaxed, anything-goes attitude and rejected all styles and theories in favor of the subjective interpretation of a problem. They were open to any conceivable typographic or image possibility. They emphasized the message as well as materials and methods used to convey the message to an audience.

A. Wild Plakken
B. Studio Dumbar
C. Hard Werken

15. Its name can be translated as “Unauthorized Bill-Posting.” The group, believing that designers should match their beliefs to the content of their graphic designs, accepts or rejects commissions based on the client’s ideological viewpoint. Its work has addressed such issues as the environment, women’s rights, gay rights, and racism, such as the 1984 poster for the anti-apartheid movement of the Netherlands. It does all of its own photography, so its designers can feel free to
experiment in the darkroom, cutting, tearing, and combining images without needing to maintain the integrity of an outside photographer’s work. __________

A. Wild Plakken
B. Studio Dumbar
C. Hard Werken

Matching

I. Match the term with its definition.

1. Clear, straightforward images that viewers can only interpret in one specific, carefully controlled way _____

2. A 1960s neo-Dadaist movement that explored conceptual and performance art, happenings, experimental poetry, and language art _____

3. Greater freedom for imaginative interpretation by introducing surrealist imagery, photomontages using torn and fragmented images, and brightly colored shapes _____

A. Fluxus
B. Closed texts
C. Open texts

Image Identification

I. Match the image with the designer or design studio.

1. Cover for Graphis 119, 1965, (Fig. 22-1) __________
   A. Pentagram
   B. Wim Crouwel
   C. Tadanori Yokoo
   D. Studio Dumbar

2. Poster for a tree planting campaign, 1961, (Fig. 22-5) __________
A. Masuda Tadashi
B. Takenobu Igarashi
C. Ryuichi Yamashiro
D. Ikko Tanaka

3. Postage stamp for the Netherlands Postage and Telecommunications Service (PTT), 1976, (Fig. 22-30) __________
   A. Studio Dumbar
   B. Wim Crouwel
   C. Pieter Brattinga
   D. Hard Werken Design

4. Exhibition poster postage stamp for the PTT, 1960, (Fig. 22-34) __________
   A. Studio Dumbar
   B. Wim Crouwel
   C. Pieter Brattinga
   D. Hard Werken Design

5. PTT corporate identity system, 1989, (Fig. 22-35) __________
   A. Studio Dumbar
   B. Wim Crouwel
   C. Pieter Brattinga
   D. Hard Werken Design

6. Theater poster for Leonce and Lena, 1979, (Fig. 22-37) __________
   A. R. E. D. Oxenaar
   B. Pieter Brattinga
   C. Gert Dumbar
   D. Anton Beeke
Chapter 23 – Postmodern Design

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Precursors to postmodern design, 466
Early Swiss postmodern design, 468
New-wave typography, 471
The Memphis and San Francisco schools, page 477
Retro and vernacular design, page 481

**Key Terms** (in order of appearance; the first page number of their appearance is listed)

Postmodernism, page 466
Late modernism, page 466
Mannerism, page 466
Supermannerism, page 466
Supergraphics, page 466
New-wave typography, page 469
Halftone dots, page 471
Moiré, page 471
“Gutenberg approach,” page 472
Radical modernism, page 475
Retro design, page 481
Vernacular design, page 481
Key People and Their Major Contributions (in order of appearance; the first page number of their appearance is listed)

Wolfgang Weingart (b. 1941), page 467
Robert Venturi (b. 1925), page 467
Barbara Stauffacher Solomon (b. 1932), page 467
Rosmarie Tissi (b. 1937), page 468
Siegfried Odermatt (b. 1926), page 468, (Fig. 23-4)
Steff Geissbuhler (b. 1942), page 468, (Fig. 23-8)
Dan Friedman (1945–1995), page 472
April Greiman (b. 1948), page 472
Willi Kunz (b. 1943), page 472, (Fig. 23-27)
Jayme Odgers (b. 1939), page 475
Kenneth Hiebert (b. 1930), page 477, (Fig. 23-28)
Memphis, page 477
Michael Graves (b. 1934), page 478
Michael Vanderbyl (b. 1947), page 478, (Fig. 23-31) (Fig. 23-34)
Michael Manwaring (b. 1942), page 478, (Fig. 23-35)
Michael Cronin (b. 1951), page 478, (Fig. 23-37)
Paula Scher (b. 1948), page 481
Louise Fili (b. 1951), page 481
Carin Goldberg (b. 1953), page 481, (Figs. 23-42 and 23-43)
Terry Koppel (b. 1950), page 481
Lorraine Louie (b. 1955), page 482
Daniel Pelavin (b. 1948), page 482 (Figs. 23-45 and 23-46)
Joe Duffy (b. 1949), page 484
Charles S. Anderson (b. 1958), page 484 (Figs. 23-47 through 23-49)
Neville Brody (b. 1957), page 484
Multiple Choice

1. By the 1970s, many believed the modern era was drawing to a close in art, design, politics, and literature. The social, economic, and environmental awareness of the period caused many to believe the modern aesthetic was no longer relevant in an emerging postindustrial society. People in many fields, including architects, economists, feminists, and even theologians, embraced the term postmodernism to express a climate of cultural change. Maddeningly vague and overused, this term became a byword in the last quarter of the twentieth century. Late modernism and ______________ are proffered as alternative terms for late twentieth-century design.
   A. new wave
   B. mannerism
   C. modern radicalism
   D. vernacular

2. The term ______________ design refers to artistic and technical expression broadly characteristic of a locale or historical period.
   A. retro
   B. Memphis
   C. new-wave typography
   D. vernacular

3. Siegfried Odermatt and ______________ sought logical and effective solutions to design problems through a playful sense of form, the unexpected manipulation of space, and designs with strong graphic impact. They achieved typographic vitality by overlapping and combining letterforms in the presentation folder for the printing firm Anton Schöb (Fig. 23-6). Placing typography on geometric shapes whose configuration was generated by the line lengths of the text itself was a technique they frequently used during the 1980s.
   A. Steff Geissbuhler
   B. Rosmarie Tissi
   C. William Longhauser
4. Through his instruction at the Basel School of Design and his personal projects, ____________ consciously sought to breathe a new spirit into the typography of order and neatness by questioning the premises, rules, and surface appearances that were hardening the innovations of the Swiss masters into an academic style in the hands of their followers. In the mid-1970s, he experimented with offset printing and film systems. The printer’s camera was used to alter images, and the unique properties of the film were explored. He began to move away from purely typographic form and embraced collage as a medium for visual communication, as shown in the 1974 announcement from *Typographische Monatsblätter* magazine (Fig. 23-13).

   A. Dan Friedman
   
   B. Willi Kunz
   
   C. Steff Geissbuhler
   
   D. Wolfgang Weingart

5. ____________ and other pioneers strongly rejected the notion of style and saw their work as an attempt to expand the parameters of typographic communication, yet their work was so widely imitated, especially in design education, that it gave rise to a prevailing typographic approach in the late 1970s and 1980s. Specific design ideas explored by him and his students in the late 1960s and early 1970s and adopted a decade later include letter-spaced, sans-serif type; bold, stair-step rules; ruled lines punctuating and energizing space; diagonal type; the introduction of italic type and/or weight changes within words; and type reversed from a series of bars.

   A. Dan Friedman
   
   B. Willi Kunz
   
   C. Steff Geissbuhler
   
   D. Wolfgang Weingart

6. Some young designers who spent time at the Basel School of Design came to the United States to teach and practice afterwards. ____________, an American who studied at the Ulm Institute of Design in 1967 and 1968 and at the Basel School of Design from 1968 to 1970, taught courses at Yale University and the Philadelphia College of Art in 1970 and 1971. He addressed the problem of teaching the basics of typography through syntactic and semantic investigations, using such ordinary copy as a daily weather report (Fig. 23-18). He urged his students to make their work both functional and aesthetically unconventional. The 1973 publication of this work in the journal *Visible Language* had a
widespread influence on typographic education in the United States and other countries.

A. Dan Friedman
B. Willi Kunz
C. Steff Geissbuhler
D. Kenneth Hiebert

7. Typographic design has usually been the most two-dimensional of all the visual disciplines, but April Greiman evolved a new attitude toward space. She achieved a sense of depth in her typographic pages. Overlapping form, diagonal lines that imply perspective or reverse perspective, floating forms that cast shadows, and gestured strokes that move back in space, overlap, or move behind geometric elements are the means she uses to make forms move forward and backward from the surface of the printed page. Greiman’s typographic space operates with the same governing principle defined by ____________ in his PROUN paintings but that he never applied to his typographic designs.

A. Alexander Rodchenko
B. El Lissitzky
C. Jan Tschichold
D. Herbert Bayer

8. ____________ accepted a one-year appointment to teach typography at the Basel School of Design while Wolfgang Weingart was on sabbatical. Inspired by the research of Weingart and his students, and with the type shop at his disposal, he began a series of typographic interpretations of writings by Canadian philosopher Marshall McLuhan. These were hand-printed and published under the title 12 Typographical Interpretations (Fig. 23-25). McLuhan’s thoughts on communications and printing were visualized and intensified by contrasting type weights, sometimes within the same word; geometric stair-step forms; unorthodox letter, word, and line spacing; lines and bars used as visual punctuation and spatial elements; and textual areas introduced into the spatial field.

A. Dan Friedman
B. Willi Kunz
C. Steff Geissbuhler
D. Kenneth Hiebert

9. The postmodernist architect ____________ used an energetic, high-spirited geometry of decorative surfaces and tactile repetitive patterns. His visual motifs
are expressed in a poster designed by Philadelphia graphic designer William Longhauser (Fig. 23-30) for an exhibition of the architect’s works. In this poster, which became an influential postmodern design in itself, a background pattern of repetitive dots is produced by the letters M I C H A E L letter spaced on a grid.

A. Robert Venturi  
B. Michael Graves  
C. Ettore Sottsass  
D. Le Corbusier

10. In the early 1980s in San Francisco, Michael Vanderbyl, Michael Manwaring, and Michael Cronin forged a postmodern design movement that positioned San Francisco as a creative center of design. Although the San Francisco designers share gestures, shapes, palettes, intuitive spatial arrangements, and assign symbolic roles to geometric elements, personal attitudes are nonetheless evident in their work. __________ combines a casual postmodern vitality with a typographic clarity, which reflects his background in the international style. This influence is evident in the 1979 “California Public Radio” poster (Fig. 23-31) and the 1985 promotional mailer for the Simpson Paper Company (Fig. 23-32).

A. Michael Vanderbyl  
B. Michael Manwaring  
C. Michael Cronin

11. Retro thrived in book jacket design, as is evident in the work of _____________. She finds inspiration in the vernacular graphics of France and Italy, which she collects during summer vacations in Europe. Eccentric letterforms on signs and vernacular graphics with long-lost typefaces discovered in flea markets and used-book stalls inform her highly personal and intuitive approach.

A. Paula Scher  
B. Lorraine Louie  
C. Louise Fili  
D. Barbara Stauffacher

12. A famous 1930s Swiss travel poster designed by ____________ is parodied in Paula Scher’s 1985 retro-style poster for Swatch (Fig. 23-40), the Swiss watch manufacturer.

A. Armin Hofmann  
B. Josef Müller-Brockmann
13. Postmodernism heralded a spirit of liberation that allowed designers to respond positively to vernacular and historic forms and to incorporate them into their work. An atmosphere of inclusion and expanding possibilities encouraged designers to experiment. The English designer ____________ wondered, “Why can’t you take a painterly approach within the print medium?” His work evolves from an effort to discover an intuitive yet logical approach to design, expressing a personal vision that could have meaning to his audience. His typographic configurations project an emblematic authority that evokes heraldry and military emblems (Fig. 23-52).

A. Joe Duffy
B. Daniel Pelavin
C. Charles S. Anderson
D. Neville Brody

Matching

I. Match the description of the movement with its name.

In the 1970s, the term postmodernism designated the work of architects and designers who were breaking with the international style that had been so prevalent since the Bauhaus. However, graphic design, rapidly changing and ephemeral, was never dominated by the international style the way architecture had been, so postmodern graphic design can be loosely categorized as having moved in several major directions:

1. This movement was characterized by a typographic revolt, as practitioners and teachers schooled in the International Typographic Style sought to reinvent typographic design. _____

2. As the 1970s closed and the 1980s began, a new movement in postmodern design swept into international prominence. Function became secondary to surface pattern and texture, color, and fantastic forms in the lamps, sofas, and cabinets of this movement’s designers. _____

3. This movement was characterized by an uninhibited, eclectic interest in modernist European design, particularly in the decades between the world wars; a flagrant disregard for the rules of proper typography; and a fascination with eccentric typefaces designed and widely used during the 1920s and 1930s. _____
A. Memphis
B. new-wave typography
C. retro

**Image Identification**

I. Match the image with the designer(s) or design studio.

1. Poster for the California Institute of the Arts, 1979 (Fig. 23-24),
   - A. Michael Vanderbyl
   - B. William Longhauser
   - C. Kenneth Hiebert
   - D. April Greiman and Jayme Odgers

2. Trademark for Marine Midland Auto Financing Division, 1985, (Fig. 23-47)
   - A. Charles S. Anderson
   - B. Daniel Pelavin
   - C. Paula Scher
   - D. Daniel Pelavin

3. Book cover for *Hoover’s Guide to the Top Southern California Companies*, 1994, (Fig. 23-46)
   - A. Charles S. Anderson
   - B. Daniel Pelavin
   - C. Paula Scher

4. “Language is a Deadly Weapon,” 1994 graphic for MTV’s “Free Your Mind”
   campaign, (Fig. 23-55)
   - A. Charles S. Anderson
   - B. Daniel Pelavin
   - C. Paula Scher
II. Identify the postmodern movement associated with the image.

1. Poster for the California Institute of the Arts, 1979, (Fig. 23-24) __________
   A. retro
   B. Memphis
   A. new-wave typography

2. Book cover for Hoover’s Guide to the Top Southern California Companies, 1994, (Fig. 23-46) __________
   A. retro
   B. Memphis
   C. new wave
Chapter 24 – The Digital Revolution and Beyond

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The origins of computer-aided graphic design, 488
Pioneers of digital graphic design, 490
Revitalizing magazine design, 495
The digital type foundry, page 498
Digital imaging, page 501
Interactive media, the Internet, and the World Wide Web, page 503
The new conceptual poster, page 507
The conceptual book cover, page 514
A voice from Africa, page 514
A new generation of film titles, page 517
A digital vanguard, page 517
Recent British graphic design, page 519
New typographic expression, page 522
A Mexican vanguard, page 528

**Key Terms** (in order of appearance; the first page number of their appearance is listed)

Pluralism, page 488
Pixels, page 488
Bit-mapped fonts, page 489, (Fig. 24-2)
Bezier splines, page 489, (Fig. 24-3)
Linotron, page 489
Desktop publishing, page 490
Émigré, page 490, (Figs. 24-6 and 24-7)
Entropy, page 493
Kern, page 495
Em, page 495
Gutter, page 495
Zines, page 495
Oxford rules, page 496
Design axis, page 498
Hypertext, page 503
Interactive media/hypermedia, page 503
Linear series, page 504
Spatial zoom, page 504
Parallel texts, page 504
Overlays, page 504
Hierarchies, page 504
Matrix, page 504
Web structure, page 504
Internet, page 504
World Wide Web, page 504
Hyperlinks, page 505
Information superhighway, page 505
Information architecture, page 505

**Key People and Their Major Contributions** (in order of appearance; the first page number of their appearance is listed)
Douglas C. Engelbart (b. 1925), page 488
Susan Kare (b. 1954), page 489, (Fig. 24-2)
Pierre Bézier (1910–1999), page 489, (Fig. 24-3)
Paul Brainerd, page 489
Rudy Vanderlans (b. 1955), page 490, (Figs. 24-6 and 24-7)
Zuzana Licko (b. 1961), page 490, (Fig. 24-8)
Katherine McCoy (b. 1945), page 492, (Fig. 24-9)
Edward Fella (b. 1939), page 492
David Carson (b. 1956), page 495, (Fig. 24-12)
Fred Woodward (b. 1953), page 495, (Figs. 24-15 through 24-17)
Gail Anderson (b. 1962), page 495, (Fig. 24-16)
John Plunkett (b. 1952) and Barbara Kuhr (b. 1954), page 497, (Figs. 24-19 through 24-21)
Sumner Stone (b. 1945), page 498, (Fig. 24-22)
Carol Twombly (b. 1959), page 498, (Fig. 24-23)
Robert Slimbach (b. 1956), page 498, (Fig. 24-24)
Matthew Carter (b. 1937), page 500, (Figs. 24-27 and 24-28)
Laurie Haycock Makela (b. 1956) and Matt Eller (b. 1968), page 501
Erik Spiekermann (b. 1947), page 504
Netscape Communications, page 505
Jessica Helfand (b. 1960), page 505, (Fig. 24-36 through 24-41)
Richard Saul Wurman (b. 1935), page 505
Clement Mok (b. 1958), page 505
Bob Aufuldish (b. 1961) and Kathy Warinner (b. 1957), page 507, (Figs. 24-43 and 24-44)
Helmut Brade (b. 1937), page 507, (Fig. 24-46)
Gitte Kath (b. 1948), page 507, (Figs. 24-47 and 24-48)
Luba Lukova (b. 1960), page 508, (Figs. 24-49 and 24-50)
Hideki Nakajima (b. 1961), page 508, (Fig. 24-51)
Makoto Saito (b. 1952), page 509, (Fig. 24-52)
Shin Matsunaga (b. 1940), page 509, (Fig. 24-54)
Mitsuo Katsui (b. 1931), page 510, (Fig. 24-55)
Jianping He (b. 1973), page 510, (Fig. 24-56)
Stefan Sagmeister (b. 1962), page 510, (Fig. 24-57)
Werner Jeker (b. 1944), page 511, (Fig. 24-58)
Jean-Benoît Lévy (b. 1959), page 511, (Figs. 24-59 and 24-60)
Rudi Meyer (b. 1943), page 511, (Figs. 24-61 and 24-62)
Niklaus Troxler (b. 1947), page 512, (Figs. 24-63 and 24-64)
Karl Dominic Geissbuhler (b. 1932), page 512, (Figs. 24-65 and 24-66)
Uwe Loesch (b. 1943), page 512, (Fig. 24-67)
Holger Matthies (b. 1940), page 513, (Fig. 24-68)
Philippe Apeloig (1962), page 513, (Fig. 24-69)
David Tartakover (b. 1944), page 514, (Fig. 24-70)
Reza Abedini (b. 1967), page 514, (Figs. 24-71 and 24-72)
Charles I. (Chip) Kidd (b. 1964), page 514, (Figs. 24-73 and 24-74)
Katsumi Asaba (b. 1940), page 514, (Fig. 24-75)
Chaz Maviyane Davies (b. 1952), page 514, (Fig. 24-76)
Erik Adigard (b. 1953) and Patricia McShane (b. 1953), page 517, (Figs. 24-80 and 24-81)
 Vaughan Oliver (b. 1957), page 519, (Fig. 24-83)
Michael Johnston (b. 1964), page 519, (Fig. 24-84)
Vince Frost (b. 1964), page 520, (Fig. 24-88)
Alan Kitching (b. 1940), page 520, (Figs. 24-89 and 24-90)
Shuichi Nogami (b. 1954), page 522, (Fig. 24-91)
Shinnoske Sugisaki (b. 1953), page 522, (Fig. 24-92)
Ralph Schraivogel (b. 1960), page 522, (Fig. 24-93)
Melchior Imboden (b. 1956), page 522, (Figs. 24-94 and 24-95)

Paula Scher (b. 1948), page 522, (Figs. 24-96 and 24-97)

Nancy Skolos (b. 1955) and Thomas Wedell (b. 1949), page 523, (Figs. 24-98 and 24-99)

Hans Dieter Reichert (b. 1959), page 523, (Figs. 24-100 and 24-101)

Mirko Ilic (b. 1956), page 524, (Fig. 24-102)

Wladyslaw Pluta (b. 1949), page 526, (Figs. 24-103 and 24-104)

Ahn Sang-Soo (b. 1952), page 527, (Fig. 24-105)

Michael Bierut (b. 1957), page 527, (Fig. 24-106)

Helmut Schmid (b. 1942), page 527, (Fig. 24-107)

Jacques Koeweiden (b. 1957) and Paul Postma (b. 1958), page 528, (Fig. 24-108)

Max Kisman (b. 1953), page 528, (Fig. 24-109)

Felix Beltrán (b. 1938), page 528, (Fig. 24-110)

Luís Almeida Herrera (b. 1946), page 529, (Figs. 24-111 and 24-112)

German Montalvo (b. 1956), page 529, (Fig. 24-113)

Gabriela Rodriguez (b. 1956), page 529, (Fig. 24-114)

Alejandro Magallanes (b. 1971), page 530, (Figs. 24-115 and 24-116)
Chapter 24 – Study Questions

Multiple Choice

1. During the 1960s, when ______________ became a prevalent means of typesetting, it took a team of skilled specialists to create and print graphic communications. These specialists included graphic designers, who created page layouts; typesetters, who operated text and display typesetting equipment; production artists, who pasted all of the elements into position on boards; camera operators, who made photographic negatives of the paste-ups, art, and photographs; strippers, who assembled these negatives together; plate makers, who prepared the printing plates; and press operators, who ran the printing presses.

   A. metal type
   B. lithography
   C. phototype
   D. wood type

2. By the 1990s, ______________ technology enabled one person operating a desktop computer to control most—or even all—of these functions. New photo-optical printing machines used computer-controlled lasers to photosensitize printing drums, making short-run and even individualized full-color press sheets possible.

   A. photographic
   B. offset lithographic
   C. laser
   D. digital

3. During the 1980s, three companies introduced powerful hardware and software to the marketplace, bringing the digital revolution to the desktops of individual graphic designers. Which company does NOT belong to that group? __________

   A. Adobe Systems
   B. Microsoft
   C. Apple Computer
4. By 1990, ____________ began receiving significant numbers of idiosyncratic and novel fonts from outside designers. Recognizing the originality of many of these submissions, partners Zuzana Licko and Rudy Vanderlans began to license and distribute the designs. Some of these typefaces (Fig. 24-26) were extremely controversial, even as they were rapidly adopted and used extensively in major advertising campaigns and publication designs. Licko designed the two typefaces at the bottom: Mrs Eaves is an exemplary interpretation of John Baskerville’s eighteenth-century transitional fonts, and Filosofia captures the spirit of modern-style typefaces.

A. Adobe Systems  
B. Émigré Fonts  
C. Linotype  
D. Monotype

5. Graphic designer ____________ created a 1987 issue of Design Quarterly magazine for the Walker Art Center in Minneapolis as a 12-by-6-foot single-sheet digital collage executed entirely on the Macintosh computer (Fig. 24-5). Images were captured from video and digitized, and words and pictures were integrated into a single computer file. In 1988, this designer expressed an obligation to “take on the challenge of continuing forward toward a new landscape of communications,” adding, “[t]o use these tools to imitate what we already know and think is a pity. I think there has to be another layer applied here. And that’s about ideas.”

A. April Greiman  
B. Katherine McCoy  
C. Edward Fella  
D. Zuzana Licko

6. With roots in American vernacular design and early modernist typography, ____________’s experimental work became a major influence on a generation of designers. From 1983 until 1991, he contributed graphics to the Detroit Focus Gallery and produced flyers, such as the one shown here (Fig. 24-10), and catalogues whose typography and lettering challenged the reader in the same way advanced art in a gallery challenged the viewer. He explored entropy, the disintegration of form from repeated copying, and an unbounded range of techniques: found typography, scribbles, brush writing, typesetting, rubdown letters, public-domain clip art, stencils, etc. He investigated the aesthetic potential of invented letterforms, irregular spatial intervals, eccentric characters, personal glyphs, and vernacular imagery. Although his influence permeates work by young
designers vigorously committed to computer graphics, he rarely uses computers and favors hand processes.

A. David Carson  
B. Fred Woodward  
C. Edward Fella  
D. John Hersey

7. During the 1990s, many designers energized their work through advanced computer graphics. New directions migrated from personal exploration and design education to the mainstream as editorial designers for specialized magazines applied computer experimentation to their pages. As art director/designer for Transworld Skateboarding (1983–1987), Musician (1988), Beach Culture (1989–1991), Surfer (1991–1992), and Ray Gun (1992–1996), ___________ shunned grid formats and a consistent approach to typographic layout. Instead, he chose to explore the expressive possibilities of each subject and each page or spread, rejecting conventional notions of typographic syntax, visual hierarchy, and imagery. In the 1994 article “Morrissey: The Loneliest Monk,” in Ray Gun (Fig. 24-14), the unusual photographic cropping and deconstructed headline convey the musician’s romanticism and mystery.

A. David Carson  
B. Fred Woodward  
C. Edward Fella  
D. John Hersey

8. After art directing Texas Monthly and Regardie’s, ___________ became the art director of the semi-monthly rock-and-roll magazine Rolling Stone. An intuitive designer, he tried to match typefaces and images to content. In this 1990 breakthrough layout of an article on Sinead O’Connor (Fig. 24-15), large-scale display type over two pages is used as a dynamic counterpoint to the photographic portrait.

A. David Carson  
B. Fred Woodward  
C. Edward Fella  
D. John Hersey

9. A virtual explosion in the release of new typefaces occurred in the 1990s, as large type vendors were joined by independent type foundries set up by studios and individual designers. _______________ became a prolific and influential
digital type foundry. An early type family developed for its PostScript page-description language was Stone, designed by Sumner Stone.

A. Adobe Systems
B. Microsoft
C. Apple Computer
D. Aldus

10. John Plunkett and Barbara Kuhr, principals of Plunkett + Kuhr, located in Park City, Utah, envisioned a magazine that would do for the information superhighway what *Rolling Stone* had done for the rock-and-roll a generation earlier. What is the name of this magazine? ____________

A. *Ray Gun*
B. *Billboard*
C. *Wired*
D. *Zembla*

11. As a staff typeface designer at Adobe, ____________ created original designs and respected digital adaptations of classical typefaces, including three masterful families inspired by historical lettering: Charlemagne, which is freely based on the decorative capitals used as versals and titling in Carolingian-era illuminated manuscripts; Lithos, inspired by the monoline simplicity and even-textured economy of Greek stone inscriptions; and Trajan, inspired by the inscription on Trajan’s column.

A. Robert Slimbach
B. Carol Twombly
C. Sumner Stone
D. Susan Kare

12. Standardization and interchangeable parts became the norm of the industrial revolution; in typography, this conformity was realized through the repetition of letterform parts and redundant layout formats. The digital revolution ushered in an era of individualization, flexibility, and customization. London-born ____________’s typeface Walker (Fig. 24-28), designed for the Minneapolis-based Walker Art Center, provides a stunning example of expanding typographic possibilities. Sturdy sans-serif capitals have a series of five “snap-on” serifs, which can be attached at will to the vertical strokes of each letter.

A. Rudy Vanderlans
13. Because electronic imaging software allowed seamless and undetectable image manipulation, the _____________ lost its status as the undisputed documentation of visual reality. The boundaries between photography, illustration, and fine art began to crumble along with those separating designer, illustrator, and photographer.

A. illustration  
B. photograph  
C. painting  
D. lithographic print

14. The 1982 press kit cover designed by Pat Gorman of Manhattan Design for _____________ is a forerunner of the image invention made possible with digital computers. This cover was created before the Macintosh computer at a time when the creative potential of electronic technology was seldom explored because designers rarely had access to sophisticated and costly technology. Gorman made color variations of the logo by exploring editing controls in a television studio. Randomly generated color combinations were selected and composed in a repeated pattern to convey the network’s constantly changing character in a nonverbal manner.

A. NBC  
B. ABC  
C. MTV  
D. CBS

15. In 1976, architect and designer Richard Saul Wurman coined the term _____________ and predicted it would become a new profession for individuals who make complex information understandable. Twenty years later, this term became widely used to denote a process of analyzing complex information and giving it structure and order, enabling audiences to glean its essence in an efficacious manner.

A. hypermedia  
B. information superhighway  
C. information architecture
16. ____________, a vast network of linked computers, had its origins in the late 1960s, when scientists at the United States Department of Defense Advanced Research Projects Agency (DARPA) established the ARPAnet computer network so they could transfer data between sites working on similar research projects. This led to a quantum leap forward in computer communications.

A. the World Wide Web
B. the Internet

17. ____________, which provides a means to easily organize and access the vast and ever-increasing digital content of text, images, sound, animation, and video, was first developed in 1990 by physicist Tim Berners-Lee at the European Organization for Nuclear Research (CERN) in Geneva, Switzerland. Berners-Lee developed the three main building blocks: Hypertext Transfer Protocol (HTTP), Hypertext Markup Language (HTML), and a specification for the “address” of every file, called the Uniform Resource Locator (URL).

A. the World Wide Web
B. the Internet

18. ____________'s graphic design is consistently characterized by an uncompromising and harsh directness. On a poster for a Lou Reed album, lyrics from one of Reed’s songs are handwritten across his face like graffiti. Born in Austria, he received his first diploma in graphic design from the University of Applied Arts in Vienna, and while on a Fulbright scholarship, he earned a master’s from Pratt Institute in New York. After first working in New York and later as the creative director for the Hong Kong office of the Leo Burnett advertising agency, he returned to New York in 1993 to found his own studio. He has designed graphics and packaging for the Rolling Stones, David Byrne, Lou Reed, Aerosmith, and Pat Metheny, among other clients.

A. Werner Jeker
B. Stefan Sagmeister
C. Rudi Meyer
D. Helmut Brade

19. In his book jacket designs for Alfred A. Knopf, ____________ frequently uses vintage images such as old prints and family albums found in flea markets and junk shops. His visual cues are elusive and require the viewer to excavate the message, as in the 1997 design for David Sedaris’s Naked. In this example, there are two covers in one. After the dust jacket, which shows a pair of boxer shorts, is removed, an X-ray is revealed on the book’s cover. In a recent monograph on his work, author Véronique Vienne stated: “By distancing the title
from the image on the cover, he puts a very specific kind of pressure on readers: he asks them to bridge the gap between what they read and what they see. In the process he empowers them by demanding they take control of the communication."

A. Katsumi Asaba  
B. Angus Hyland  
C. Chip Kidd  
D. Andrew Altmann

20. _____________ continues to be a major force in graphic design and to draw upon historical models while transforming them into her own unique form of expression. An example of this ability is her 1994 poster for the Public Theater production of Diva Is Dismissed, which reflects music posters from the 1960s. Her typographic poster for the 1995 New York Shakespeare Festival’s productions of *The Tempest* and *Troilus & Cressida* seems like a refined version of the typographic posters of the nineteenth century.

A. Nancy Skolos  
B. Gabriela Rodriguez  
C. Katherine McCoy  
D. Paula Scher

**True/False**

1. Galliard (Fig. 24-27), which was designed by Matthew Carter in 1978, is a masterful adaptation of a sixteenth-century design by Robert Granjon. _____

**Matching**

I. Match the person with the innovation.

1. Douglas C. Engelbart _____
2. Susan Kare _____
3. Pierre Bézier _____
4. Paul Brainerd _____
A. This thirty-six-year-old former newspaper editor formed a company called Aldus (after the fifteenth-century printer Aldus Manutius) to develop software for the Macintosh so newspapers could produce advertisements more efficiently. In 1985, Aldus introduced PageMaker software.

B. The French mathematician who invented mathematically generated, nonuniform curves (in contrast to curves with uniform curvatures, called arcs) defined by four control points, which are particularly useful for creating letterforms and computer graphics.

C. A scientist at the federal government’s Augmentation Research Center in the 1960s, this person invented the first mouse, a small wooden box on steel wheels.

D. This person worked in the Apple Computer design department and designed early bit-mapped fonts that were then released by Apple.

II. Match the term with the definition.

1. entropy ____
2. kern ____
3. em ____
4. zine ____

A. A horizontal measurement equivalent to the width of the letter m
B. Self-published personal magazines using desktop-publishing software and inexpensive printing or copier reproduction
C. The disintegration of form from repeated copying
D. To increase or decrease the space between pairs of letters

III. Match the typefaces with the type designers who designed them.

1. Zuzana Licko ____
2. Matthew Carter ____
3. Robert Slimbach ____
4. Susan Kare ____
5. Carol Twombly ____

A. Lithos
B. Geneva
C. Mrs Eaves
D. Minion
E. Bell Centennial

IV. Match each term with its definition.

1. hypermedia ____
2. hypertext ____
3. multiple-master typefaces ____

A. Text on a computer screen containing pointers to other text, which can be accessed in a nonlinear way and is instantly available in a nonlinear way by placing the cursor on the key word or icon and clicking on the mouse.

B. Two or more master designs that combine to generate an extensive sequence of fonts whose weight, width, style, and optical size are determined by a design axis.

C. A combination of audio, visual, and cinematic communications connected to form a coherent body of information.

V. Seven basic structural methods are often used in interactive media. Match the terms with their definitions.

1. linear series ____
2. spatial zoom ____
3. parallel texts ____
4. overlays ____
5. hierarchies ____
6. matrix ____
7. web structures ____

A. Networks constructed with links designed to guide the viewer through interconnected information

B. Different views of the same information, such as a series of maps showing the Roman Empire at different stages in its history

C. A sequence of screens, much like the pages of a book or images in a slide show, which can be called up on the screen one after another

D. Modified versions of the same document

E. Lets the viewer acquire closer or more detailed data by clicking on a word to see its definition or by focusing in on a detail of a map or diagram

F. Organizes data on a grid of interconnected pathways that intersect at appropriate tangential points

G. Branching structures organized like a family tree allowing the user to select options that lead down the various branches

VI. Match the people with their contributions.

1. Jessica Helfand ____
2. Clement Mok ____
3. Erik Spiekermann ____
4. Richard Saul Wurman ____

A. Coined the term information architecture for a process of analyzing complex information and giving it structure and order, and predicted it would become a new profession for individuals who made complex information understandable.


C. An Apple Computer creative director who left the company to open a design studio in 1987, which was renamed Studio Archetype in 1996. An early advocate of the graphic designer’s role in the rapidly changing world
of interactive media who believed design should be defined not as an isolated entity, such as packaging or graphics that is added onto the product or service, but as an integral part of an organization's overall vision and strategy.

D. Designed the initial website for the Discovery Channel, which demonstrated in the infancy of the medium that graphic designers could create identity, aid navigation, and bring visual interest to websites, and became a paradigm of web design.

**Image Identification**

Identify the designer and the date of the following images.

1. Fig. 24-5
2. Fig. 24-9
3. Fig. 24-10
4. Fig. 24-13
5. Fig. 24-57
6. Fig. 24-59
7. Fig. 24-61
8. Fig. 24-82
9. Fig. 24-99
10. Fig. 24-105
11. Fig. 24-106
12. Fig. 24-109
13. Fig. 24-114
Chapter 1 – Answer Key

Multiple Choice

1. B – Africa
2. B – Caves
3. A – Kenya
4. C – Writing
5. C – Simple Pictures
6. C – Altamira in Spain
7. A – Art
8. D – pictographs
9. A – petroglyphs
10. B – ideographs
11. B – petroglyphs and pictographs
12. B – Mesopotamia
13. D – Sumerian
14. C – Writing
15. C – to keep records systematically
16. B – Blau monument
17. A – a code of laws and consequences for violating them
18. A – cattle brands
20. B – latin
21. C – funerary texts
22. C – Images were inserted on separate pages opposite the text they illustrated.
23. B – identification seals
Matching

I.
1. determinatives – D
2. cartouche – F
3. hieroglyphics – C
4. homonymous – B
5. ankh – A
6. obelisk – E

II.
1. demotic – E
2. papyrus – A
3. recto – B
4. hieratic – D
5. verso – C

III.
1. ziggurat – C
2. edduba – E
3. phonograms – F
4. stele – A
5. rebus – D
6. cuneiform – B

Image Identification

I.
1. Fig. 1-1: Cave painting from Lascaux, c. 15,000–10,000 B.C.
2. Fig. 1-5: Early Sumerian pictographic tablet, c. 3100 B.C.
3. Fig. 1-10: Stele bearing the Code of Hammurabi and detail, c. 1800 B.C.
4. Fig. 1-12: Hittite cylinder seal, undated
5. Fig. 1-16: The Rosetta Stone, c. 197–196 B.C.
6. Fig. 1-26: Vignette from Papyrus of Ani, c. 1420 B.C.
7. Figs. 1-27 and 1-28: Scarab of Ikhnaton and Nefertiti, c. 1370 B.C.

II.

1. Fig. 1-2: B – petroglyphs
2. Fig. 1-11: C – cuneiform
3. Fig. 1-23: A – hieroglyphs
Chapter 2 – Answer Key

Multiple Choice

1. B – sounds
2. C – Phaistos Disk
3. D – Phoenicians
4. C – the initial sound of the object depicted
5. B – more geometrically structured
6. A – alternating left to right and right to left
7. A – uncials
8. C – an oral culture no longer had the capacity to contain and document knowledge and information
9. C – Phoenician
10. C – Etruscans
11. B – during the Middle Ages
12. A – codex
13. B – G
14. D – Kufic
15. C – parchment
16. A – abstract depictions of the mouth and tongue

Matching

I.

1. vellum: F
2. serifs: C
3. signature: G
4. Capitalis Quadrata: B
5. Capitalis Monumentalis: A
6. parchment: E
7. Capitalis Rustica: D

**True/False**

1. True
2. False
3. True
4. False
5. True

**Image Identification**

I.

1. Fig. 2-2 – The Phaistos Disk, undated
2. Fig. 2-11 – Greek votive stela with four figures, c. 500 B.C.
3. Fig. 2-12 – Greek wooden tablet with uncialis, A.D. 326[AM5]
4. Fig. 2-16 – Inscribed Etruscan Bucchero, seventh or sixth century B.C.

II.

1. Fig. 2-18: B – Capitalis Monumentalis
2. Fig. 2-19: A – Capitalis Quadrata
3. Fig. 2-20: C – Capitalis Rustica
Chapter 3 – Answer Key

**Multiple Choice**

1. A – oil paint
2. C – Ts-ang Chieh
3. B – logograms
4. D – chiaku-wen
5. A – Ts’ai Lun
6. A – inked rubbings
7. D – Diamond Sutra
8. C – money
9. B – accordion-style
10. D – moveable type
11. C – Album of Eight Leaves

**Matching**

1. chin-wen: A
2. hsaio chuan: C
3. k’ai-shu: D
4. chia-ku-wen: B

**True/False**

1. True
2. False
3. True
4. False
5. False
6. False
7. True
8. False

**Image Identification**

I.
1. Fig. 3-6: Page from the Album of Eight Leaves, A.D. 1744
2. Fig. 3-8: Chinese chop
3. Fig. 3-15: Pages from the Pen Ts’ao, A.D. 1249

II.
1. Fig. 3-2: A – Chiaku-wen (bone-and-shell script)
2. Fig. 3-3: C – Chin-wen (bronze script)
3. Fig. 3-4: B – Chen-shu (regular style calligraphy)
Chapter 4 – Answer Key

**Multiple Choice**

1. C – copisti
2. A – classical
3. C – Celtic
4. D – word spaces
5. C – the English scholar Alcuin of York
6. A – Caroline miniscules
7. B – the Book of Revelation
8. A – travel increased due to the crusades and pilgrimages
9. A – littera moderna
10. D – Figurative illustrations
11. B – Book of Hours
12. D – illuminator
13. A – colophon
14. C – classical
15. B – unicals
16. C – Les tres riches heures du Duc de Berry

**Matching**

I.

1. Gothic: C
2. classical style: A
3. Celtic: B
True/False

1. False
2. True
3. False
4. True
5. True
6. True
7. False
8. True
9. True

Image Identification

I.

1. Fig. 4-6: The Lindisfarne Gospels, c. 698
2. Figs. 4-7, 4-8 and 4-9: The Book of Kells, c. 794–806
3. Fig. 4-10: Caroline minuscules, ninth century A.D.
4. Fig. 4-11: Coronation Gospels, c. 800
5. Fig. 4-13: The Four Horsemen of the Apocalypse, 1047
6. Fig. 4-19: Islamic manuscript Padishahnamah, c. 1700
7. Figs. 4-20 and 4-21: Les très riches heures du Duc de Berry, 1413–16

II.

1. Fig. 4-5: B-Celtic book design
2. Fig. 4-16: C-Gothic manuscript
3. Fig. 4-18: A-Islamic book design
Multiple Choice

1. A – Devotional prints of saints
2. C – The Ars Moriendi
3. D – paper
4. A – Laurens Janszoon Coster
5. B – Procopius Waldfoghel
6. C – type mold
7. D – textura
8. A – “Letters of Indulgence” by Pope Nicholas V
9. C – 418 full-page illustrations
10. B – copperplate engravings
11. B – watermark
12. B – Johann Fust and Peter Schoeffer

Matching

I.

1. Punch: C
2. Xylography: B
3. Matrix: E
4. Engraving: A
5. Typography: D

True/False

1. True
2. True
3. True
4. False
5. True
6. False
7. True
8. True
9. False
10. True
11. True

**Image Identification**

I.
1. Fig. 5-2: Jack of Diamonds woodblock playing card, c. 1400
2. Fig. 5-5: Block book page from The Story of the Blessed Virgin, 1400s
3. Fig. 5-7: Pages from an ars moriendi, 1466
4. Fig. 5-9: Pages from Ars Memorandi per Figuras Evangelistarum (Book of Notable Religious Figures), c. 1470
5. Fig. 5-12: Johann Gutenberg, Letters of Indulgence, c. 1454

II.
1. Fig. 5-11: A – Jost Amman
2. Fig. 5-13: C – Johann Gutenberg
3. Figs. 5-14 and 5-15: B – Fust and Schoeffer
Chapter 6 – Answer Key

Multiple Choice
1. C – Typography evoked illusions of the natural world on flat surfaces through such means as the fixed viewpoint.
2. C – incunabula
3. C – here begins
4. D – 1:1.618
5. C – Johann Zainer
6. B – illustrator
7. A – Nuremberg Chronicle
8. D – Albrecht Dürer
9. C – Lucas Cranach the Elder
10. D – Arnold Pannartz and Conrad Sweynheym
11. A – They were elegant and refined.
12. B – white dots punched into black areas to create tone
13. B – broadsheet
14. C – exemplars

True/False
1. False
2. True
3. True
4. True
5. True
6. True
7. False

Matching
I.
1. ex libris: D
2. fraktur: B
3. broadside: A
4. exemplar: C

Image Identification
I.
1. Fig. 6-4: Johann Zainer, page from De mulieribus claris (On Famous Women), 1473
2. Fig. 6-9: Anton Koberger, pages from the Nuremberg Chronicle, 1493
3. Fig. 6-14: Albrecht Dürer, title page for The Life of the Virgin, 1511
4. Fig. 6-20: Hans Lufft and Lucas Cranach the Younger, pages from Fabian von Auerswald’s Ringer Kunst (Art of Wrestling), 1539
5. Fig. 6-25: Phillipe Pigouchet, pages from Horae Beatus Virginis Mariae (Hours of the Blessed Virgin Mary), 1498

II.
1. Fig. 6-7: C – Anton Koberger
2. Fig. 6-15: B – Albrecht Dürer
3. Fig. 6-21: A – Lucas Cranach the Younger
Chapter 7 – Answer Key

Multiple Choice
1. D – Venice
2. A – Johannes de Spira
3. B – Nicolas Jenson
4. B – Calendarium
5. B – asymmetrical
6. C – Aldus Manutius
7. C – pocket
8. D – Francesco Griffo (Francesco da Bologna)
9. D – writing
10. B – France
11. C – Issuing the first printer’s type specimen sheet
12. D – Claude Garamond
13. B – Oronce Finé
14. B – copperplate engravings
15. D – trademark
16. A – Stephen and Matthew Dye

True/False
1. True
2. False
3. False
4. True
5. True
6. True
7. True
8. True

Matching

I.
1. bracketing: C
2. fleurons: B
3. headpiece: D
4. tailpiece: E
5. trademarks: A
6. type specimen sheet: F

II.
1. Francesco da Bologna, surnamed Griffo: C
2. Claude Garamond: E
3. Robert Granjon: F
4. Nicolas Jenson: A
5. Aldus Manutius: B
6. Geoffroy Tory: D

Image Identification

I.
1. Figs. 7-7 and 7-8: Erhard Ratdolt, Peter Loeslein, and Bernhard Maier, pages from Calendarium, 1476
2. Figs. 7-16 and 7-17: Aldus Manutius, pages from Hypnerotomachia Poliphili, 1499
3. Fig. 7-25: Geoffroy Tory, capital G from a series of criblé initials, c. 1526
4. Fig. 7-27: Geoffroy Tory, pages from Champ Fleury, 1529
5. Fig. 7-28: Geoffroy Tory, construction of the letter Q from Champ Fleury, 1529
6. Fig. 7-37: Joannes Frellonius and Hans Holbein the Younger, pages from Imagines Mortis, 1547
7. Fig. 7-38: Johann Oporinus, page from De Humani Corporis Fabrica (Construction of the Human Body), 1543

II.
1. Fig. 7-9: B – Erhard Ratdolt
2. Fig. 7-31: A – Simon de Colines
3. Fig. 7-43: C – Stephen and Matthew Daye
Chapter 8 – Answer Key

**Multiple Choice**

1. B – Romain du Roi
2. D – transitional
3. B – Moveable type
4. B – George Bickham
5. B – printed both the illustrations and text from one copper plate for each page
6. D – Benjamin Franklin
7. D – arabesques in headpieces and tailpieces
8. C – transitional
9. C – William Playfair
10. A – typefaces
11. B – modern style
12. C – neoclassical
13. D – Manuale Tipografico
14. A – pied de roi
15. B – classics by Virgil
16. A – stereotyping
17. C – Shakespeare Press
18. D – romanticism

**True/False**

1. True
2. True
3. False
4. True
5. False
6. False
7. False
8. True
9. False
10. False

**Image Identification**

I.

1. Fig. 8-1 and 8-2: Louis Simonneau, master alphabets for the Romain du Roi, 1695
2. Fig. 8-8: George Bickham, “A Poem, On the Universal Penman,” c. 1740
3. Figure 8-9: John Pine, Page from Horace’s Opera, Volume II, 1737
4. Figure 8-16: Giambattista Bodoni, title page from Saggio tipographico (Typographic Essay), 1771
5. Figure 8-20: Pierre Didot, pages from Virgil’s Bucolica, Georgica, et Aeneis (Pastorials, Farming, and Aeneis), 1798

II.

1. Fig. 8-7: C – Pierre Simon Fournier le Jeune
2. Fig. 8-12: A – John Baskerville
3. Fig. 8-14: B – Willam Playfair
Chapter 9 – Answer Key

**Multiple Choice**

1. B – Signage was needed to guide residents through the streets of fast-growing cities
2. D – fat faces
3. C – Egyptian faces
4. A – sans-serif
5. B – Tuscan-style
6. B – Vincent Figgins
7. D – Darius Wells
8. B – William Leavenworth
9. D – limited number of characters in each font
10. B – brass matrix
11. D – Joseph Niepce
12. C – with a long exposure time, so moving subjects, such as carriages and pedestrians, were not recorded
13. B – motion picture photography
14. C – halftone screen
15. C – The first use of sans-serif typography as a running book text
16. C – aesthetic confusion
17. C – Owen Jones
18. B – Chromolithography
19. A – toy books
20. D – Walter Crane
21. A – Randolph Caldecott
22. B – Harper’s Illuminated and New Pictorial Bible
23. B – Century
24. A – market research

**True/False**
1. True
2. True
3. True
4. True
5. True
6. True
7. True
8. False
9. False
10. True
11. False
12. False
13. True
14. False
15. True
16. False

**Matching**
1. A – Matthew Brady
2. B – Sir John Herschel
3. C – Stephen H. Horgan
4. D – William Henry Fox Talbot
5. E – Julia Margaret Cameron

**Image Identification**

I.

1. Fig. 9-2: Robert Thorne, fat-face types, 1821
2. Fig. 9-18: Ottmar Mergenthaler, Model 5 Linotype machine, 1886
3. Fig. 9-22: Louis-Jacques Daguerre, daguerreotype of Paris boulevard, 1839
4. Fig. 9-26: William Henry Fox Talbot, pages from The Pencil of Nature, 1844
5. Figs. 9-31 and 9-32: Stephen H. Horgan, experimental photoengraving of halftone image, 1880
6. Fig. 9-34: Julia Margaret Cameron, “Sir John Herschel,” 1867
7. Fig. 9-37: Mathew Brady, “Dunker Church and the Dead,” 1862
8. Fig. 9-43: John H. Bufford’s Sons, “Swedish Song Quartett” poster, 1867
9. Fig. 9-56: Kate Greenaway, page from Under the Window, 1879

II.

1. Fig. 9-21: A – Joseph Niepce
2. Fig. 9-39: C – Eadweard Muybridge
3. Fig. 9-61: B – Charles Dana Gibson
Chapter 10 – Answer Key

**Multiple Choice**

1. A – color was used to identify the lines and shapes in the diagrams
2. A – art
3. D – Japanese
4. C – Golden
5. D – regaining high standards of design, materials, and workmanship
6. B – Charles R. Ashbee
7. C – The use of seven different colors of ink
8. C – a significant upgrade of book design
9. A – alphabet
10. D – Venetian and French Renaissance
11. B – William Addison Dwiggins
12. C – Albert Bruce Rogers
13. D – Century
14. C – American Type Founders Company (ATF)
15. B – Lucien and Esther Pissaro
16. D – Jan van Krimpen
17. A – Hollandsche Mediaeval

**True/False**

1. True
2. True
3. False
4. False
5. True
6. False
7. False
8. True
9. False
10. True
11. False

**Image Identification**

I.

1. Fig. 10-2: William Pickering, pages from *The Elements of Euclid*, 1847
2. Fig. 10-6: Arthur H. Mackmurdo, title page for *Wren's City Churches*, 1883
3. Fig. 10-10: Selwyn Image, title page to *The Century Guild Hobby Horse*, 1884
4. Fig. 10-22: Charles R. Ashbee, page from the *Essex House Psalter*, 1902
5. Fig. 10-23: T. J. Cobden-Sanderson and Emery Walker, pages from the *Dove's Press Bible*, 1903
6. Fig. 10-37: Frederic W. Goudy, booklet cover, 1911

II.

1. Fig. 10-18: B – William Morris
2. Fig. 10-32: A – Charles Nypels
3. Fig. 10-36: C – Rudolf Koch
Multiple Choice

1. B – screen paintings
2. D – Thirty-six Views of Mount Fuji
3. D – Assyrian motifs
4. C – Chérettes
5. B – William Mooris
6. D – Aubrey Beardsley
7. B – Le Chat Noir
8. B – Eugène Grasset
9. C – yellow covers
10. D – swirling organic lines
11. B – a concentrated food supplement
12. A – appropriate materials, functional forms, and a unity of visual organization
13. D – illustrative
14. B – Javanese culture
15. A – medieval letters
16. D – Surimono

True/False

1. False
2. True
3. False
4. True
5. False
6. False
7. True
8. True
9. True
10. False
11. True
12. False
13. False
14. False
15. True
16. True
17. True

Image Identification

I.

1. Fig. 11-7: Ando Hiroshige, Evening Squall at Great Bridge near Atake, c. 1856–59
2. Fig. 11-16: Jan Toorop, The Three Brides, 1893
3. Figs. 11-21 and 11-22: Charles Ricketts, pages from The Sphinx, 1894
4. Fig. 11-24: Henri de Toulouse-Lautrec, “La Goulue au Moulin Rouge” poster, 1891
5. Fig. 11-28: Théophile-Alexandre Steinlen, “Tournée du Chat Noir” poster, 1896
6. Fig. 11-33: Alphonse Mucha, poster for Job cigarette papers, 1898
7. Fig. 11-45: Will Bradley, pages from The American Chap-Book, 1905
8. Fig. 11-55: Henri van de Velde, poster for Tropon food concentrate, 1899
9. Fig. 11-58: Privet Livemont, Rajah Coffee poster, 1899
10. Fig. 11-70: Otto Eckmann, cover for Allgemeine Elektrizitäts-Gesellschaft catalogue, 1900
II.

1. Fig. 11-3: E – Kitagawa Utamaro
2. Fig. 11-5: B – Katsushika Hokusai
3. Fig. 11-11: A – Jules Chéret
4. Fig. 11-20: C – Aubrey Beardsley
5. Fig. 11-32: D – Alphonse Mucha
6. Fig. 11-43: F – Will Bradley
7. Fig. 11-65: G – Otto Eckmann
Chapter 12 – Answer Key

Multiple Choice

1. C – geometric
2. B – Frank Lloyd Wright
3. D – The Four
4. C – Jessie Marion King and Talwin Morris
5. A – Wiener Werkstätte (Vienna Workshops)
6. D – Ver Sacrum
7. B – Peter Behrens
8. B – Akzidenz Grotesque
9. C – Edward Johnston
10. B – The Bauhaus in Germany

True/False

1. True
2. True

Image Identification

1. Fig. 12-5: Jessie Marion King, William Morris’s The Defence of Guenevere, 1904
2. Fig. 12-6: Talwin Morris, Red Letter Shakespeare series, c. 1908
3. Fig. 12-19: Koloman Moser, Ver Sacrum, 1901
4. Fig. 12-20: Alfred Roller, Ver Sacrum calendar, 1903
5. Fig. 12-26: Alfred Roller, poster for the Sixteenth Vienna Secession exhibition, 1902
6. Fig. 12-30: Josef Hoffmann, Wiener Werkstätte exhibition poster, 1905
7. Fig. 12-33: Peter Behrens, Celebration of Life and Art, 1900

II.
1. Fig. 12-23: C – Koloman Moser
2. Fig. 12-27: A – Ifred Roller
3. Fig. 12-46: B – Peter Behrens
Multiple Choice

1. B – Synthetic cubism
2. B – Fernand Léger
3. C – poet
4. D – Hannah Höch
5. D – Calligrammes
6. D – Käthe Kollwitz
7. B – Wassily Kandinsky and Paul Klee
8. C – John Heartfield
9. B – Man Ray

True/False

1. True
2. True

Matching

I.

1. Expressionism: E
2. Surrealism: B
3. Cubism: D
4. Futurism: A
5. Dada: C

II.
1. collage: D
2. manifesto: A
3. pattern poetry: F
4. calligrammes: E
5. simultaneity: B
6. photomontage: C

III.
1. Photomontage: B
2. Solarization: C
3. Automatism: A

**Image Identification**

I.
1. Fig. 13-9: Filippo Marinetti, futurism, 1915
2. Fig. 13-29: Kurt Schwitters, Dada, 1922
3. Fig. 13-42: Max Ernst, surrealism, 1934
4. Fig. 13-46: Käthe Schmidt Kollwitz, expressionism, 1923
Chapter 14 – Answer Key

Multiple Choice
1. C – Plakatstil
2. A – concept
3. D – The Beggarstaffs
4. A – collage
5. C – Sachplakat
6. D – Posters promoted radio programs that kept listeners informed about the conditions of war.
7. D – cubism
8. C – Ludwig Hohlwein
9. D – illustrative
10. C – Käthe Schmidt Kollwitz
11. B – A.M. Cassandre
12. A – color

True/False
1. False
2. True
3. False

Image Identification
I.
1. Fig. 14-3: The Beggarstaffs, Plakatstil, 1896
2. Fig. 14-7: Lucian Bernhard, Plakatstil, 1912
3. Fig. 14-8: Hans Rudi Erdt, Plakatstil, 1911

II.
1. Fig. 14-36: B – Ludwig Hohlwein
2. Fig. 14-38: C – Edward McKnight Kauffer
3. Fig. 14-53: A – Austin Cooper
Chapter 15 – Answer Key

Multiple Choice
1. B – El Lissitzky
2. B – Vladimir Tatlin and Alexander Rodchenko
3. C – The Isms of Art
4. D – Gustav Klutsis
5. B – Vladimir Vasilevich Lebedev
6. A – Théo van Doesburg
7. B – Ladislav Sutnar
8. A – László Moholy-Nagy
9. C – Henryk Berlewi

Image Identification
I.
1. A – El Lissitsky
2. A – El Lissitsky
3. A – El Lissitsky
4. D – de Stijl
5. C – Théo van Doesburg

II.
1. C – de Stijl
2. A – suprematism
3. B – constructivism
III.

1. C – Novyi lef (Left Front of the Arts)
2. A – De Stijl magazine
3. B – Veshch/Gegenstand/Objet
Chapter 16 – Answer Key

Matching

1. B – Weimar, Germany
2. A – Dessau, Germany
3. C – László Moholy-Nagy
4. C – Herbert Bayer
5. B – Nazi Party
6. D – Jan Tschichold
7. C – Futura
8. D – Universal Alphabet
9. B – Leichte Kabel
10. A – Times New Roman
11. D – Eric Gill
12. B – Isotype
13. B – Piet Zwart
14. A – Hendrik N. Werkman
15. D – Paul Schuitema
16. C – Willem Sandberg
17. B – Herbert Matter
18. B – Graphis
Chapter 17 – Answer Key

Multiple Choice

1. B – Armory Show
2. C – William Addison Dwiggins
3. C – Lester Bell
4. D – Alexey Brodovitch
5. C – Joseph Binder
6. B – Federal Arts Project
7. D – the Container Corporation of America
8. A – John Atherton
9. B – Jean Carlu
10. B – Ladislav Sutnar
11. C – Herbert Bayer

True/False

1. True

Image Identification

I.

1. A – Alexey Brodovitch
2. B – Erté
3. C – A. M. Cassandre
4. C – Ben Shahn
5. A – Herbert Bayer

6. B – Joseph Binder
Multiple Choice

1. C – International Typographic Style
2. D – Univers
3. A – Adrian Frutiger
4. C – Helvetica
5. D – Ornamentation was prized for its decorative quality.
6. D – Hermann Zapf
7. A – Josef Müller-Brockman
8. C – golden mean
9. C – semiotics
10. D – Anton Stankowski
11. C – Armin Hofmann
12. C – Basel School of Design in Basel, Switzerland
13. D – Rosmarie Tissi

Image Identification

1. C – Ernst Keller
2. A – Max Bill
3. D – Carlo Vivarelli
4. B – Carlo Vivarelli
5. A – Josef Müller-Brockman
Chapter 19 – Answer Key

Multiple Choice

1. B – ideas
2. C – New York City
3. C – Paul Rand
4. B – Bradbury Thompson
5. B – Saul Bass
6. C – Cipe Pineles
7. B – corporate identity
8. D – Yale University
9. B – Otto Storch
10. A – Henry Wolf
11. C – Ramparts
12. D – Doyle Dane Bernbach
13. C – figurative typography
14. C – Herb Lubalin

Image Identification

I.

1. D – Paul Rand
2. B – Mike Salisbury

Matching

I.

1. A – Visual/verbal syntax
2. B – Figurative typography
3. C – Phototypography
4. D – Typogram
Chapter 20 – Answer Key

**Multiple Choice**

1. D – consumer goods
2. B – “Good design is good business.”
3. C – trademarks
4. D – All of the above
5. C – Georg Olden
6. A – Lou Dorfsman
7. A – Herbert Matter
8. B – Norman Ives
9. C – Paul Rand
10. C – Paul Rand
11. D – Chase Manhattan Bank of New York
12. B – Saul Bass
13. B – Unimark
14. C – U.S. National Park Service
15. A – the American Institute of Graphic Arts (AIGA)
16. C – the 1980 Moscow Twenty-second Olympiad
17. D – Music Television (MTV)
18. B – Manhattan Design
19. A – Georg Olden

**Matching**

I.

1. D – logotype
2. B – corporate identity
3. A – annual report
Chapter 21 – Answer Key

Multiple Choice
1. A – Tadeusz Terpkowski
2. D – Henryk Tomaszewski
3. B – Push Pin Almanack
4. B – art nouveau
5. D – Seymour Chwast
6. C – Seymour Chwast and Milton Glaser
7. B – Woody Pirtle
8. A – art nouveau
10. A – Seymour Chwast
11. C – Wes Wilson
12. E – Victor Moscoso
13. C – Gunther Kieser
14. B – Willy Fleckhouse
15. D – Robert Massin

Image Identification
1. A – Raúl Martínez
2. B – Elena Serrano
Chapter 22 – Answer Key

Multiple Choice
1. B – Pentagram’s
2. B – Herbert Spencer
3. C – mon
4. A – Ikko Tanaka
5. C – alphabets
6. C – Tadanori Yokoo
7. D – Shigeo Fukuda
8. A and D – pragmatic constructivism and a vigorous expressionism with jolting images and spontaneous spatial syntax
9. C – Total Design
10. A – Wim Crouwel
11. D – Pieter Brattinga
12. C – Anthon Beeke
13. C – Anthon Beeke
14. C – Hard Werken
15. A – Wild Plakken

Matching
1. B – Closed texts
2. A – Fluxus
3. C – Open texts

Image Identification
1. A – Pentagram
2. C – Ryuichi Yamashiro
3. B – Wim Crouwel
4. B – Wim Crouwel
5. A – Studio Dumbar
6. D – Anton Beeke
Chapter 23 – Study Questions

**Multiple Choice**

1. B – mannerism
2. D – vernacular
3. B – Rosmarie Tissi
4. D – Wolfgang Weingart
5. D – Wolfgang Weingart
6. A – Dan Friedman
7. B – El Lissitsky
8. B – Willi Kunz
9. B – Michael Graves
10. A – Michael Vanderbyl
11. C – Louise Fili
12. C – Herbert Matter
13. D – Neville Brody

**Matching**

I.

1. B – new-wave typography
2. A – Memphis
3. C – retro

**Image Identification**

I.

1. D – April Greiman and Jayme Odgers
2. A – Charles S. Anderson
3. A – Charles S. Anderson
4. C – Paul Scher

II.

1. A – new-wave typography
2. A – retro
Chapter 24 – Answer Key

Multiple Choice
1. C – phototype
2. D – digital
3. B – Microsoft
4. B – Émigré Fonts
5. A – April Greiman
6. C – Edward Fella
7. A – David Carson
8. B – Fred Woodward
9. A – Adobe Systems
10. C – Wired
11. B – Carol Twombly
12. B – Matthew Carter
13. B – photograph
14. C – MTV
15. C – information architecture
16. B – the Internet
17. A – the World Wide Web
18. B – Stefan Sagmeister
19. C – Chip Kidd
20. D – Paula Scher

True/False
1. True
Matching

I.
1. Douglas C. Engelbart – C
2. Susan Kare – D
3. Pierre Bézier – B
4. Paul Brainerd – A

II.
1. entropy – C
2. kern – D
3. em – A
4. zine – B

III.
1. Zuzana Licko – C
2. Matthew Carter – E
3. Robert Slimbach – D
4. Susan Kare – B
5. Carol Twombly – A

IV.
1. hypermedia – C
2. hypertext – A
3. multiple-master typefaces – B

V.
1. linear series – C
2. spatial zoom – E
3. parallel texts – D
4. overlays – B
5. hierarchies – G
6. matrix – F
7. web structures – A

VI.
1. Jessica Helfand – D
2. Clement Mok – C
3. Erik Spiekermann – B
4. Richard Saul Wurman – A

**Image Identification**
1. Fig. 24-5: April Greiman, 1987
2. Fig. 24-9: Katherine McCoy, 1989
3. Fig. 24-10: Edward Fella, 1987
4. Fig. 24-13: David Carson, 1994
5. Fig. 24-57: Stefan Sagmeister, 1996
6. Fig. 24-59: Jean-Benoît Lévy, 2001
7. Fig. 24-61: Rudi Meyer, 2001
8. Fig. 24-82: John Maeda, 1996
9. Fig. 24-99: Nancy Skolos and Thomas Wedell, 1999
10. Fig. 24-105: Ahn Sang-Soo, 2002
11. Fig. 24-106: Michael Bierut, 2002
12. Fig. 24-109: Max Kisman, 2001
13. Fig. 24-115: Gabriela Rodriguez, 2001