

6TH
EDITION

**typo
graphic
de
sign:**

FORM AND COMMUNICATION

Rob Carter
Philip B. Meggs
Ben Day
Sandra Maxa
Mark Sanders

WILEY

typographic design:

FORM AND COMMUNICATION

6TH
EDITION



Saint Barbara.
*Polychromed walnut
sculpture, fifteenth-
century German or
French. The Virginia
Museum of Fine Arts.*

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Cover design: Sandra Maxa and Mark Sanders

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“The whole duty of typography, as with calligraphy, is to communicate to the imagination, without loss by the way, the thought or image intended to be communicated by the Author.”

Thomas James Cobden-Sanderson

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During the late 1970s and early 1980s, I was a youthful assistant professor of graphic design and typography at Virginia Commonwealth University. At that time, typography held special significance in the graphic design curriculum, and faculty spent much effort writing content for the typography courses. With perhaps the exception of Emil Ruder's *Manual of Typographical Design*, a masterful book based on Ruder's philosophy and typographic instruction during the 1960s at Basel School of Design, my colleagues Philip Meggs, Ben Day, and I could not find a text that moved typography beyond what was generally considered a technical discipline. Our concern was to teach typography as both a technical and theoretical discipline, one that focused on form (syntax) and communication (semantics). Finally, during a meeting sometime in 1982, we made a decision to write our own typography textbook, based on our collections of notes from our classes.

While the three of us shared a passion for typography and a commitment to typographic education, each of us also brought our own unique vision, which produced a synergistic and dynamic interaction. Researching, articulating, and blending ideas did not come easily. During weekends and long into countless nights, we struggled to invent a vocabulary and approach to typographic education that would move the discipline forward and provide students with a text that not only covered basics but also presented information within a much-needed theoretical and historical framework.

Three years later, the first edition of *Typographic Design: Form and Communication* was published. The book, with its gray cover and elemental *TD*, was eventually referred to as the “Carter, Day, Meggs” book, or simply “the gray book.” It soon became a classic, one that has inspired, enlightened, and educated thousands of students over thirty years.

I am proud and grateful that my former graduate students Sandra Maxa and Mark Sanders have taken up the mantle of authorship for this, the sixth edition of *Typographic Design: Form and Communication*. As articulate and committed design educators and practitioners, they have preserved the spirit of previous editions while brilliantly introducing vital new content. Readers who thoughtfully enter into this volume will gain the knowledge necessary for an informed and inspired typographic design practice.

Rob Carter

Typography is a constantly evolving discipline, and this book aims to provide a concise yet comprehensive overview of the information, vocabulary, tools, and methods used in effective typographic-design practice. Included in the following chapters are the history and anatomy of typography; principles of visual organization and legibility; a study of the intersection of form, meaning, and media; projects that explore a variety of contexts; and case studies devoted to traditional and nontraditional typographic design processes.

This book's sixth edition reflects a view of typography that transcends specific technologies or media. A knowledge of typographic fundamentals is key to communicating in all environments—static, dynamic, or kinetic—and the first few chapters address the basics of form, syntax, how type communicates, and its potential for expression. Current typographic design practice can be better understood if one understands the evolution of earlier typesetting processes, and Chapter 7 provides that background for new designers, many who will work primarily in digital environments. Chapters specific to on-screen and kinetic typography provide the designer with an expanded awareness of legibility factors and enable compelling new ways to communicate. Case studies in applied problem solving are meant to inspire and show readers how to use their newfound knowledge to communicate visually. Theoretical and structural problem-solving approaches, evolved by design educators, reinforce the underlying concepts in this book. An understanding of typographic classification and subtlety of form is gained from the study of type specimens.

Through the thirteen chapters of this book, the authors share a compilation of information and examples with practitioners and students. It yields both insights and inspiration, bringing order to the complex and diversified subject of typographic design.

From the origins of writing to
Gutenberg's invention of movable
type: 3150 BCE–1450 CE

c. 3150 BCE

1-1

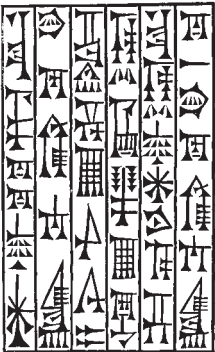


1-1 c. 3150 BCE:
The earliest written documents, impressed clay tablets from Sumer. The impressions represent clay tokens, which were used for record keeping before the invention of writing.

1-2 c. 3000 BCE:
Cuneiform, a very early writing system utilizing wedge-shaped marks on clay tablets, was invented by the Sumerians.

c. 2500 BCE: Egyptians begin to make papyrus, a new writing material derived from the stems of the papyrus plant.

1-2



1-3



1-4



1-6



1-3 c. 2600 BCE:
Completion of the pyramids at Giza, Egypt.

1-6 c. 1800–1400 BCE:
Stonehenge, a megalithic monument of 30-foot-tall stones set into circular patterns.

1-8



1-7 c. 1570–1349 BCE:
Polychromed wood sculpture from New Kingdom Egypt, with hieroglyphic inscriptions.

1-8 c. 1450 BCE:
Detail, The Book of the Dead of Tuthmosis III, hieroglyphic writing on papyrus.

1-4 c. 2400 BCE: False-door stele inscribed with hieroglyphic writing, from Old Kingdom Egypt.

1-5 c. 2100 BCE:
Cuneiform tablet listing expenditures of grain and animals.

1-5



1-7



ΥΕΙΡΙΑΙΤΕΝΑΕΕ
·ΕΗΒΑΝΝΕΑΝΠΟ
ΑΣΟΥΤΙΜΠΥΡΟΤΑΕΑ

1-11

c. 1500 BCE

1-9

𐤀𐤁𐤂𐤃𐤄
𐤅𐤆𐤇𐤈𐤉
𐤊𐤋𐤌𐤍𐤎
𐤏𐤐𐤑𐤒

1-12



1-12 448–432 BCE: The Parthenon, temple of the goddess Athena, on the Acropolis in Athens, Greece.

1-14

MARTISQ'DOLO

1-15



1-16

CONNERTANTIRIA
SINMANIBUSUESTR
VLTRONSIAMMAGNO

1-9 c. 1500 BCE: The twenty-two characters of the Phoenician alphabet.

c. 800 BCE: Homer writes the *Iliad* and the *Odyssey*.

540 BCE: The first public library is established in Athens, Greece.

1-10 389 BCE: Inscription in the Phoenician alphabet on a fragment of a marble bowl.

1-11 Fourth century BCE: Greek manuscript writing.

1-13 414–413 BCE: Fragment of a Greek record of sale, carved on stone.

c. 160 BCE: Parchment, a new writing material made from animal skins, is developed in the Greek state of Pergamum.

44 BCE: Julius Caesar is murdered.

1-14 c. 50 BCE–500 CE: Roman square capitals (*capitalis quadrata*) were carefully written with a flat pen.

c. 33 CE: Crucifixion of Christ.

1-15 c. 79 CE: Brush writing from a wall at Pompeii, preserved by the volcanic eruption of Vesuvius.

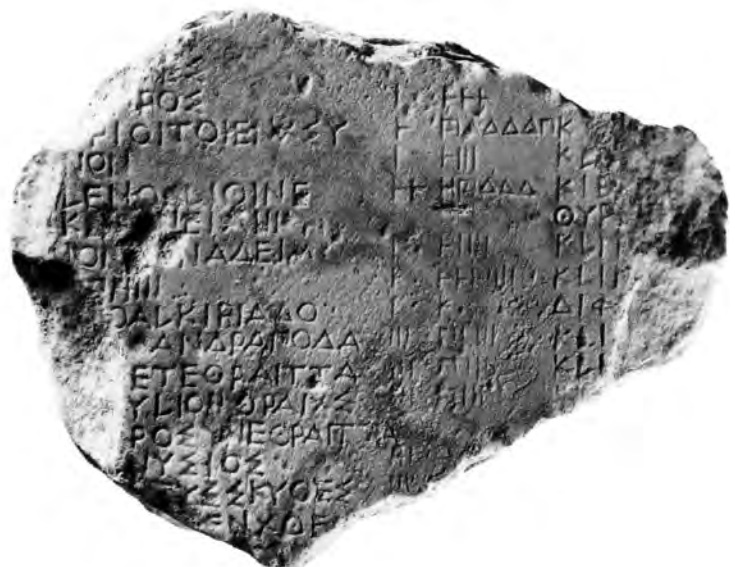
105 CE: Ts'ai Lun invents paper in China.

150 CE: The Roman codex, with folded pages, begins to be used alongside the rolled scroll.

1-16 c. 100–600: Roman rustic writing (*capitalis rustica*) conserved space by using condensed letters written with a flat pen held in an almost vertical position.



1-10



1-13

118 CE

1-17



1-17 118–25:
The Pantheon, Rome.



1-19

1-19 312–15: Arch
of Constantine, Rome.
Carved into marble,
monumental Roman
capitals survived the
thousand-year Dark
Ages.

325: Emperor Constantine
adopts Christianity as
the state religion of the
Roman Empire.

452: Attila the Hun
invades and ravages
northern Italy.

476: Emperor Romulus
Augustulus, last ruler
of the western Roman
Empire, is deposed by
the Ostrogoths.



1-20

1-21

muſadquequamuiconſci
mitatiſnoſtraetrepidatio
mur tamen fidei eſt uincit

1-20 533–49: Church
of Sant'Apollinare in
Classe, Ravenna, Italy.

1-18 Undated:

The fluid gestural quality,
harmonious proportions,
and beautiful forms
of Roman writing are
effectively translated
into the permanent stone
carving of monumental
capitals (*capitalis
monumentalis*).

1-18



c. 400–1400: During the
thousand-year medieval
era, knowledge and
learning are kept alive in
Christian monasteries,
where manuscript books
are lettered in scriptoria.

1-21 Third–sixth

centuries: Uncials are
rounded, freely drawn
majuscule letters.

1-22 Third–ninth

centuries: Half-uncials,
a lettering style of
the Christian Church,
introduce pronounced
ascenders and
descenders.

1-23 Sixth–ninth

centuries: Insular
majuscules, a formal
style with exaggerated
serifs, are developed by
Irish monks from the
half-uncials.

1-22

monuauſcm

1-23

magnum quod erit

732 CE



1-24

1-24 c. 800: Portrait of Christ from the Book of Kells, a Celtic manuscript.

868: The earliest extant printed text, of the Diamond Sutra, is printed in China.

nostro qui sedet super thronum et
agno. Et omnes angli stabant i
circu throni ⁊ ceciderunt ⁊ adora
uerunt deum dicentes. amen. Ben
dictio ⁊ claritas ⁊ sapientia ⁊ gra
rum actio. honor ⁊ uirtus ⁊ fortitu
do deo nro in secula seculorum. amen

1-31

1-26 c. Eleventh century: Round tower on the Rock of Cashel, county Tipperary, Ireland, a lookout and refuge against Viking invaders.

1-28 1163–1250: Construction of Notre Dame Cathedral, Paris.

1-30 Twelfth century: Bronze and copper crucifix from northern Italy.

1215: The Magna Carta grants constitutional liberties in England.



1-32

1-32 Thirteenth century: Byzantine school, *Madonna and Child on a Curved Throne*.

732: The Battle of Tours ends the Muslim advance into Europe.

800: Charlemagne is crowned emperor of the Holy Roman Empire by Pope Leo III.

1-25 Tenth century: High Cross at Kells, Meath County, Ireland.



1-25

1-26



1-27 Eighth–twelfth centuries: Caroline minuscules become the standard throughout Europe after Charlemagne issues his reform decree of 796, calling for a uniform writing style.

1034: Bi Sheng (Pi Sheng) invents movable type in China.

1096–99: The First Crusade.

est quia autem super p

1-27

1-29

early gothic

1-29 Eleventh–twelfth centuries: Early Gothic lettering, a transitional style between Caroline minuscules and Textura, has an increased vertical emphasis.

1-31 Thirteenth–fifteenth centuries: Gothic Textura Quadrata, or Textura, the late-Gothic style with rigorous verticality and compressed forms.

1347–51: First wave of the Black Death, a plague that decimates the European population.

1-28



1-30



1-33

Rotunda

1-34 Fourteenth century: Lippo Memmi, *Saint John the Baptist*.

1431: Joan of Arc is burned at the stake.

Genesis^y

[illegible]

1-37
Fra Filippo Lippi,
Madonna and Child.

1-40 The cathedral in the medieval city of Mainz, Germany.

1-36 Fifteenth century: First page of a block book, the biblical book of Apocalypse. Woodblock printing probably appeared in Europe before 1400.

1-38 c. 1450–55: Page from Gutenberg's forty-two-line Bible, the first European typographic book.

1-39 Woodblock print of the hand printing press, with compositors setting type from a typecase in the background.

The humanist philosophy that flowered during the Renaissance embraced the study of classical literature, a belief in human dignity and worth, a spirit of individualism, and a shift from religious to secular concerns.

1465

bat ille ihesus: q̄ quom̄ p̄mū aufes uocare? moises figurā p̄ntiens iussit eū
ihesum uocari: ut dux militię delectus esset aduersus amalech qui oppug-
nabant filios israhel: et aduersariū debellaret p̄ noīs figuram: et populi m̄

1-41

esse sensum semitas queritur. tanq̃ illi ad cogitandum rheda & quadrigis opus eēt. Democritus quasi in puteo quodam sic alto ut fundus sit nullus: ueritatem iacere demersam nimirum stulte

1-42

ab omnipotenti deo missus deus uerbum quasi lucis in
cunctis annūciat. Non hinc aut aliunde: sed undiq; cun-
ad deum uerum: grācos simul et barbaros omnem sexū

1-43

1-41 1465: Germans Konrad Sweynheym and Arnold Pannartz design the first type in Italy. It had some Roman features.

1-42 1467: Konrad Sweynheym and Arnold Pannartz, the first truly Roman-style type, influenced by Roman inscriptional capitals and manuscripts written in Caroline minuscules.

1-44

In the tyme of þe troublous world/ and of the
fione beynge and regnyng as well in the roye
englonde and fraunce as in all other places vn

1-43 1470: Nicolas Jenson, early Venetian roman typeface.

1-44 1475: William Caxton, typography from the first book printed in the English language.

1-46 1486: Erhard Ratdolt, the earliest known specimen sheet of printing types.

1492: Christopher Columbus lands in America.

1-47 c. 1494: Scholar and printer Aldus Manutius established the Aldine Press in Venice to publish works by the great Greek and Roman thinkers.

1-48 1495: Francesco Griffio (punch cutter for Aldus Manutius), roman type first used in *De aetna* by Pietro Bembo.



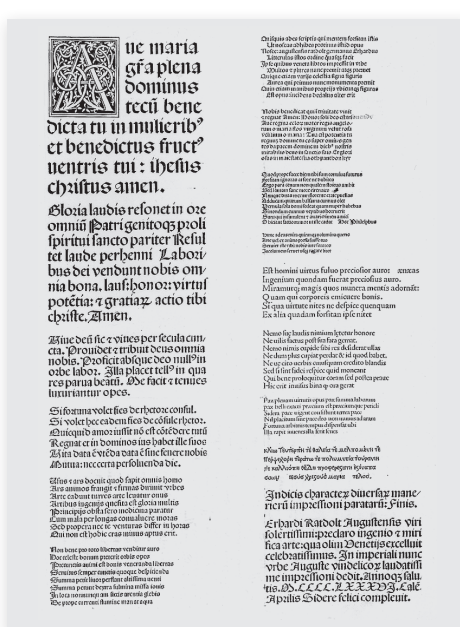
1-45

1-45 c. 1485: Filippino Lippi, *Portrait of a Youth*.



1-47

1-46



1-48

lud admirari, quod uulgo solet: magnu
esse scilicet tantas flammās, tam immen
sos ignes post hominum memoriā sem

1501

T.O.N-IN PRIMVM GEORGICORVM,
ARGVMENTVM.

Quid faciat letus segetes, quae sydere fructus
A grivola, ut faciem arrem profundat aratri,
S emma quo iacienda modo, cuiusq; locorum
E docuit, missis magno olim favore reddit.

T.V-M-GEORGICORVM LIBER PRI
MVS AD MOECENATEM.

Vid faciat letus segetes, quo sydere
erram,
V erere Maecenas, ulmusq; adium
gerenites,
Conueniat, quae astra bonum, quis
cillus habendo

S it pecori, atq; apibus quanta experientia patris,
Hinc canere incipiam. Vo; o clarissimamundi
Lumina, labentem caelo quae ducis annum
Liber, et alma Ceres, ut sivo sinuare tellus
C haoniam pingui glandem mutauit arista,
P oculaq; inuentus Acheloi a musae iuuas,
E t uos agrestum praesentia numina Fauni,
F eris simul, Faunusq; pedem, Dryadesq; puella,
Munera uestra otio, iugisq; cui prima frenentem
F udit equum magno tellus percussa tridentem
N eptune, et cultor nemorum, cui pinguis Cae
T erantum nunci tendent dumetis inuena,
I pse nemus liquens patrum, salusq; Licet

1-49

1-50 Home of Albrecht
Dürer, Nuremberg,
Germany.

1-55



1-56



1-55 1519–47: Pierre
Nepveu, château of
Chambord, France.

1-49 1501: Francesco
Griffo, the first italic
typeface, based on
chancery script
handwriting.

1-51 Woodblock
initial by Geoffroy
Tory, who returned to
France from study in
Italy in 1505, inspired
by Roman letterforms
and Renaissance design
ideals.

1517: Martin Luther
posts his ninety-five
theses on the door
of Wittenberg Castle
Church, launching the
Reformation.

1-52 1523: Lodovico
Arrighi, an Italian writing
master, introduces his
formal chancery italic
type.

1-53 1525: Albrecht
Dürer, construction of the
letter B.

1-54 1529: Geoffroy
Tory, construction of the
letter B.

1-56 c. 1480–1561:
Claude Garamond,
outstanding designer
of Old Style typefaces
during the French
Renaissance.

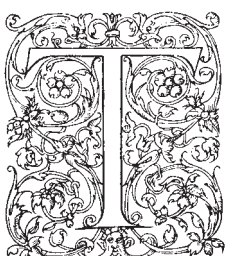
*Dele uarie sorti de littere poi, che in questo Tratta-
tello trouerai se io ti uoleffi ad una per una descriuere*

1-52

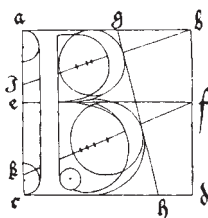
1-50



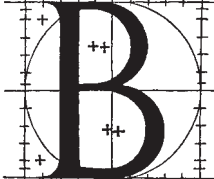
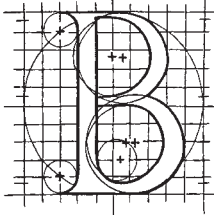
1-51



1-53



1-54



1-59

c. 1540



1-57

1-57 c. 1540: Titian, portrait, *Cardinal Pietro Bembo*.

1543: Nicolaus Copernicus publishes his theory of the heliocentric solar system.

LIVRE PREMIER DE

Doliphile rassemble comme il luy fut aduis en songe qu'il dormoit, & en dormant se trouuoit en une uallée fermée d'une grand closture en forme de pyramide, sur laquelle estoit eslys un obelisque de merueilleuse haulteur, qu'il regarda songeusement, & par grande admiration.



A forest espouventable aiant esté par moy passée, & apres auoir delaisé ceste premiere region par le doux sommeil qui m'auoit lors espris, ie me trouuay tout de nouveau en vn lieu beaucoup plus delectable que ie premier, car il estoit bordé & enuironné de plaitans cotaulx verdoians, & peuplez de diuerses manieres d'arbres, comme chéines, faux, planes, ormes, fraïnes, charmes, tilleulz, & autres, plantez selon l'aspect du lieu. & abas atrauers la plaine, y auoit de peutz buysfons d'arbrisseaux fauluaiges, cōme genetz, geneutiers, bruyeres, & tamarins, chargez de fleurs. parmy les prez croissoient les herbes medicinales, a scauoir les trois consolides, enule, cheurefeuil, branque vrline, liuelche, persil de macedoine, puoynne, guymaues, plantain, betoyne, & autres simples de toutes fortes & especes, plusieurs delquelles m'estoient incōgneues. Vn peu plus auant que le mylieu de ceste plaine, y auoit vne fablonniere meslée de petites mottes verdes, & pleine d'herbe menotte, & vn petit boyz de palmiers, esquelz les Egyptiens cueillent pain, vin, huile, vellement, & mesm̃ pour baillir leurs fuciles sembloient lames d'espees, & estoient chargées de frui& il y en auoit de grandes, moyennes, & petites, & leur ont les anciens donnéce

1-60



1-60 After 1577: El Greco, *Saint Martin and the Beggar*.

1582: Pope Gregory XIII initiates the Gregorian calendar, which is still in use.

1584: Sir Walter Raleigh sends explorers to the North American coast.

1-62



1-62 1607: Carlo Maderna, façade of St. Peter's, the Vatican.

1609: Regular weekly newspapers appear in Strasbourg, Germany.

1-58 1544: Simone de Colines, title page with woodcut border.

1-59 1546: Jacques Kerver, typography, illustration, and decorative initials, which were combined with rare elegance during the French Renaissance.

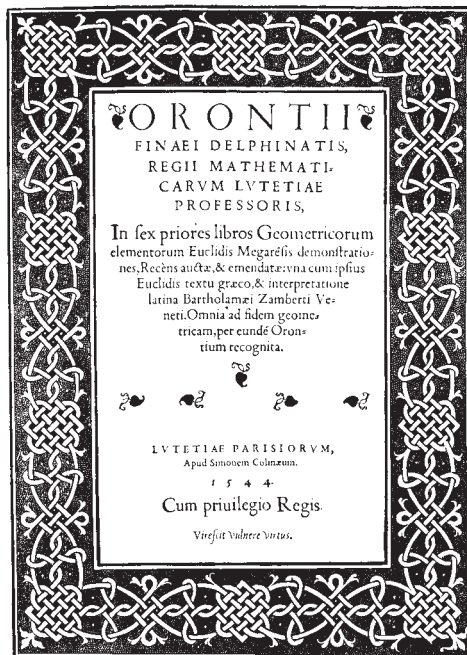
1-61 1595: Johann Theodor de Bry, illustrative initial *E*.

1603: William Shakespeare writes *Hamlet*.

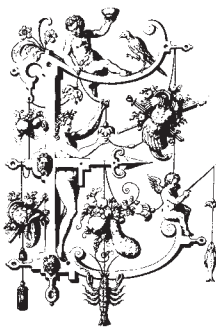
1-63 1621: Jean Jannon, typesfaces upon which twentieth-century Garamonds are based.

1-64 1628: The Vatican Press, specimen of roman capitals.

1-58



1-61



La crainte de l'Eternel est le chef de science: mais les fols mesprisent sapie&ce &

1-63

1-64

FRANCISCVS

1632

1-65



1-65 1632–43: The Taj Mahal, India.

1-66 c. 1630: Sir Anthony van Dyck, portrait, *Henri II de Lorraine*.

1639: The first printing press in the British Colonies is established in Massachusetts.

1657: First fountain pen is manufactured, in Paris.

1-66



sa doctrine et de ses lois. Après, il nous fait voir tous les hommes renfermés en un seul homme, et sa femme même tirée de lui; la concorde des mariages et la

During the eighteenth century, type design went through a gradual transition from Old Style to Modern Style fonts designed late in the century.

1-67



Ad me profectam esse aiebant. D. quid Quæso, igitur commorabare, ubi id

1-68

1-67 c. 1664: Jan Vermeer, *Woman Holding a Balance*.

1666: The Great Fire of London.

1667: Milton publishes *Paradise Lost*.

1-69 1675–1710: Sir Christopher Wren, St. Paul's Cathedral, London.

1700: The emergence of the Rococo style.

1-68 c. 1670: Christoffel van Dyck, Dutch Old Style type.

1686: Sir Isaac Newton sets forth his law of gravity.

1-69



1-70 1702: Philippe Grandjean (punch cutter), Romain du Roi, the first transitional face.

1-71



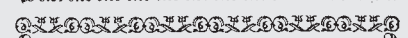
1-71 1709: Matthaus Poppelmann, Zwinger Palace, Dresden, Germany.

1709: England adopts the first copyright law.

1-72 1720: William Caslon, Caslon Old Style types, which from this date were used throughout the British Empire.

ABCDEFGHIJKLMN
OPQRSTUVWXYZJ

Quousque tandem abutere,
Catilina, patientia nostra? qu
Quousque tandem abutere, Ca-
tilina, patientia nostra? quam-



This new Foundry was begun in the Year 1720, and finish'd 1763; and will (with God's leave) be carried on, improved, and enlarged, by WILLIAM CASLON and Son, Letter-Founders in LONDON.



1-70

10

1-72

1-75



1722

1-76



1-77



1-73

1-73 1722: Castletown, near Dublin, Ireland.

1738: First spinning machines are patented in England.

1-75 1750: François Boucher, *The Love Letter*.

1-74 1744: Benjamin Franklin, title page using Caslon type.

1-76 1750s: John Baskerville creates extraordinary transitional typefaces.

1-74

M. T. CICERO'S
CATO MAJOR,
OR HIS
DISCOURSE
OF
OLD-AGE:

With Explanatory NOTES.

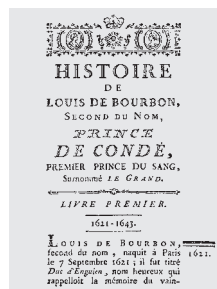


PHILADELPHIA:
Printed and Sold by B. FRANKLIN,
MDCCXLIV.

1-77 1765: Thomas Cottrell introduces display types two inches tall (shown actual size).

1-78 1768: Pierre Simon Fournier le Jeune, ornamented types.

1-79 1773: Johann David Steingruber, letter A from *Architektonisches Alphabet*.



1-78

1-80 1774: John Holt, broadside of the American revolutionary era, using Caslon type.

1775: James Watt constructs the first efficient steam engine.

1776: American Declaration of Independence is signed.



1-79

1-81 1784: François Ambroise Didot, the first true Modern Style typeface.

1789: The fall of the Bastille launches the French Revolution.

1791: American Bill of Rights guarantees freedoms of religion, speech, and the press.

1793: French King Louis XVI and Marie Antoinette are sent to the guillotine.



1-80

1-82 1791: Giambattista Bodoni, Modern Style typefaces of geometric construction, with hairline serifs.

1791: American Bill of Rights guarantees freedoms of religion, speech, and the press.

1793: French King Louis XVI and Marie Antoinette are sent to the guillotine.

1796: Aloys Senefelder invents lithography.

1799: Nicolas-Louis Robert invents the papermaking machine.

lumes in-4° sur papier-vélin de la fabrique de messieurs Matthieu Johannot pere et fils, d'Annonai, premiers fabricants de cette sorte de papiers en

1-81

LA
*DIVINA
COMMEDIA*

DI
DANTE ALIGHIERI

CON
ILLUSTRAZIONI

TOMO I.

PISA
DALLA TIPOGRAFIA
DELLA SOCIETÀ LETTERARIA
MDCCCIV.

1-82

The nineteenth century and the Industrial Revolution: 1800-1899 CE

The Industrial Revolution had a dramatic impact upon typography and the graphic arts. New technology radically altered printing, and designers responded with an outpouring of new forms and images.

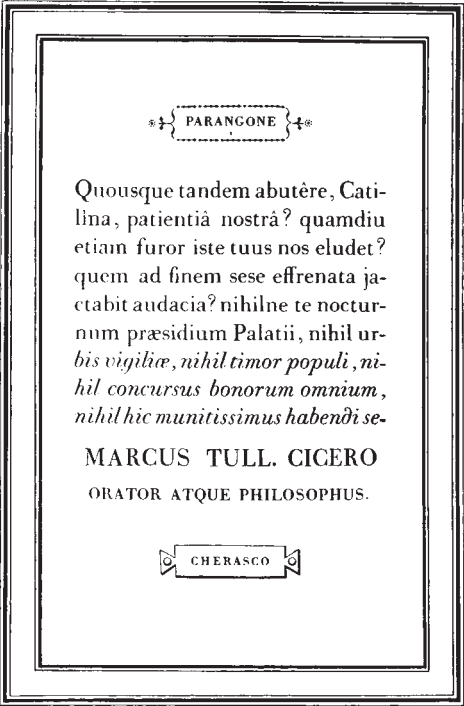
1803



1-84 1812: Jacques-Louis David, *Napoleon in His Study* (detail).

1814: Friedrich Koenig invents the steam-powered printing press.

1-88



1-89

Manchester

1-83

R. THORNE

1-83 c. 1803: Robert Thorne designs the first fat face.

1804: Napoleon Bonaparte crowned emperor of France.

1808: Ludwig van Beethoven composes his Fifth Symphony.

1-85 1815: Vincent Figgins shows the first Egyptian (slab-serif) typefaces.

1-86 1815: Vincent Figgins shows the earliest shaded type.

1-87 1816: William Caslon IV introduces the first sans serif type.

1-88 1818: Page from *Manuale Tipographico*, which presented the lifework of Giambattista Bodoni.

1-89 1821: Robert Thorne, Tuscan style with splayed serifs.

1-85

ABCDEFGHIJK

1-86

ABCDEFGHIKM

1-87

LETTERFOUNDER

1822

1-90 1822: Thomas Jefferson, rotunda of the University of Virginia in the neoclassical style based on Greek and Roman architecture.

1822: Joseph-Nicéphore Niépce produces the first photographic printing plate.

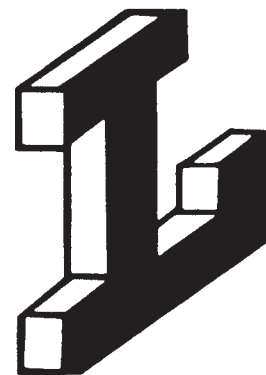
1-91



1-94



1-95



1-91 c. 1826: Bower, Bacon and Bower, early reversed type entitled White.

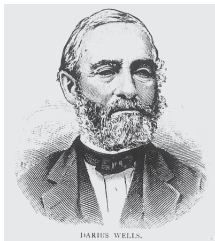
1826: Joseph-Nicéphore Niépce takes the first photograph from nature.

1-90



1-92 1827: Darius Wells invents the mechanical router, making the manufacture of large display wood types possible.

1-92



1-93 1833: Vincent Figgins introduces outline types.

1-94 1836: Davy and Berry, poster printed with wood type.

1830s–80s: Wood-type posters and broadsides flourish in America and Europe.

1-95 1836: Vincent Figgins, perspective type.

1-96 1837: Handbill set in fat face.

1837: Victoria crowned queen of England.

Working Men, Attention!!

Global Office
Saturday, November 20, 1837

It is your imperious duty to drop your *Hammers and Sledges!* once and all, to your post repair, **THIS AFTERNOON**, at **FIVE** o'clock P. M. and attend the

GREAT MEETING

called by the papers of this morning, to be held at the **CITY HALL**, then and there to co-operate with such as have the **GREAT GOOD OF ALL THEIR FELLOW CITIZENS at Heart!** Your liberty! yea, your **LABOUR!!** is the subject of the call: who that values the services of **HEROES** of the *Revolution* whose blood achieved our Independence as a Nation, will for a moment doubt he owes a few hours this afternoon to his wife and children?

HANCOCK.

1-93

HOUSEHOLD FURNITURE,
PLATE, CHINA-WARE, JEWELS,
WATCHES

1-96

1840s: Ornamented type becomes increasingly important.

1840

1-97



1-97 c. 1840–52:
Sir Charles Barry and
A. W. N. Pugin, Houses
of Parliament, London,
inspiration for the Gothic
Revival.

1-98 c. 1841: Wood and
Sharwoods, ornamental
type.

1-99 1845: Robert
Besley, the first
Clarendon style.

1848: The California
Gold Rush begins.

1851: Joseph Paxton
designs the Crystal
Palace.

1-98



audacia tua? nihilne te noc
dium palatii, nihil urbis vigi

1-99

PRES'T. MADISON'S LIBRARY, AT AUCTION.

AT Orange Court House, Virginia, on Tuesday the 27th day of June, prox., being the day after the County Court of Orange in that month; I shall sell at public auc- tion, to the highest bidder, that part of the Library of the late James Madison, which, in a recent division of his books with the University of Virginia, fell to the share of my testator; and at the same time I will sell other books, the property of my said testator. In all there are some

SEVEN OR EIGHT HUNDRED VOLUMES,

among which are many very rare and desirable works, some in Greek, some in Latin, numerous others in French, and yet more in English, in almost all the de- partments of Literature; not a few of them being in this manner exposed to sale only because the University possessed already copies of the same editions. The sale beginning on the day above mentioned, will be continued from day to day till all the books shall have been sold, on the following terms:

Cash will be required of each purchaser whose aggregate purchases shall a- mount to no more than Five dollars; those whose purchases shall exceed that a- mount, will have the privilege either to pay the cash or to give bond with approved security, bearing interest from the date, and payable six months thereafter.

ELHANON ROW, Administrator,
with the will annexed of John P. Todd, dec'd.

May 30, 1854.

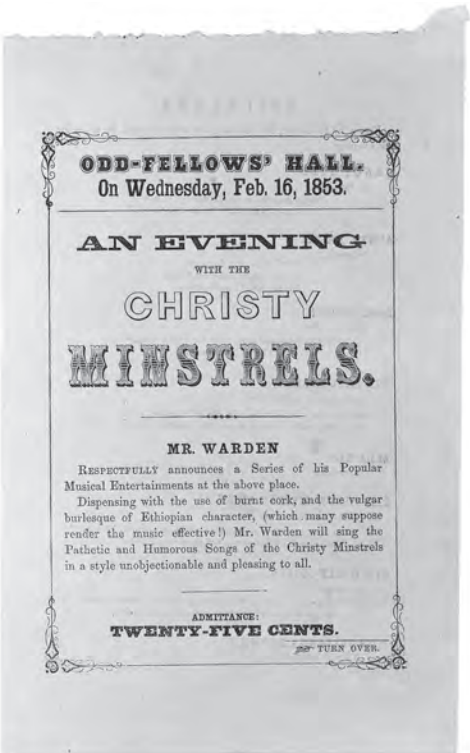
1-101

1-100 1853: Handbill
combining Egyptian,
outline, and decorative
types.

1-101 1854: Broadside
using elongated fat face
fonts.

1854: The United States
makes its first treaty with
Japan.

1-100



1856: Sir Henry
Bessemer develops
process for converting
iron to steel.

1-102 1859: William
H. Page and Company,
Ornamented Clarendons.

1859: Charles Darwin
publishes *Origin of
Species by Means of
Natural Selection*.

1-102



1860

1-104



1-104 c. 1865: Honoré Daumier, *The Third-Class Carriage*.

1866: The first successful transatlantic cable is laid.

1867: Alfred Nobel invents dynamite.

1867: Christopher Sholes constructs the first practical typewriter.

1861–65: American Civil War.

1863: Abraham Lincoln signs the Emancipation Proclamation.

1-105



1-105 1868: Currier & Ives, *American Homestead Winter*.

1-107 1883: The Brooklyn Bridge is opened to traffic.

1883: William Jenney designs the first skyscraper, a ten-story metal-frame building in Chicago.



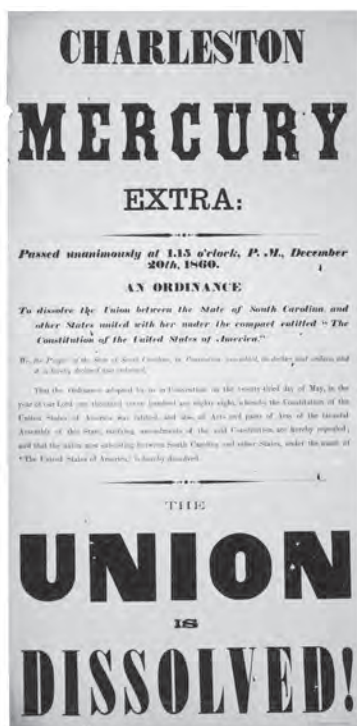
1-109



1-110

1-103 1860: *Charleston Mercury*, broadsheet announcing the dissolution of the Union.

1-103



1-106 c. 1875: J. Ottmann, chromolithographic card for Mrs. Winslow's Soothing Syrup.

1876: Alexander Graham Bell invents the telephone.

1877: Thomas Edison invents the phonograph.

1879: Thomas Edison invents the electric lightbulb.



1-106

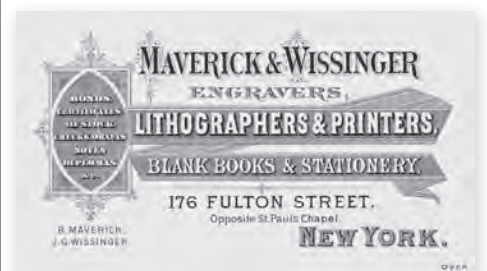
1-108 c. 1885: Maverick & Wissinger, engraved business card.

1-109 c. 1880s: Lettering printed by chromolithography.

1-107



1-110 1886: Ottmar Mergenthaler invents the Linotype, the first keyboard typesetting machine.



1-108

1887



1-112

1-112 1889: Alexandre Gustave Eiffel, the Eiffel Tower.



1-114

1-114 1892: Paul Gauguin, *By the Sea*.

1-115

This is the Golden type.
This is the Troy type.
This is the Chaucer type.



1-116

1-111 1887: Advertisement for Estey Organ.

1887: Tolbert Lanston invents the Monotype machine.

1-113 c. 1890s: Coca-Cola syrup jug.



1-115 William Morris' typeface designs: 1890, Golden; 1892, Troy; 1893, Chaucer.

1-116 1891–98: William Morris' Kelmscott Press launches a revival of printing and typography.

1-117 1892: William Morris, page from *News from Nowhere*.

1-117

Afloat again

CHAPTER XXIV. UP THE THAMES. THE SECOND DAY.

HEY were not slow to take my hint; & indeed, as to the mere time of day, it was best for us to be off, as it was past seven o'clock, & the day promised to be very hot. So we got up and went down to our boat; Ellen thoughtful and abstracted; the old man very kind and courteous, as if to make up for his crabbedness of opinion. Clara was cheerful & natural, but a little subdued, I thought; and she at least was not sorry to be gone, and often looked shyly and timidly at Ellen and her strange wild beauty. So we got into the boat, Dick saying as he took his place, "Well, it is a fine day!" and the old man answering "What! you like that, do you?" once more; and presently Dick was sending the bows swiftly through the slow weed-checked stream. I turned round as we got into mid-stream, and waving my hand to our hosts, saw Ellen leaning on the old man's shoulder, and caressing his healthy apple-red cheek, and quite a keen pang smote me as I thought how I should never see the beautiful girl again. Presently I insisted on taking the sculls, and I rowed a good deal that day; which no doubt accounts for the fact that we got very late

230

1-111



1893



1-118

1-118 1893: Henri van de Velde, title page for *Van Nu en Straks*.

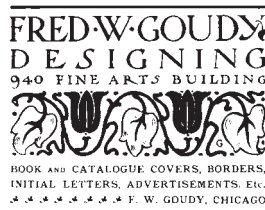
1895: The Lumière brothers give the first motion-picture presentation.

1-119



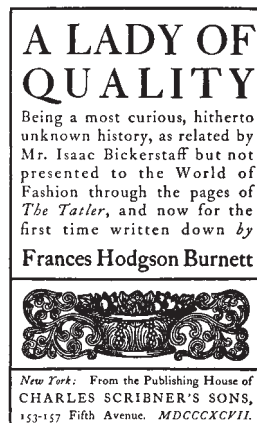
1-119 1897: Edmond Deman, title page in the curvilinear art nouveau style.

1-120



1-120 1890s–1940s: Inspired by Kelmscott, Americans Frederick Goudy and Bruce Rogers bring renewed excellence to book and typeface design.

1-121



1-121 1897: Will Bradley, title page in his “chap book” style, reviving Caslon type and colonial woodcut techniques.

1899: Construction begins on the first zeppelin airship.



1-123

1-123 1898–1902: Hector Guimard, entrance to a Paris Métro station.

1-122 1899: Josef Hoffmann, catalog cover for a Vienna Secession exhibition.

1-122



Typography in the twentieth century: 1900–2000

The twentieth century was a period of incredible ferment and change. Unprecedented advances in science and technology, and revolutionary developments in art and design left their marks on typography.

1900

1-124



1-124 1900: Peter Behrens, dedication page from *Feste des Lebens und der Künste*.

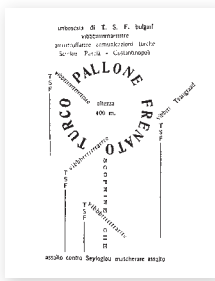
1903: The Wright brothers achieve the first powered flight.

1905: Albert Einstein proposes his theory of relativity.



1-126

1-125



1-125 1909: Filippo Marinetti founds Futurism, experiments with typographic form and syntax.

1-126 c. 1910: German sans serif “block style.”



1-128

1-127



1-127 1913: Wassily Kandinsky, *Improvisation 31 (Sea Battle)*.

1914–18: World War I.

c. 1915: Kasimir Malevich, painting shown at the 0.10 group exhibition launching Suprematism.



1-129

1-129 1917: John Heartfield, Dadaist advertisement.



1-130

1-130 1917: Vilmos Huszar, *De Stijl* magazine cover.

1918: Czar Nicholas II and his family are executed.

1-131



1-131 1919: Raoul Hausmann, Dada poem.

1920: Women's suffrage is granted in the United States.

1920: Bolsheviks triumph in the Russian Revolution.