ADVANCED TYPOGRAPHY
PROFESSOR LIS CHARMAN

DUE DATE: SEE SYLLABUS

BRINGHURST
Chapter 5:
Analphabetic Symbols

1) Describe/demonstrate Bringhurst's recommended treatment of the dash & spacing "to set off phrases" (*Analphabetic Symbols* 5.2)

2) Bringhurst states that "Double hyphens in a typeset document are a sure sign that the type was set by a _____, not a _____. If this is so — should anyone in this class use a double hyphen in their design work? Please circle: Yes or No (*AS* 5.2)

3) Describe/demonstrate Bringhurst's recommended treatment of dash & spacing "to indicate range" (*AS* 5.2.2)

4) Bringhurst states "Use ellipses that fit the font." What additionally does he state regarding the ellipses? (*AS* 5.2.7)

5) What does Bringhurst recommend regarding the apostrophe and numerical plurals? (*AS* 5.4.3)

6) What does Bringhurst recommend regarding periods in acronyms? (*AS* 5.4.4)

7) a) What does Bringhurst recommend regarding the hyphen in *Analphabetic Symbols* 5.4.5)?

b) How can placement of the hyphen change the meaning of "twenty one night stands"? (*AS* 5.4.5)

Demonstrate:

c) What key idea/s does Bringhurst put/s forward when discussing "douglas-fir, balsam fir…? (*AS* 5.4.5)

8) Why does Bringhurst recommends that typographers should "remap the font driver and keyboard…" (*AS* 5.5.2)

1) a) Bringhurst recommends "choosing faces that will survive and… prosper under the final printing conditions". Give an example of this from your own education or work experience. What typefaces have you used that have not survived or prospered when treated typographically? Typographic problems from printing on a jet ink printer? What *other* problems have you run into? What 'mistakes' have you learned from? To receive full points answer all parts of this question with thoughtful consideration and examples from your experiences. (*CCT* 6.1.3 & 6.1.4).

2) a) What is the *key idea* Bringhurst offers for choosing a typeface in *CCT* 6.2.1?

b–d) To follow Bringhurst outlines *three* recommendations for choosing the 'best typeface' for a book design (*CCT* 6.2.1) What are they?

3) List the detailed ways in which Bringhurst recommends a designer handle a modest typeface. (*CCT* 6.2.3)

4) Describe & list at least *three* of Bringhurst's suggestions to typographers for addressing historical considerations. (*CCT* 6.3)

5) a) In *CCT* 6.5 what are the two forms of beauty Bringhurst lists?

b) What does he mean by this. How would you apply this idea in your work?

6) In *CCT* 6.5.1, how does Bringhurst suggest the typographer start?

7) a) In *CCT* 6.5.5, what is the key idea that Bringhurst suggests/recommends?

b) How does Bringhurst suggest a designer make and apply this decision? (*CCT* 6.5.5)

8) In *CCT* 6.6.3, Bringhurst points out two key factors of importance when type sits side by side.
a) What are they?

b) List additional term/s and explain Bringhurst's 'extension'

c) Why?

9) Today the typographer can buy and download for free thousands of typefaces — what does Bringhurst think of this and what does he recommend regarding building your own type library?

10) True or false?

Does Bringhurst state that most documents can be set perfectly well with only one family of type?

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BRINGHURST
Chapter 8:
Shaping the Page

(NO WORKSHEET
FOR CHPTR 7)

1) Convenience (as well as cost & practical concerns) leads designers to base page sizes on _____ _____ _____ _____. List two examples of poor page dimensions decisions which fail to meet practical limitations and cost concerns: _____ _____ and _____ _____ (*SP* 8.1)

2) Aid in determining page sizes can be found in _____ _____ _____ and _____. Certain proportions keep recurring not only pleasing humans but also prominent in nature — found in the structures of _____ _____ _____ _____ _____ _____ _____ _____ _____ and _____. (*SP* 8.1)

3) Bringhurst describes page proportions derivable from simple geometric figures. Manuscripts and books from _____ _____, _____&_____ _____ _____, _____ _____ _____, _____ _____ embody and share similar proportions and that these proportions recur across regions of the world suggests that their beauty is not simply fashion. (*SP* 8.1)

4) Favorite page shapes of the European Middle Ages and are still in use today are _____:_____ &_____:_____. The Renaissance typographers favored a narrower page with proportions such as _____:_____, _____:_____, _____:_____ &_____:_____. (*SP* 8.1, page 147)

5) The golden section is a symmetrical relation built from asymmetrical parts. _____ _____, _____, or _____ embody the golden section when the smaller is to the larger as the larger is to the sum. That is _____:_____ = _____:_____ (*SP* 8.2)

6) The Fibonacci series is a logarithmic spiral of increase — it can be seen in the structure of pineapples, pinecones, sunflowers, sea urchins, snails, the chambered nautilus and in the proportions of the human body.
List one of the groups of typeface sizes chosen according to the Fibonacci series. List the one you believe would be the most versatile and useful to try in a detailed book design (be prepared to explain why): _____, _____, _____, _____, _____, _____, _____. (*SP* 8.2 pp 157–158)

Why did you choose this one? (*SP* 8.2)

_____

_____

_____

7) True or False (please circle) (*SP* 8.3)

Choose inherently satisfying page proportions in preference to stock sizes or arbitrary shapes.

8) True or False (please circle) (*SP* 8.4)

If the text is meant to invite continuous reading, set it in columns that are clearly taller than wide.

9) Bringhurst states that the textblock should be shaped so that it balances and contrasts with the shape of the overall page — Describe two examples of possible treatment and how they fit the above prescription…(*SP* 8.4.2)

_____

_____

_____

_____

_____

10) Review the ways/elements (that can create VITALITY on the page) that can bring the design into the margins. (*SP* 8.5.2)

_____

_____

_____

_____

_____

_____

_____

11) List the folio treatments Bringhurst best believes should be used to mark the reader's way.

1) _____

2) _____

3) _____

4) _____

1) Bringhurst asserts that 'our' Latin alphabet is over _____ characters. (*The State of the Art* 9.1)

2) "The old compositor's typecase is a partitioned wooden tray holding hundreds of… interchangeable parts." The alphabet with all its alphabetic and analphabetic characters—all of these subsemantic particles (or bits) are called 'sorts' by letterpress printers. And all of these 'subsemantic particles' are cast on standardized bodies of metal—assembled and reassembled as needed to form meaning (p22). Gutenberg's cases used _____ different sorts to set his 42-line Bible. (*TSA* 9.1)

3) a) What is 'hinting.' (*TSA* 9.2)

b) Postscript v. TrueType—explain the differences in their approaches to hinting & their mathematics (*TSA* 9.2)

c) FULLY & clearly explain the differences between cubic & quadratic splines — Postscript & TrueType. (*TSA* 9.2)

4) a) What are multiple master fonts? (*TSA* 9.2)

5) On page 184 the letter 'a' set in Adobe Jenson MM demonstrating that is its scalable for weight and for optimal size. "Here one letter of uniform weight is scaled from 6 to 72 pt optimal size. The forms are resized to the same x-height so their shapes and effective weights can be compared… (*TSA* 9.2)

a) Please describe the difference/s YOU observe in the letters.

b) Why? Explain why do you believe/know these differences are necessary.

6) a) How is "good justification calculated"? Describe. (*TSA* 9.4)

b) What is the "best computer justification"? FULLY describe/explain? (*TSA* 9.4)

c) What %'s allowed in Bringhurst's book by intercharacter spacing AND width of individual glyphs. (*TSA* 9.4)

d) And — the bulk of work is done by… (*TSA* 9.4)

e) Why are these limitations CRUCIAL? Explain the what the "elasticity" in letter and word spacing should be held to in English and why. (*TSA* 9.4)

10) In your own words summarize & demonstrate your understanding of *TSA* 9.5.1:

11) In your own words summarize & demonstrate your understanding of *TSA* 9.5.2:

12) In your own words summarize & demonstrate your understanding of *TSA* 9.5.3:

13) True or False (please circle) (*TSA* 9.6.1)
Bringhurst believes that in several respects, digital typography still lags far behind the methods and resources of Renaissance compositors and medieval scribes. This supports his assertion that typographers should "Consult the ancestors."

14) Explain in your own words what elements, design, etc… that determine/define what a 'good typeface is' (*TSA* 9.6.2)

EXTRA CREDIT (END OF TERM) | ADVANCED TYPOGRAPHY | INSTRUCTOR: LIS CHARMAN
RE-TYPESET THE FOLLOWNG TEXT CORRECTLY. USE ALL YOU HAVE LEARNED FROM BRINGHURST—
REFER TO "TYPELESSON.PDF" BY NICK SHIN FOR ASSISTANCE.
—COMPLETE THE THREE PAGES OF TEXT FOR EXTRA CREDIT~ ASK LIS TO POST THE EXTRA CREDIT TEXT (ON THE NEXT FEW PAGES) TO THE BLOG!

Gilead Partners

Pfizer Inc

In August 1996, Gilead and Pharmacia & Upjohn (now Pfizer) entered into a collaboration whereby Pharmacia was given exclusive rights to market VISTIDE® (cidofovir injection) for the treatment of cytomegalovirus retinitis in patients with HIV in all countries outside of the United States. Under the terms of the agreement, Pharmacia paid Gilead a $10 million initial license fee, and an additional $10 million milestone payment upon receipt of the European Marketing Authorisation for VISTIDE in May 1997. Pfizer also pays Gilead royalty payments on sales of VISTIDE. In addition, as a result of receiving the European Marketing Authorisation, Pharmacia purchased 1,133,786 shares of newly issued Series B Convertible Preferred Stock for approximately $40 million or $35.28 per share.

Japan Tobacco Inc

In July 2003, Gilead Sciences and Japan Tobacco Inc. (JT) entered into a licensing agreement under which JT will commercialize products in Gilead's HIV portfolio in Japan. The agreement includes Viread® (tenofovir disoproxil fumarate), Emtriva® (emtricitabine) and the co-formulation of the two products, Truvada® (tenofovir disoproxil fumarate and emtricitabine). JT is responsible for seeking regulatory approval and commercialization of all three products in Japan. Upon successful commercialization of the products in Japan, JT will make payments to Gilead based on product sales. In April 2004, JT announced the launch of Viread in Japan.

Cubist Pharmaceuticals

Cambridge, MA and Foster City, CA, January 7, 2001 - Cubist Pharmaceuticals, Inc. (Nasdaq: CBST) and Gilead Sciences, Inc. (Nasdaq: GILD) jointly announced the signing of a licensing agreement for the exclusive rights to commercialize Cubist's investigational antibacterial drug Cidecin™ (daptomycin for injection) and an oral formulation of daptomycin in 16 European countries following regulatory approval.

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MR. STEVEN's MONDAY

Mr. Stevens scurried to - and fro trying to get the 14 1/2" x 40" box prepared for the U.P.S. driver. The U.P.S. driver was standing at the door, politely waiting for Mr. Stevens to get the box taped up and addressed. Mr. Stevens was sending the package to Lynn Lee, M.D.' F.R.C.S.(C) at 4444 Wondering WAy, Toronto, ON M5R 2R6. Mr. Stevens was quite concerned that the package might not leave on time. This past week his town had first experienced a flood and then a few days later a tornado touched down. Today, he was more than fairly certain - as bad things come in threes - that a third natural disaster was about to hit.

Case Studies
Mayo Clinic: Design Thinking in Health Care - Case Study Synopsis & Teaching Objectives
Can doctor-patient interactions be tested in a laboratory setting?
By Andrea Nagy Smith

Case Background
In the early 2000s, Mayo Clinic physician Nicholas LaRusso asked himself a question: if we can test new drugs in clinical trials, can we in a similarly rigorous way test new kinds of doctor-patient interactions?

Although over the last 50 years there had been enormous advances in diagnosing and treating disease, the systems of delivering health care had changed little. In fact, new tests, treatments and procedures meant that the health care experience had become increasingly complex for provider and patient alike.

But what if there were better ways to provide care? As LaRusso reasoned, “New technology, new diagnostic tests, and new therapeutics will be most effective if we can improve the ways we deliver these enormous advances to patients.”

LaRusso had heard that design firms like IDEO were offering consulting services in the area of human-factors design, and he wondered if their work might be applicable in the health care setting. Mayo had a history of innovation in care delivery, starting with the invention of the patient medical record in the early 20th century, and the clinic was always looking for ways to improve both patient outcomes and the health care experience.

In 2002, in consultation with IDEO, LaRusso and colleague Dr. Michael Brennan opened a skunkworks outpatient lab called SPARC, where physicians and designers could work together to test hypotheses about ways in which providers and patients interact. They dealt with a number of challenges: recruiting busy physicians to a new and untested type of research, crossing the cultural divide between physicians and designers, doing experimentation with real patients, and gaining institutional support for their unusual endeavor.

Within six years, the lab grew from a small venture sponsored by a single department to an enterprise-wide Center for Innovation, a dedicated research and design-oriented institute that studies the processes of health care provision, from the initial phone call, to the clinic visit, to the diagnosis and treatment of the problem, to follow-up and preventive care.

In 2010, the CFI was a respected internal consultancy of Mayo Clinic. It had five platforms that encompassed various kinds of service redesign, and it had grown from two full-time employees to 32. It had undertaken projects to reorganize the work flows in a practice, test new strategies for patient education, use technology to improve physician consultations, and redesign the traditional exam room.

At the same time, CFI designers and physicians acknowledged that the innovations they had developed were small, and they spoke of the goal of "transformational" change. But in 2010 there were questions about how the CFI would achieve its stated aspirations. What would a major change in health care delivery look like? How should the CFI's impact be measured? Were the center's structure and processes appropriate for transformational change?

Teaching Objectives
The principal case question concerns the tension between incremental and transformational innovation within a service setting. It will be of particular interest in courses on innovation, design thinking, service design, and the health care industry.

The case also allows for discussion of ancillary topics, such as:

- The risks and rewards of innovation in health care.
- The role of innovation in developing a powerful service brand such as Mayo Clinic.
- The need for improvements in health care delivery processes.
- The evolution of an innovation project from skunkworks to institutionalized center.
- The opportunities and challenges of integrating designers into the medical culture.
- The challenge of measuring impact of innovation in health care delivery.
- The challenge of diffusing innovation within Mayo and beyond.

Case Resources
The case study consists of a brief history of innovation at Mayo, an overview of current challenges in health care delivery, descriptions of particular projects, and a discussion of challenges faced by the CFI, including internal management, metrics, and strategies for bringing together designers and physicians. Development of the case was overseen by Rodrigo Canales, Assistant Professor of Organizational Behavior at the Yale School of Management and Andrea Smith, Project Editor at the Yale School of Management’s Case Study Research Department.

Besides text, the case study consists of 35 links to primary

documents and 33 video clips featuring interviews with Mayo Clinic executives, physicians, administrators, and designers.

A highlight of the case is a set of mini-cases on five projects undertaken by the Center for Innovation:

- Dermatology practice redesign: CFI designers worked with Mayo's dermatology practice to enable each function to work at the top of their license; as a result, the practice increased its business from 35 to 65 patients a day.
- Pediatric ENT practice redesign: The CFI helped the pediatric ENT unit to more effectively treat sick children by improving communication with their parents.
- Diabetes education cards: Mayo's endocrinology practice, in collaboration with the CFI, found that patients who used new diabetes education cards were more knowledgeable about the side effects of their medicines and more likely to be compliant with their treatment plans.
- eConsults: A new electronic communication system helps physicians to communicate more efficiently with each other and with faraway patients.
- Exam room redesign: A new exam room designed by the CFI enables patients to better retain information about their health records and exam results.

Discussion Topics

From Incremental to Transformational Innovation

The key challenge faced by the CFI in 2010 is the pressure to produce transformational change. Instructors can discuss the difference between incremental and transformational innovation and ask students to consider whether they are in tension. Do the two types of innovation need to be balanced? Should the CFI stick with incremental improvements, the same type of small changes that made Toyota the largest automaker in the world? Or should it attempt to foster a breakthrough innovation? What would such an innovation in health care delivery look like? And does the CFI have the structure to produce transformational innovation?

Innovation in the Health Care Setting

Mayo Clinic has a history of innovation in health care delivery, beginning with the invention of the patient medical record in the early 20th century. One hundred years later, there is a new need for innovations in the service of health care. Instructors can frame the problem by discussing the connection between advances in medical treatments and diagnosis and the increasing complexity of the health care experience. Doctors and patients alike are under pressure as they attempt navigate a highly specialized medical system. Instructors can also discuss the move toward "data-driven" methods for monitoring complex services so as to minimize errors. Consumers are expecting higher levels of quality in a variety of settings, and techniques are available to track effective and ineffective pieces of a complex system. With its Center for Innovation, Mayo Clinic is bringing to the health care setting the methods that transformed the New York Police Department and the Toyota Motor Corporation.

The SPARC Laboratory as a Skunk Works Operation

Mayo Clinic was one of the first medical organizations to open a laboratory to study the processes of health care delivery. Instructors can discuss the challenges of starting a new venture in any large establishment and the particular sensitivities of experimenting with service innovations in the health care setting. They can also consider the importance the credibility of Dr. Nicholas LaRusso as head of the new SPARC Laboratory: could such a new venture have been started without the leadership of a respected member of the existing institution?

Two Cultures: Design and Medicine

By the early 2000s "design thinking" had become a new method for improving various aspects of the consumer experience. When Mayo Clinic brought designers into the medical setting, it had to deal with communication challenges between physicians and designers. Instructors can discuss the "design thinking" movement and ask students to consider the role of designers in facilitating innovation in health care delivery. What do designers bring to the medical environment? In what ways do designers need to accommodate their style to the expectations of a medical clinic?

Institutionalizing Innovation

A key challenge faced by the CFI in 2010 is to expand its influence. The center has achieved substantial successes, but it has not always been able to diffuse them throughout the institution. How should the CFI measure its results? Once it has concrete results, how should it publicize them and persuade others to act on them? Which projects seem to be the most scalable, and which are the most difficult to bring to scale? What should the CFI do when projects such as the check-in kiosk receive positive feedback but nevertheless do not find acceptance in practice?