Designing Interactive Systems I

Visual Design

Prof. Dr. Jan Borchers
Media Computing Group
RWTH Aachen University

Winter Semester ’23/’24

http://hci.rwth-aachen.de/dis
Review

- What are the 3 levels of processing?
- Why is knowledge in the world important?
- What is feedback in HCI? Why is it important?
- What are the differences between mistakes and slips?
VISUAL DESIGN

Why?
Graphic Design
Visual Design
UI Design
Web Design
Digital Design
Four Basic Design Principles

**Proximity**

**Alignment**

**Repetition**

**Contrast**
Proximity
AREAS OF EXPERTISE

- Strategic Planning and Execution
- Internet and New Media Development
- User Experience Improvements
- Software and Internet UX Design
- Market and Consumer Research
- New Product Development and Launch
- Process Design and Reengineering
- Organizational Turnarounds
Travel Tips

1. Take twice as much money as you think you’ll need.
2. Take half as much clothing as you think you’ll need.
3. Don’t even bother taking all the addresses of the people who expect you to write.

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First Friday Club
Winter Reading Schedule

Friday November 1 at 5 p.m. Cymbeline
In this action-packed drama, our strong and true heroine, Imogen, dresses as a boy and runs off to a cave in Wales to avoid marrying a man she hates.

Friday, December 6, 5 p.m. The Winter’s Tale
The glorious Paulina and the steadfast Hermione keep a secret together for sixteen years, until the Delphic Oracle is proven true and the long-lost daughter is found.

All readings held at the Mermaid Tavern. Sponsored by I Read Shakespeare.
Join us for $3!
For seating information phone 555-1212

Also Friday, January 3 at 5 p.m. Twelfth Night
Join us as Olivia survives a shipwreck, dresses as a man, gets a job, and finds both a man and a woman in love with her.
Correspondences
Flowers, herbs, trees
Ancient Greeks and Romans
Historical characters

Quotes on motifs
Women
Death
Morning
Snakes

Language
Iambic pentameter
Rhetorical devices
Poetic devices
First lines

Collections
Small printings
Kitschy
Dingbats

Correspondences
Flowers, herbs, trees
Ancient Greeks and Romans
Historical characters

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Death
Morning
Snakes

Language
Iambic pentameter
Rhetorical devices
Poetic devices
First lines

Collections
Small printings
Kitschy volumes
Dingbats
JOIN A
SHAKESPEARE
CLOSE READING!

How would you like to...
understand every word and every nuance in a Shakespeare play?
Can you imagine...
seeing a play performed and actually understanding everything that’s going on?
What if you could...
laugh in the right places in a play, cry in the right places, boo and hiss in the right places?
Ever wanted to...
talk to someone about a Shakespeare play and have that person think you know what you’re talking about?
Would you like to...
have people admire and esteem you because you know whether or not Portia betrayed her father by telling Bassanio which casket to choose?
It’s all possible.
Live the life you’ve dreamed about!
Be an Understannder!
For more info on how to ween up and start your joyous new life as an Understannder, contact us right away:
phone: 1-800-555-1212
email: SFSReaders@gmail.com
web: http://www.meetup.com/SFSCloseReaders/
GERTRUDE’S PIANO BAR

STARTERS:
GERTRUDE’S FAMOUS ONION LOAF - 8
SUMMER GARDEN TOMATO SALAD - 8
SLICED VINE-RIPENED YELLOW AND RED TOMATOES WITH FRESH MOZZARELLA AND BASIL
BALANCED VINAIGRETTE
HAMEL’S CHOPPED SALAD - 7
CUBED CUCUMBERS, AVOCADO, TOMATOES, JALAPENO PEPPERS, Romaine Leaves, Tossed in a Light Lemon Vinaigrette
CARIBBEAN Ceviche - 9
LINE-MARINATED BABY SCALLOPS WITH RED PEPPER, ONIONS, CILANTRO, JALAPENO, AND ORANGE JUICE
SHRIMP COCKTAIL - 14
FIVE LARGE SHRIMP WITH HOUSE-MADE COCKTAIL SAUCE

ENTREES:
NEW YORK STEAK, 16 OZ - 27
RÔTISSERIE CHICKEN - 17
NEW ORLEANS LUMP CRAB CAKES WITH WARM VEGETABLE COLESLAW, MASHED POTATOES, SPINACH, AND ROMESCO SAUCE - 18
GRILLED PORTOBELLO MUSHROOM STUFFED WITH RICOTTA CHEESE, GARLIC, ONIONS AND SPINACH, SERVED OVER MASHED POTATOES - 18
NEW ZEALAND RACK OF LAMB - 26
BARBECUED BABY BACK RIBS - 24
AUSTRALIAN LOBSTER TAIL, 10 OZ - MARKET PRICE
SURF & TURF
AUSTRALIAN LOBSTER & ROZ FILET - MARKET PRICE

Gertrude's Piano Bar

Starters
Gertrude’s Famous Onion Loaf - 8
Summer Garden Tomato Salad - 8
Sliced vine-ripened yellow and red tomatoes with fresh mozzarella and basil Balsamic vinaigrette
Hamel’s Chopped Salad - 7
Cubed cucumbers, avocado, tomatoes, jalepeños, and romaine leaves tossed in a light lemon vinaigrette
Caribbean Ceviche - 9
Line-marinated baby scallops with red pepper, onions, cilantro, jalapeños, and orange juice
Shrimp Cocktail - 14
Five large shrimp with house-made cocktail sauce

Entrees
New York steak, 16 ounce - 27
Rôtisserie Chicken - 17
New Orleans Lump Crab Cakes - 18
with warm vegetable coleslaw, mashed potatoes, spinach, and Romesco sauce
Grilled Portobello Mushroom - 18
-stuffed with ricotta cheese, garlic, onions and spinach, served over mashed potatoes
New Zealand Rack of Lamb - 26
Barbecued Baby Back Ribs - 24
Australian Lobster Tail, 10 ounce - Market Price
Surf & Turf
Australian Lobster & 8 ounce Filet - Market Price

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Alignment
A Return to the Great Variety of Readers
The History and Future of Reading Shakespeare

by Patricia May Williams

February 26

A Return to the Great Variety of Readers
The History and Future of Reading Shakespeare

Patricia May Williams
February 26
O ye gods!

Render me worthy of this noble wife.

Brutus in *Julius Caesar*
One Night in Winnemucca
Jerry Caveglia

A saga
of adventure
and romance
and one moccasin
**Tri-State Wellness Center**

**Welcoming new patients**
Accepting all insurance plans

<table>
<thead>
<tr>
<th>Family Medicine</th>
<th>Women's Health Services &amp; Family Medicine</th>
<th>Specialty Services</th>
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<tr>
<td>Adult &amp; Family Practice</td>
<td>Adult &amp; Family Practice</td>
<td>Treatment of HIV &amp; Hepatitis C</td>
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<tr>
<td>Infusion</td>
<td>Internal Medicine</td>
<td>Research</td>
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<td>Infectious Disease</td>
<td>Gynecological Services</td>
<td>Pharmacy Services</td>
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<td>Sexual Health</td>
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<td>Travel Medicine</td>
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<td>HIV &amp; Hepatitis C Testing</td>
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<td>Appts: 1-855-877-2810</td>
<td>1-775-555-1604</td>
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<td>1-775-555-1621</td>
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<td>1-775-555-1623</td>
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www.tristatewellnesscenter.org

www.TriStateWellnessCenter.org
Good Design Is As Easy as 1-2-3

1. Learn the principles.
   They’re simpler than you might think.

2. Recognize when you’re not using them.
   Put it into words — name the problem.

3. Apply the principles.
   You’ll be amazed.

Learn the basic principles.
They’re simpler than you might think.

Recognize when you’re not using them.
Put it into words — name the problem.

Apply the principles.
Be amazed.
Six Steps to Pie as Art

1. Preparation for creating
2. Building the pie
3. Beautifying the pie as art
4. Cooking to perfection
5. Presenting your creation
6. Eating pie art with friends
“Le petit jambon pensa à la vie et mort”


“Wine nut, murder?” whim Guilty Looks, hoe dist never peony tension tore murder’s scaldings.

“Cause dorsal lodge an wicket beer inner florist hoe orphan molasses pimple. Ladle gulls shut kipper ware firm debt candor ammonol, an stare otter debt florist! Debt florist’s mush toe destresses fury ladle gull!”

Hormone nurture

Wail,imple oil-waves wander doe wart udder pimple dun wampum toe doe. Debt’s jest hormone nurture. Wan moaning. Guilty Looks dissipater murder, an win entity florist. Fur lung, disk evengeress gull wetter putty yowler coils cam tore moritced ladle cordage inhibited buyer huff firmly off beers—Fedder Beer (horne pimple, fur oblivious raisins, coiled “Brewing”), Murder Beer, and Ladle Bore Beer. Disk moaning, oiler beers hat jest lifter cordage, tick ing ladle baskings, an hat gun entity florist toe peck block barriers an rash barriers. Guilty Looks ranker dough ball; bought, off cues, nor bady worse hum, soda sully ladle gull win baldly rat entity beer’s horse!

Sop’s toe hart

Honor tipple inner darning run, stud tree boils fullersop—wan grade bagboiler sop, was muddle cash boil, an wan twenyladle boil. Guilty Looks tucker spun fuller
Repetition
Dr. Euphemia May Weber
Professor of Psychiatry and Neuroscience at the University of California, Younsville

"A Hundred Years of Science"

Monday, September 27, 8 p.m.
Reilly Rooser Auditorium, Truchas
Free admission

A Hundred Years of Science

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Professor of Psychiatry and Neuroscience at the University of California, Younsville

Monday, September 27, 8 p.m.
Reilly Rooser Auditorium, Truchas
Free admission

This Twentieth Memorial Lecture is presented by the R. William Whetstone Memorial Committee.

The Screenwriting Conference in Santa Fe

At The Screenwriting Conference in Santa Fe, chances are you’ll meet someone who will change your life.”
Santa Fe, New Mexico
June 1—June 5
956-255-1590 • 866-255-1590
www.SCSFe.com
Contrast
Exciting Headline
Wants pawn term dare worsted ladle gull hoe hat search petty yowler coal debt pimple colder Gullty Looke. Gullty Looke lift inner ladle corage saturated adder shit disidence firmer bag florics, any ladie gull ophnan sister murder toe letter gore entry florics oil buyer shelt.

Thrilling Subhead
"Gulty Looks!" crater murder angularly, "nominy term area garner asthma suture stooked quich? Goltor door florics? Sordidly nut!"

"Wire nut, murder!?" wined Gughty Looks, how dint peeny tension tore murder’s scalings.

"Cause dorsal lodge an wicket beer inner florist hoe ophnan molasses pimple, Ladie gull shut rippin were firm debt candor ammortal, an stare otter debt florics! Debt florics’s much tode dentures furry ladie gull!"

Another Exciting Headline
Walt, pimple oil-wares wander close want udder pimple dum wampum toe doe. Debt’s jest hormone nurture. Wan moaning, Gulty Looks disspairer murder, an win entity florics. Fur lung, disk avengers gull wetter petty yowler coal are come morticed ladle corage inhibited buyer hull firmly off beers — Foddor Beer (home pimple, fur oblious raisins, called "Browing"), Murder Beer, an Ladie Bore Beer. Disk moaning, oller beans hat jest litter corage, ticking dude bagings, an hat gun entify florics toe peck black-banners an rash-barriers. Gulty Looks ranker doug ball; bought, off curse, nor-bawdy worse hum, toda sully ladie gull win baldly rat entry beer’s horse.

Boring Subhead
Honor tipple inner darning rum, stud tree bolls fuller sop-wan grade bag boll sop, wan mudder-sash ball, an wan twawny ladle boll. Gulty Looks tucker span fuller sop tipper grade bag boll-bushy spurted arm inner honey.

"Archt!" crater gull, "Debt sop’s tow hart — barns mar mouse!"

Dingy traotor sop inner mudder-sash ball, witch worse toe called. Butter sop inner twawny ladle boll worse jest.

Another Exciting Headline
Walt, pimple oil-wares wander close want udder pimple dum wampum toe doe. Debb’s jest hormone nurture. Wan moaning, Gulty Looks disspairer murder, an win entity florics. Fur lung, disk avengers gull wetter petty yowler coal are come morticed ladle corage inhibited buyer hull firmly off beers — Foddor Beer (home pimple, fur oblious raisins, called "Browing"), Murder Beer, an Ladie Bore Beer. Disk moaning, oller beans hat jest litter corage, ticking dude bagings, an hat gun entify florics toe peck black-banners an rash-barriers. Gulty Looks ranker doug ball; bought, off curse, nor-bawdy worse hum, toda sully ladie gull win baldly rat entry beer’s horse.
I am a hard-working, dependable, cheerful person of many talents. My ideal position is with a company that values my combination of creativity and effort and one in which I can continue to learn.

ACCOMPLISHMENTS:
2011–present
English Teacher, Yomago High School for Language and the Arts

2003-2011
Act of Good, web designer and developer, working with a professional team of creatives in Portland.

2003-2006
Pocket Full of Posies Day Care Center. Changed diaries, taught music and painting, typed notes, road books 10 and danced with babies and toddlers. Also coordinated volunteers, hired other teachers, and developed programs for children.

1997-2000
Developed and led a ski band called Lead Neen. Designed the web site and coordinated a national tour.

EDUCATION:

Santa Rosa Junior College, Santa Rosa, California. Focus on graphic design and drafting, 1999-2001.

PROFESSIONAL AFFILIATIONS:
2000-2002
Grand National Monotype Club, Executive Secretary.

1999-2003
Jerks of Invention. Members of Portland, President.

1992-1998
Local Organization of Travelers’ Wild

LANGUAGES:
English, native
Japanese, fluent

HOBBIES:
Music (guitar, bass, trumpet, keyboard, vocals), photography, drawing, dancing, rowing, reading, magic.

REFERENCES:
Sally Psychick
565.883.0419

Eugene J. Laghara
415.808.3009
The Rules of Life

Your attitude is your life.

Maximize your options.

Don’t let the seeds stop you from enjoyin’ the watermelon.

Be nice.
Four Basic Design Principles

Proximity
Alignment
Repetition
Contrast
Color
Triads

Split

Complementary
Triads
Shades and Tints

Monochromatic
color.adobe.com
Type
Type Categories

Oldstyle
Modern
Slab serif
Sans serif
Script
Decorative—
including Grungy!
Serif (pronounced "sairiff," not "suh reef")

Diagonal stress

This curve is the bracketing

Serifs on lowercase letters are slanted

Moderate thick/thin transition in the strokes

Goudy Oldstyle

Goudy Palatino Times

Bell Sabon Garamond
Vertical stress

Serifs on lowercase letters are thin and horizontal

There is no bracketing

Modern

Bodoni Poster Compressed

Radical thick/thin transition in the strokes

Bodoni  Didot, Didot Bold

Walbaum  Modern No. 20
Serifs on lowercase letters are horizontal and thick slabs

Vertical stress

Very little or no thick/thin transition, or contrast, in the strokes

Slab serif

Clarendon

Memphis

New Century Schoolbook

Diverda Light, Black
No serifs anywhere

No thick/thin transition in the strokes

No stress because there’s no thick/thin

Sans serif

Brandon Grotesque

Folio Modernica Light, Heavy

Bailey Sans, Bold Transat Text
Script

Peony Adorn Bouquet
Bookeyed Sadie Emily Austin
Thirsty Rough Light
Decorative

MATCHWOOD  THE WALL
HORST SCARLETT
SYBIL GREEN  FLYSWIM
Adobe Garamond Pro Regular

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 nopqrstuvwxyz
 abcdefghijklm
 nopqrstuvwxyz
 1234567890
Oiled Mudder Harbored
Oiled Mudder Harbored
Wen tutor cardboard
Toe garter pore darker born.
Bud wenchy gut dare
Door cardboard worse bar
An soda pore dark hat known.

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Creating Contrast

Grey Value: Lighter for larger type

Size
Don’t be a wimp.

Weight
Contrast heavy weights with light weights, not medium weights.

Structure
Look at how the letterforms are built—monoweight or thick/thin. Choose fonts from different categories to get different structures.

Caps versus lowercase is a contrast of form, as well as roman versus italic or script. Scripts and italics have similar forms—don’t combine them.

Direction
Think more in terms of horizontal type versus tall, narrow columns of type, rather than type on a slant.

Color
Warm colors come forward; cool colors recede. Experiment with the “colors” of black text.
"66 and 99" ⇒ “66 and 99” or „99 und 66“

The 90's ⇒ The 90’s

Hyphen: odd-looking

en dash: 9:00–12:00, Human–Computer Interaction

em dash: Bob—to my astonishment—finished the game.

Never underline. It cuts through letters and is hard to read.

Avoid ALL CAPS. Missing “coastline”. Hard to read (lawyers love it).
Kerning

WATERMELON
WATERMELON
WATERMELON

No adjustments made.
The software program made automatic adjustments.
Hand kerning applied.

Widows & Orphans

Avoid single word on last line, or single line on new page, at end of paragraph.

Styled Text

Include punctuation: Then finish.

Ligature
Either indent the first word of a new paragraph by one $em = \text{width of “m” letter} = 12 \text{ pt}$ for 12 pt font.

Or add some space between paragraphs (default for German.) Never both, and never for the first paragraph after a heading.
Center Alley worse jester pore ladle gull hoe lift wetter stop-murder an toe heft-cisterns. Daze worming war furry wicket an shellfish Parsons, spatially dole stop-murder, hoe dint lack Center Alley an, infect, word

Warnock Pro Regular 9/10.8
(9 point type, 10.8 leading or linespacing)

Center Alley worse jester pore ladle gull hoe lift wetter stop-murder an toe heft-cisterns. Daze worming war furry wicket an shellfish Parsons, spatially dole stop-murder, hoe dint lack

Warnock Pro Bold 9/10.8
This is exactly the same as the example above, except it is the bold version.

Center Alley worse jester pore ladle gull hoe lift wetter stop-murder an toe heft-cisterns. Daze worming war furry wicket an shellfish Parsons, spatially dole stop-murder, hoe dint lack Center

Warnock Pro Light 9/10
This is the light version of the font, but it has less linespacing, making the texture appear more dense.

Warnock Pro Light 9/13, extra letterspacing.
Notice this has a lighter color than the example above (same font) due to the extra space between the lines and the letters.

Warnock Pro Light 9/13, extra letterspacing.
This is exactly the same as the one above, except in italic. It has a different color and texture.

< 60 characters
Process

1. Identify focal point
2. Group information
3. Strengthen alignments
4. Find or create repetition
5. Create contrasts
Designing Interactive Systems I

Introduction to the Course

Prof. Dr. Jan Borchers
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Winter term 2018/19

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Designing Interactive Systems I

Visual Design

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Winter Semester ’23/’24

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Summary

Basic Visual Design Principles
- Proximity
- Alignment
- Repetition
- Contrast

Selecting colors

Working with Type
- Oldstyle
- Modern
- Slab serif
- Sans serif
- Script
- Decorative—Including Grungy!