

## *Index*

- Aiken, Howard, 15
- Aker, Shane  
*Last Drawing of Canaletto*, 84–85
- Alberti, Leon Battista, 36, 40, 41, 42  
*On Painting*, 36
- Allen, Rebecca  
*Emergence*, 157
- Alto (computer), 18
- Amerika, Mark, 156  
*PHON:E:ME*, 155
- Andreessen, Mark, 20
- Apple Macintosh (interface), 19, 41, 49, 69, 72, 112, 149, 165. *See also* Graphic User Interface and transparency, 44–48
- Archituv, Romy, 12. *See also* TEXT RAIN
- ARPANET, 18
- Artificial intelligence (AI), 16, 20–21, 117–119
- Ascott, Roy, 155, 156, 160
- Atkinson, Bill, 69
- ATR MIC Labs, 78–79
- Augmented reality, 80, 127–128
- Badre, Albert, 138  
*Shaping Web Usability*, 139, 160
- Banff Centre, The, 159
- Barlow, John Perry, 124, 136, 169  
“Declaration of Independence for Cyberspace,” 119–120
- Bembo (typeface), 37
- Bennet, Ed  
*Ornitorrinco*, 157  
*Rara Avis*, 157
- Berger, John  
*Ways of Seeing*, 52
- Berners-Lee, Tim, 3, 20
- Biotica* (Brown), 146, 157
- Blinn, James, 38
- Book  
as interface, 81
- Bookchin, Natalie  
*Marking Time*, 155
- Brandt, Kathleen, 83–84. *See also* Exclusion Zone
- Bricken, Meredith  
“No Interface to Design,” 125
- Bricolage, 104–106
- Brown, John Seeley, 139
- Brown, Richard, 146. *See also* *Biotica*  
*Neural Net Starfish*, 157
- Brunelleschi, Filippo, 40, 52
- CaiiA-Star, 160
- Caley, John, 155
- Catmull, Ed, 38
- Catts, Oron, 159
- Chapman, a. c.  
*Impermanence Agent*, 156
- CNN, 85–86  
CNN.com (Web site), 87
- Coma* (1978), 96
- Computer  
as medium, 5, 15, 21, 27  
wearable, 108–109  
and window metaphor, 90
- Computer graphics, photorealistic, 38–40
- Constable, John  
*Wivenhoe Park*, 50
- Contextual design, 140
- Convergence, myth of, 99–101, 105
- Cook, Sian  
Pussy Galore (typeface), 159  
WD+RU, 159
- Cox, Donna, 159
- Cyberspace, 22, 23, 119–123. *See also* Disembodiment, myth of; Gibson, William

- Davenport, Glorianna, 155
- Davies, Char  
*Ephémère*, 158  
*Osmose*, 158
- Descartes, René, 16
- Designers (in conflict with Structuralists), 3, 4, 73, 152–154
- Desktop metaphor, 44, 45–46, 69, 89–90. *See also* Graphical User Interface
- Diamond, Sara, 159  
*Code Zebra*, 159
- Dickson, Stewart  
*3-D Zoetrope*, 83, 159
- Diller, Elizabeth, 156  
*Refresh Point*, 155
- Disembodiment, myth of, 117–123, 158. *See also* Embodiment
- Dolinsky, Margaret  
*Alive on the Grid*, 155–156
- Domike, Steffe, 133. *See also Terminal Time*
- Drucker, Johanna, 155
- Dubberley, Hugh, 24
- Duguid, Paul, 139
- Earls, Elliot Peter  
*EYE SLING SHOT LIONS*, 104–105
- Embodiment, 123–129. *See also* Disembodiment, myth of
- Emerging Technologies (Etech), 11, 78, 146
- Engelbart, Douglas, 17, 21, 40–41, 44, 46, 90, 138
- Evanson, Shelley, 24
- Exclusion Zone* (Brandt), 83–84, 137, 140, 145
- Experience design, 22–26, 148–149. *See also* Contextual design
- Fakeshop* (Gomperz, Murthy, Thacker), 28, 84, 96–98, 112, 129, 149
- Flanagan, Mary, 156, 158
- Flash MX, 152–153
- Fleishman, Monika, 158
- Galloway, Alex  
*Starry Night*, 156
- Garcia, Doren  
*Last Drawing of Canaletto*, 84–85
- Gates, Bill, 44, 69
- Gayed, Jim  
*Last Drawing of Canaletto*, 84–85
- Gibson, William, 126  
 and cyberspace, 22, 23  
*Neuromancer*, 23, 51, 117–119
- Goldberg, Ken  
*TeleGarden*, 157
- Golden, William, 50
- Gomperz, Jeff, 96–97. *See also Fakeshop*
- Graffiti (software), 111
- Graphical User Interface (GUI), 40–42, 43, 44–46, 48–52, 68, 69, 74, 83. *See also* Desktop metaphor
- Gromala, Diane  
 biomorphic type, 166  
*Dancing with the Virtual Dervish*, 157  
 Excretia, 164–167, 168, 169  
*Meditation Chamber*, 124, 126
- GUI. *See* Graphical User Interface
- Hayles, N. Katherine, 155
- HCI. *See* Human-Computer Interaction
- Hiroshima City University, 78–79
- Ho, Rania  
*Free Range Appliances in a Light Dill Sauce*, 104–105
- Hodges, Larry  
 Virtual Vietnam, 123–124, 126
- Holbein (the Younger), Hans  
*The Ambassadors*, 62–65
- Holmes, Tiffany, 60. *See also Nosce Te Ipsum*
- Human-Computer Interaction (HCI), 28, 73, 74, 101, 127, 138–140
- Human Interface Technology Lab, 78–79
- Hutchins, David, 85

- Last Drawing of Canaletto*, 84–85  
Hypertext, 23, 155
- IBM, 89
- Information appliances, 2, 5, 14–15, 110–112. *See also* Norman, Donald
- Internet, 21
- Ishii, Hiroshi, 128–129
- Jackson, Shelley  
*Patchwork Girl*, 155
- Jeremijenko, Natalie, 159  
*Suicide Box*, 154–155
- Jobs, Steve, 18–19, 44, 69
- Joyce, Michael  
*afternoon*, 155  
*Jurassic Park*, 51
- Kac, Eduardo, 159  
*GFP Bunny*, 159  
*Ornitorrinco*, 157  
*Rara Avis*, 157
- Kare, Susan, 46–47
- Kay, Alan, 18, 40–41, 45, 51, 68, 69, 89, 90, 92, 138. *See also* Graphical User Interface
- Kelly, David, 24
- Kerne, Andruid  
*Collagemachine*, 156
- Kozel, Susan  
*trajet: a video dance installation*, 158
- Lanier, Jaron, 51, 125
- Laurel, Brenda, 156, 158  
*Computers as Theater*, 15
- Leeson, Lynn Hershman, 159
- LeGrady, George  
*Pocket Full of Memories*, 156
- Licklider, J. C. R., 17–18, 21, 92  
“The Computer as a Communications Device,” 17
- Licko, Zuzana, 46
- MacIntyre, Blair, 128
- Maes, Pattie, 157
- Malina, Roger  
*Leonardo*, 159
- Marcus, Aaron, 160
- Matrix, The* (1999), 125, 135
- Magic Book* (HIT Lab, ATR MIC Lab, Hiroshima City University), 28, 78–83, 84, 91, 148
- Manovich, Lev, 155
- Mateas, Michael, 133. *See also* *Terminal Time*
- McCarthy, John, 16
- McNall, Cameron, 85  
*Last Drawing of Canaletto*, 84–85
- McQuiston, Liz  
Pussy Galore (typeface), 159  
WD+RU, 159
- Media forms, 86–88, 110–112, 149
- Meditation Chamber, The*. *See* Gromala, Diane
- Memmott, Talan  
*Lexia to Perplexia*, 155
- Mercalfe, Robert, 18
- Microsoft Windows, 41, 45, 49, 54, 69–73
- Mignonneau, Laurent  
Life Spacies II, 157  
PICO\_SCAN, 157  
*Riding the Net*, 156
- Minsky, Marvin, 16
- MIT Media Lab, 128, 155, 157
- Mok, Clement, 24
- Möller, Christian  
*Audio Grove*, 158  
*Virtual Cage*, 158
- Moravec, Hans, 118, 124
- Moss, Brian  
*Impermanence Agent*, 156
- Moulthrop, Stuart  
*Victory Garden*, 155
- Mountford, S. Joy, 160

- MTV, 65–66  
Murray, Janet, 155  
Murthy, Prema, 96–97. *See also Fakeshop*
- National Gallery, The, 62  
Natural interface, myth of, 50–53  
Nelson, Ted, 17, 21, 23  
*New York Times on the Web*, 87  
Nielsen, Jakob, 4–5, 20, 24, 38, 73, 74, 101, 108, 152–153  
*Designing Web Usability*, 4, 20, 101  
NLS (oNLine System), 17, 46. *See also Engelbart, Douglas*
- Norman, Donald, 2, 5–6, 14, 111, 112, 153  
“Emotion and Design,” 6, 153  
*The Invisible Computer*, 2  
*Nosce Te Ipsum* (Holmes), 28, 61, 62, 65, 67, 68, 74, 78, 84, 98  
Novak, Marcos, 158
- Old style typeface, 37, 164  
Owen, Matt  
*volumeone.com*, 156
- Palm Pilot, 111, 112  
PARC. *See Xerox Palo Alto Research Center*  
Pauline, Mark, 159  
Penny, Simon  
*Petit Mal*, 157  
*Traces*, 158  
Perspective, 36  
Photography, 86  
Plato, 118, 168  
and virtual reality, 135–137  
Pliny the Elder, 35  
Project Gutenberg, 102–103
- Rath, Alan, 157  
Rave design, 66  
Reflectivity, 6, 68, 82, 149, 154–155. *See also Transparency*
- Remediation, 83–86, 88–89, 91–92  
Rheingold, Howard  
*Virtual Reality*, 51  
Rhizome.org, 156  
Rocket Ebook, 111  
Rozin, Daniel, 32–33, 34. *See also Wooden Mirror*
- Sandhaus, Louise, 155  
Schiphorst, Thecla  
*Bodymaps, Artifacts of Mortality*, 158  
Schiller, Gretchen  
*trajet: a video dance installation*, 158  
Scofidio, Ricardo, 156  
*Refresh Point*, 155  
Seaman, Bill, 156  
*Recombinant Poetics*, 155  
Sengers, Phoebe  
*Traces*, 158  
Shannon, Claude, 86  
Shedroff, Nathan, 24  
Sharir, Yavoc  
*Dancing with the Virtual Dervish*, 157  
Siegel, David, 4–5, 73  
*Creating Killer Web Sites*, 4, 102  
SIGGRAPH 2000 Art Gallery, 7, 10–11, 67  
bricolage in, 104–106  
and cultural contexts, 137  
as experience design, 144–149, 153  
and mediascape, 112  
and oscillation between physical and virtual, 123  
and remediation, 83, 93  
as snapshot of digital art world, 154  
SIGGRAPH 2000 (conference), 10–11, 12, 15, 26, 28, 117, 144  
and mediascape, 112  
SIGGRAPH Electronic Theatre, 84

- Slayton, Joel, 159
- Smith, Alvy Ray, 38, 40
- Smith, Gareth, 85  
*Last Drawing of Canaletto*, 84–85
- Smith, Jeffrey  
*Traces*, 158
- Sommerer, Christa, 157  
*Riding the Net*, 156
- Sony Glasstron, 110
- Sony Walkman, 110
- Sponge, 116–117. *See also T-Garden*
- Stanton, Frank, 50
- Star Wars* (1977), 19
- Starbuck, Madelyn, 155, 156
- Stelarc  
*Robot Arm*, 157
- Stewart, Jackie  
*Last Drawing of Canaletto*, 84–85
- Stone, Sandy, 159
- Strauss, Wolfgang, 158
- Structuralists (in conflict with Designers), 3, 6, 73, 152–154
- Sutherland, Ivan, 38, 51  
 “Through the Looking Glass,” 43
- Talbot, William Henry Fox, 36
- Taylor, Robert  
 “The Computer as a Communications Device,” 17
- Telematic art, 155, 156
- Television, 86  
 enhanced, 99–100  
 interactive, 99
- Terminal Time* (Mateas, Domike, and Vanouse), 28, 84, 106, 132–135, 140, 149
- TEXT RAIN* (Utterback and Archituv), 12–15, 25, 33, 61, 67, 78, 106, 145, 146, 154  
 as bricolage, 105  
 combining physical and virtual, 98  
 as contextual design, 137  
 as remediation, 83  
 as window and mirror, 26, 28  
 and writing, 14, 15, 117
- Thacker, Eugene, 96–97. *See also Fakeshop*
- Three Mile Island, 53–54
- T-Garden* (Sponge), 28, 84, 116–117, 137, 146, 149, 157
- Tognazzini, Bruce, 43–44, 68  
 “Principles, Techniques, and Ethics of Stage Magic,” 43
- Transparency, 6, 35–36, 38–39, 62, 63, 64–68, 70, 90, 111, 149, 153  
 dangers of, 53–55  
 myth of, 48–50, 82, 105, 121
- Tribe, Mark  
*Starry Night*, 156
- Triggs, Teal  
 Pussy Galore (typeface), 159  
 WD+RU, 159
- Tschichold, Jan, 38, 40, 46, 64–65  
*The New Typography*, 38
- Turing, Alan, 15–16
- Turing test, 17
- Turkle, Sherry  
*The Second Self*, 20
- Ubiquitous computing (ubicomp), 106–107, 127  
 as ubiquitous media, 108
- Usability, 74. *See also* Human-Computer Interaction
- Utterback, Camille, 12. *See also TEXT RAIN*
- Vanouse, Paul, 133. *See also Terminal Time*
- Vesna, Victoria  
*Context Providers, Conditions of Meaning in Digital Arts*, 158
- Virtual reality (VR), 21, 51, 53, 80, 116, 127, 156  
 contrasted to ubiquitous computing, 106–107  
 and embodiment, 123–126
- von Neumann, John, 15–16

I N D E X

- Walker, John, 43
- Wardrip-Fruin, Noah  
*Impermanence Agent*, 156
- Watch, 108  
 analog, 108–110  
 digital, 108, 112
- Wattenberg, Martin  
*Starry Night*, 156
- Weingart, Wolfgang, 64–65
- Weiser, Mark, 106–107, 111, 127. *See also*  
 Ubiquitous computing
- Whitehurst, Duane  
*Impermanence Agent*, 156
- Wilson, Stephen  
*Body Surfing*, 158
- Wooden Mirror* (Rozin), 28, 32–33, 60, 61, 67–68,  
 78, 84, 106, 145–146, 154  
 as contextual design, 137  
 and reflectivity, 34, 56, 74
- Word.com  
*StSSYFiGHT 2000*, 156
- World Wide Web, 38, 48, 74, 97, 98. *See also*  
 Nielsen, Jakob  
 and art, 146  
 and computer as medium, 20  
 and cultural contexts, 139  
 as cyberspace, 23–24, 119–120  
 and Designers, 3  
 diversity on, 101  
 hypertext, 23  
 media forms in, 87–88
- Williams, Raymond, 102
- Winograd, 25
- Wizard-of-oz, 43
- Writing  
 materiality of, 169  
 as reflective interface, 167–169
- Wurman, Richard Saul, 24–25
- Xerox Palo Alto Research Center (Xerox PARC),  
 18, 40, 44, 45, 49, 69, 89, 127, 139. *See also*  
 Kay, Alan
- Zeuxis, 35, 40, 53
- Zimmerman, Eric  
*BliX*, 156
- Zimroth, Evan, 13  
 “Talk, You,” 13
- Zurr, Ionat, 159