INDEX

Alazraki, Jaime, 147
Anti-realism, 23
Appel, Alfred, 130
Aristotle, 65, 70, 76, 140

Banach-Tarski Paradox, 158
Beckett, Samuel, 23
Bell, J. S., 56. See also Hidden variable theories
Bergson, Henri, 18
Bersani, Leo, 88
Bohm, David, 49, 57, 58. See also Hidden variable theories
Bohr, Niels, 48, 54, 65, 97
interpretation of Uncertainty Relation, 51–55
quantum of action, 52–53
time as series in, 162–166
Bohr, Niels, 48, 54, 65, 97
interpretation of Uncertainty Relation, 51–55
quantum of action, 52–53
time as series in, 162–166
Bondi, Hermann, 193n
Borges, Jorge Luis, 21, 24, 27, 142
“The Aleph,” 156–161
“The Approach to Al-Mu’tasim,” 148–151
Cantor set theory, 37, 139–143, 151, 157–158, 161
“The Doctrine of Cycles,” 154–155
field concept in, 151, 161
“History of Eternity,” 142, 160
“The Library of Babel,” 151–152
literary strategy and style, 143, 148, 153–154
Nabokov’s relation to, 138–139, 167

“New Refutation of Time,” 161–167
“Pierre Menard, Author of Don Quixote,” 138–139
Platonism and, 159–160
Strange Loops in, 143, 148, 152–153
time as series in, 162–166
“Tlön, Uqbar, Orbis Tertius,” 139, 144–148
Butler, Colin, 164–165

Cantor, Georg, 37
actually infinite sets, 140–141
alephs, 140, 160–161
Borges’s differences with, 159–161
transfinite set theory, 139–143, 154–156
Čapek, Milic, 49n
Capra, Fritjof, 19
Cartesian dichotomy, 31–32, 41–42, 86, 137, 187–188
Causality, 10
Chautauqua. See Pirsig, Robert M.
Christ, Ronald, 160
Clark, Colin, 88, 91
Conrad, Joseph, 23–24
Cosmic web, 21, 42, 49. See also Field concept
Cowan, James C., 86n
Cultural matrix, 23–24

Dauwen, Joseph Warren, 159
Davis, Martin, 35. See also Halting Problem
Index

Davis, P. C. W., 189, 193, 194
Davison, Ned J., 164n
Dembo, L. S., 125–127

Eichner, Hans, 17–19
Eighteenth-century rationalism, 16–17
Einstein, Albert, 44, 111
belief in causality, 42, 48
concept of spacetime, 46–47
disapproval of quantum mechanics, 49–50
General Theory of Relativity, 43, 47–49
search for universal harmony, 45–46
Special Theory of Relativity, 18, 43, 45–47
unity of relativity theory, 48–49
Engleberg, Edward, 94n

Faulkner, William, 24
Ferris, Timothy, 190n
Feynman, Richard, 50n
Field concept, 19, 32, 42, 55
definition of, 9–10, 15–17
Einstein and, 48–49
epistemological implications of, 27–28
influence on writers, 24–25
language and, 41–42
limits to classical analysis, 31–36
resistance to articulation, 19–23, 55, 59
See also Borges, Jorge Luis; Nabokov, Vladimir; Pynchon, Thomas
Ford, George, 101n
Formalist Program, 32, 40
Freud, Sigmund, 103, 105, 170n
Friedman, Alan J., 170n
Friedmann, Alexander, 190–192

Gardner, Martin, 113, 115
influence on Nabokov, 114–117, 127, 135
relativity, 44–45
General Theory of Relativity. See Einstein, Albert
Gödel, Kurt, 36, 41
Cantor as predecessor, 141–142
Incompleteness Theorem, 21, 33–35
See also Hofstadter, Douglas
Gold, Thomas, 193n
Gombrich, E. H., 176n
Gravitation, 55, 196–197. See also Einstein, Albert; Pynchon, Thomas

Halting Problem, 35–36. See also Davis, Martin
Hanson, N. R., 38–39
Heisenberg, Werner, 31, 45, 51–52, 112. See also Bohr, Niels; Keller, Evelyn
Hidden variable theories, 56–58. See also Bohm, David
Hilbert, David, 32, 34
Hinz, Evelyn, 95n
Hofstadter, Douglas, 34. See also Gödel, Kurt
Hooker, Clifford, 52, 58. See also Bohr, Niels; Quantum mechanics
Hough, Graham, 94n

Implicate order. See David Bohm

Jammer, Max, 56–57
Jung, C. G., 173n

Kasner, Edward, 142, 160. See also Borges, Jorge Luis
Keller, Evelyn, 85, 87–88. See also Heisenberg, Werner; Uncertainty Relation
Kermode, Frank, 88
Kline, Morris, 141–142, 158. See also Cantor, Georg
Kuhn, Thomas, 39–40

Lanczos, Cornelius, 45, 48
Laplace, Pierre, 42
Lawrence, D. H., 26, 44, 83, 86, 101
approach/avoidance to unconscious, 91, 103, 109
Fantasia of the Unconscious, 104–109
incest desire in, 90, 103, 105
language and, 96–97
Maxwellian terms in, 44, 86
metaphysics of, 87–89
polarities in, 85–94, 104–105
Psychoanalysis of the Unconscious, 104–108
The Rainbow, 90–95
spiritual incest in, 106, 108
style in, 94–97

206
Lawrence, D. H. (cont’d)
  Uncertainty Relation and, 87–88, 91, 109–110
  womb imagery in, 97, 107–108
  Women in Love, 96–102
Leavis, F. R., 94n
Leverenz, David, 168n
Levine, George, 168n
Literary history, 22–25
Mason, Bobbie Ann, 127n
Maxwell, James Clerk, 43
Mendelson, Edward, 168n
Minkowski, Hermann, 46, 49n
Morin, Edgar, 138
Nabokov, Vladimir, 22, 26, 49, 167
  asymmetry in Ada, 120–124, 129–130
  asymmetry in thought of, 124–125
  field concept and, 136–137
  The Gift, 125–126
  Look at the Harlequins! 116–117
  memory in Ada, 131–135
  metaphysics of Ada, 136–137
  mirror symmetry in Ada, 112, 117–118
  movies in Ada, 132–134
  Pale Fire, 126–127
  Speak, Memory, 124–125, 130
  time in Ada, 119–122, 135–136
Newman, James. See Kasner, Edward
Newtonian mechanics, 16, 42–43, 45, 163
Ozier, Lance W., 190n
Parity, fall of, 112–113. See also Wu, C. S.;
  Wigner, Eugene
Particle Physics, 58, 58–59n
Pauli, Wolfgang, 112, 173n
Petersen, Aage, 52
Pirsig, Robert M., 25, 40
  bifurcated narrative in, 70–71
  as character, 71–77
  Chautauqua, 68
  definition of the Good, 66–67
  lateral sequence, 80–81
  linear sequence, 79–80
  motion metaphors, 75–78
  Phaedrus, 64–67
  Quality, 64–68
  substance metaphors, 75–78
  synthesis of personae, 82–84
  water metaphors, 78–80, 82
Planck, Max, 43
Polanyi, Michael, 39–40
Positivist Program, 32, 38, 40
Prigogine, Ilya, 189n
Puetz, Manfred, 170n
Purdy, Strother, 128–129
Pynchon, Thomas, 21, 27, 41, 54
  black holes, 194–196
  Borges and, 183
  Cartesian dichotomy and, 187–188
  cosmology and, 189–197
  deconstructing dynamic, 168–169
  equivocal figures, 175–179, 182
  field concept and, 175–179
  frame metaphor and, 179–180
  gravity and, 190–197
  language and, 184–187
  narrative technique, 174–175
  patterns, 170–172
  singularities, 189–193, 195
  thermodynamics and, 189, 193
Quantization of light, 51
Quantum mechanics, 43
  Einstein and, 49–50
  hidden variable theories and, 57–58
  relativity and, 55–56
  Uncertainty Relation and, 50–52
  wave-particle duality, 50–52
Received View. See Suppe, Frederick;
  Hanson, N. R.
Relativity, 45–49
  hidden variable theories and, 57
  quantum mechanics and, 55–56
  invariance of, 46
  See also Einstein, Albert
Rodino, Richard H., 72, 74n
Romanticism, 17–19
Russell, Bertrand, 142
Sanders, Scott, 168n
Saussure, Ferdinand de, 22–23
Schwarzchild, Karl, 194–195
Seidel, Michael, 168n
Self-referentiality, 10, 32
field concept and, 40–42
positivist program and, 36–40
post-modern fiction and, 36–37
post-Newtonian science and, 41–42
See also Borges, Jorge Luis
Sequence, 139. See also Borges, Jorge Luis
Series. See Borges, Jorge Luis; Sequence
Set, 32, 139, 141. See also Borges, Jorge Luis; Sequence
Siegel, Mark, 168n
Slade, Joseph, 191n
Smith, Kennan T., 140n
Snapper, Ernst, 32–33
Spacetime, 49n. See also Einstein, Albert; Minkowski, Hermann
Special Theory of Relativity. See Einstein, Albert
Stark, John, 78, 81
Steele, Thomas S., 78, 81
Strange Loop, 34, 36. See also Borges, Jorge Luis; Hofstadter, Douglas
Suppe, Frederick, 38–40
Symmetry, 113–114. See also Nabokov, Vladimir; Wu, C. S.; Strange Loops
Tanner, Tony, 36
Taylor, E. T., 47

Teilhard de Chardin, Pierre, 178
t’Hooft, Gerard, 58, 58–59n
Tzu, Chuang, 162–164

Uncertainty Relation, 50–52. See also Kell-ler, Evelyn; Heisenberg, Werner; Bohr, Niels
Undecidable propositions, 34. See also Hofstadter, Douglas; Strange Loop

Wave-particle duality. See Quantum mechanics
Weber, Frances Wyers, 147n
Weyl, Hermann, 16, 58
Wheeler, J. A., 47
Whitehead, Alfred North, 22
Whorf, Benjamin, 16
Wigner, Eugene, 113–114
Williams, Carol, 124, 126
Wittgenstein, Ludwig, 168
Wolfley, Lawrence C., 177
Wu, C. S., 112–113. See also Parity, fall of; Wigner, Eugene

Zeller, Nancy Anne, 129n
Zeno, 140, 153