

Index

-
- A priori propositions, 103, 127–128. *See also* Analyticity
Absolute beginnings, 213
Absolutism, 1–2
Academic philosophy, 25n23, 28, 30, 36, 108, 111–113, 206–207. *See also* Analytic philosophy; Continental philosophy
Ackermann, W., 133, 179, 180, 189
Action, and knowledge, 41
Addition of integers, 136
Adjectives, 140
Adler, Mortimer, 201
Aesthetics, 92, 195
Aiken, Henry, 157
Ajdukiewicz, K., 105
Aldrich, V. C., 105
Alternation, 178
Analogic synthesis, 171
Analogy, 57, 70
Analysis, 4, 24n23
Analytic empiricism, xi, 8, 10–18, 20–21, 25n23, 101–102, 132. *See also* Analytic philosophy; Logical positivism
Analytic philosophy, x–xi, 24n23, 31–32, 101, 105, 112, 116, 131, 132, 174, 193, 206, 208. *See also* Analytic empiricism
Analytic propositions, 15, 17, 22n1, 60, 123, 126, 130, 133, 164, 174. *See also* Analyticity
Analyticity, 8, 11, 13, 35, 61, 73–74, 124, 126–129, 130, 133, 158, 175, 176. *See also* Analytic propositions
Anscombe, G. E. M., 256
Anthropocentricity, 94
Anthropology, 31
Antinomies, 116
Apparent variable, 79
Aquinas, Thomas, 202
Arbitrariness, 16
Aristotelian physics, 57
Aristotelian-Thomist synthesis, 31
Aristotle, xi, 43, 55, 87, 109, 202, 212
Arithmetic truth, 18, 144
Arithmetical translations, 145
Art, 31, 102
Artificial economy, 137
Artificial intelligence, 203
Artificial languages, 16, 125, 127, 137
Asian philosophies, 31. *See also* Chinese philosophy; Indian philosophy
Assertion concept, 79
Assimilation of expressions, 158
Atlas, J. D., xii
Atomic propositions, 15
Attributes, 73, 164
Augustine, 202
Austin, J. L., 101, 114, 253
Autonomous progressions, 148
Avenarius, R., 104
Axiom, 13–14, 64
Axiom of choice, 14, 68–69, 121, 188–189
Axiom of constructibility, 186. *See also* Constructible sets
Axiom of constructivity, 186
Axiom of extensionality, 182
Axiom of infinity, 14, 22n10, 68–69, 72, 98–99, 121, 129, 135, 182, 186
Axiom of reducibility, 69, 71–72, 99
Axiom of relations, 78
Axiom of replacement, 186
Axiom (scheme) *200, 183, 185
Axioms of ZF, 135, 142
Ayer, A. J., 103, 104, 105, 155, 160, 258

- 'Backbone,' 1
- Bacon, Sir Francis, 47–49, 51, 53–55, 64, 85, 202, 254
- Bankruptcy theory, 132
- Bar-Hillel, Y., 258
- Barcan (Marcus), Ruth, 126
- Bartley, W. W., 240
- Beauty, 78
- Beck, L. W., 127–128, 209
- Beethoven, Ludwig van, 43
- Beginnings, ix, 44, 213. *See also* Absolute beginnings; Conditional beginnings
- Behavior, 164
- Behaviorism, 102, 118, 164–166, 175
- Behmann, Heinrich, 242
- Being-there, 139
- Being-thus-or-thus, 139
- Bentham, Jeremy, 104, 160
- Bergmann, Gustav, 103
- Bergson, Henri, 30, 45, 61
- Berkeley, George, 4, 50, 202–203
- Berlin, Isiah, 114, 202
- Bernays, Paul, 70, 173, 179–180, 185, 198
- Berry, G., 259
- Beth, E. W., 258
- Biconditional, 178
- Biology, philosophy of, 111, 168. *See also* Jacob, F.
- Black, Dora Winifred, 236, 241, 243
- Blackwell, Kenneth, 47, 52
- Blake, William, 93
- Blanshard, B., 128
- Boden, M., 203
- Boffa, M., 189, 260
- Bohnert, H. G., 22n10, 258
- Boltzmann, B., 103–104
- Bolzano, B., 133, 160
- Bouwsma, Oets, 256
- Bracketing, 213
- Bradley, Francis Herbert, 45, 62
- Brentano, F., 103
- British empiricism, 33, 46, 101
- Broad, C. D., 101, 105
- Brouwer, L. E. J., 60, 70, 127, 179, 243
- Bunge, Mario, 55
- Burali-Forti paradox, 183, 186
- Burke, Edmund, 105
- Burks, A. W., 258
- Calculus of classes, 78
- Cambridge movement, 104
- Canonical frame for theory, 146. *See also* Quantification theory
- Canonical notation, 141, 171
- Cantor, Georg, 10, 50, 71, 106–108, 135, 179
- Cantor's concept of set. *See* Iterative concept of set
- Caorsi, C. E., 260
- Cardinality, 145–146
- Cardinality of the domain, 140
- Carnap, Rudolph, xi, xii, 8, 11–16, 18–20, 39, 56, 101, 103, 129–130, 180, 198, 201
- on analyticity, 132–133
- Aufbau*, 102, 119, 122–123, 169
- development of philosophy of, 33–35, 118–122, 137
- Logical Syntax*, 15, 120, 124–126
- Quine influenced by, 136–138, 154–155
- Russell's influence on, 52, 65–66
- on semantics and syntax, 120–121, 124–126
- Carroll, Lewis, 130
- Cartesian doubt, 63. *See also* Beginnings
- Cassirer, E., 212
- Cauchy, A. L., 160
- Causal law, 107
- Certainty, 1, 37, 88
- Chao, Y. R., 241
- Chateaubriand, O., 259
- Chihara, C., xii, 142, 146, 151
- Chin, Yueh-lin, 193, 250
- Chinese philosophy, 37, 193, 194
- Chisholm, R. M., 105
- Chomsky, Noam, 76, 196, 259
- Chronological table of Russell, Wittgenstein, Carnap, and Quine, 231–260
- Church, Alonzo, 180
- Chwistek, Leon, 179, 182
- Clarity, 102, 125
- Clark, Ronald W., 231
- Class, 4, 67, 69, 78–79, 99. *See also* Set theory
- Class-concepts, 140
- Classical particle mechanics, 65
- Coffey, Peter, 239
- Cognition, 113, 199, 202
- Cognitive psychology, 203
- Cognitive value, 199
- Cohen, R. S., 258

- Coherence, 115
 Collective morality, 26
 Commitment, 163
 Common sense, 17
 Communication, 28, 31, 84
 Completeness theorem, 179
 Complexes, 95, 97
 Composite propositions, 173
 Comprehension, axiom of, 188
 Computability, 178, 180
 Computer engineering, 177, 203
 Comte, Auguste, 55, 104, 161
 Concatenation, 177–178
 Concepts, 5, 20, 47, 73, 79, 132, 140
 Conceptual experience, 12
 Conceptual intuition, 12, 19
 Conceptual knowledge, 12, 18–19, 46
 Conceptual realism, 29
 Conceptual scheme, 158
 Conceptualism, 140
 Concrete concepts, 41
 Concreteness, 150
 Conditional, 178
 Conditional beginnings, 213
 Confirmability, 122
 Confirmation, 107
 Conjunctions, 72, 150
 Conrad, Joseph, 33, 51
 Consciousness, 28, 200
 Conservation law, 57
 Consistency proofs, 80, 180
 Constituent, 4
 Constructed language systems, 201
 Constructible sets, 179–180
 Constructions, 171
 Content, 19
 Context dependence, 76
 Continental philosophy, 31, 112–113,
 116, 193, 206, 208
 Convention, 107, 133
 Conventionalism, 13, 14, 15, 115, 197
 Conventions, 125, 127, 130, 132
 Cook, S. A., 178
 Copi, I. N., 177
 Copleston, F., 195
 Cosmology, 31, 115
 Counterfactual conditionals, 107
 Couturat, L., 61
 Crawshay-Williams, R., 52, 257
 Crowdedness, 40–41
 Cultural production, 27–28
 Darwin, Charles, 43, 57
Dasein, 139
 Davidson, D., 250, 259, 260
 Davis, M., xii
 Dedekind, R., 7, 18, 64, 95, 164, 179
 Dedekind cut, 151
 Deductions, 13, 80–81
 Definiteness, 95
 Definition by abstraction, 123
 Definition of identity, 71, 134
 Definitional reductionism of theory to
 observation, 123
 Definitions, 13
 Della Volpe, Galvano, 161, 177
 Denial, 178
 Dennett, D., 203
 Denoting, 78, 79, 90, 121
 Derrida, J., 113
 Descartes, René, 27, 29, 30, 32, 54, 63,
 85–86, 109, 113, 117, 195, 200, 202,
 208
 Descriptions, 67, 69
 Descriptive phrases, 95
 Dewey, John, x, 29, 30, 112, 113, 117,
 160, 195, 241, 251
 Dialectic materialism, 197
 Dialectic realism, 31
 Dialectics, 54, 116, 208
 Diamond, C., 245
 Dickinson, Lowes, 51
 Dilman, Ilham, 260
 Ding-an-sich, 86, 116
 Disagreement, systematic study of, 39–40
 Disjunction, 72, 79, 91, 150, 178
 Dispositional statements, 123
 Disprovable propositions, 14
 Doctrine of types, 66
 Dreben, Burton, 186, 259
 Dreyfus, H., 203
 Drives, 40
 Dualism, 115, 197
 Dubos, R., 29
 Ducasse, C. J., 105
 Duhem, Pierre, 104, 158, 160, 175, 197,
 206
 Dummett, Michael, 186
 Dunham, B., 178
 Duty, 78
 Earman, John, 107
 Eaton, Ralph, 130

- Eclecticism, 37, 211
 Economic order, 31
 Economics, 84, 199, 210
 Economy, 118, 159, 163, 174, 199. *See also* Occam's razor
 Education, 31, 34, 84, 195
 Egocentric predicament, 46
 Egocentrism, 46, 47
 Einstein, Albert, 7, 8, 28, 29, 33, 82, 103, 104, 108, 110, 131, 209, 248, 250, 253
 Elegance, 66, 86, 92, 94
 Elementary facts, 89, 90, 99
 Elementary logic, 15, 129, 133, 134, 159, 164, 171–172, 179–180. *See also* First order logic
 Elementary propositions, 15, 89–92, 95–96
 Elimination of unnecessary objects, 139
 Eliot, T. S., 239
 Empirical induction, 7
 Empirical propositions, 42
 Empirical psychology, 208
 Empiricism, 3, 7, 12–13, 16, 20, 46–48, 50, 54, 63, 129–133, 160–165. *See also* Analytic empiricism
 Engelmann, Paul, 240–241, 243, 248
 Engels, Friedrich, 31, 177, 200
 'Enlightened empiricism,' 165
 Enriques, F., 104
 Entities, 69
 Entrepreneurship, 31
 Epicurus, 104
 Epistemology, 29, 63, 65, 108, 163, 169–171, 201, 208
 'Epistemology naturalized,' 165
 Equality, 43–44, 57
 Equations, 69
 Equivalence, 178
 Equivocation of languages and theories, 143
 Esperanto, 201
 Esthetic experience, 40, 44
 Ethical constants, 78
 Ethics, 26, 34, 58, 92, 94, 195
 Ethnology, 39, 252
 Eucken, Rudolf, 30
 Everyday knowledge, 43
 Evolution, 43, 57, 201
 Exclusive approach, 169. *See also* Intersection
 Existence, 141, 158
 Existence assumptions, 158
 Existence statements, 186
 Existence-theorem, 90
 Existential classes, 141
 Experience, ix, 5, 26, 28, 36–37, 40, 44, 46, 63
 Extension, 164, 176
 Extensional objects, 162
 Extensional paradoxes, 5
 Extensionality, 4–6, 71–73, 75, 77, 91, 97, 98, 99, 164, 172–173, 188
 Extensive abstraction, 123
 Extrinsic views, 6
 Facts, 19, 39–41, 77, 89–90, 120, 127
 Factualism, 63
 Falling-under relation, 90
 Feferman, S., 147, 152
 Feigl, Herbert, 103–104, 121, 243, 258–259
 Feuerbach, L., 104, 195, 206
 Feys, R., 258
 Finch, Edith, 98, 236
 Fine arts, 31
 Finite cases, 70
 Finite ontology, 144
 Finite sets, 4, 99, 143
 First order arithmetic, 178
 First order logic, 13, 14, 16, 133, 141, 159, 179. *See also* Elementary logic
 First order Peano arithmetic, 143
 First order theories, 9, 123, 140, 172, 173, 176. *See also* First order logic
 First order theory of concatenation, 177
 First philosophy, 166, 168, 191
 Flexner, A., 250
 'Flight from intension,' 171, 173
 Focus, ix
 Føllesdal, D., 259
 'Following the rule,' 88
 Force, 39
 Formal, 164
 Formal implication, 78
 Formal logic, 7
 Formal precision, 35, 66, 120, 158, 162, 164
 Formal semantics, 121
 Formalism, 177
 Forster, T. E., 260
 Foucault, Michel, 113, 193
 Foundationalism, 32

- Frank, Philipp, 103, 258
 Freedom, 26, 40
 Frege, G., 6, 34, 50, 60, 64, 66, 73, 79,
 82, 88, 102, 104, 105, 107, 121, 127,
 136, 160, 179, 180, 202, 237, 238
 Freud, Sigmund, 28, 93, 212
 Freudian psychology, 29
 Functions, 71–72
 Fundamental philosophy, 210
 Fundamental physics, 7

 Galilean physics, 57
 Galilei, Galileo, 44, 162, 202
 Garey, M. R., 178
 Garrido, M., 260
 Geach, P. T., 259
 General, 208
 'Genetic' epistemology, 203
 Genetic strategy, 166
 Genetics, 43
 Gentzen, G., 180
 German idealism, 60
 German philosophy, 194
 Gibson, R. F., Jr., 174, 260
 Global definiteness, 11
 Global indefiniteness, 11, 35
 Gochet, P., 260
 Goclenius, Rudolf, 139
 Gödel, Kurt, xi, 8, 16, 27, 32, 36–37,
 39, 43, 71–72, 79, 110, 179, 180, 206,
 253
 on analyticity, 12–14
 on defining truth, 144
 on intuition, 20–21
 on logic, 4, 5, 73
 on mathematics, 19, 29, 124
 and the Vienna Circle, 103–104, 106
 Goldmann, Lucien, 211
 Good, 78, 100
 Goodman, Nelson, 119, 130, 150, 248,
 255, 258–259
 Gorky, Maxim, 240
 Gottlieb, D., 151
 Gould, J. A., 177
 Gradualism, 162
 Grammar, 76–77, 133, 171, 172
 Grattan-Guinness, I., 237
 Greek philosophy, 194
 Grelling, Kurt, 103
 Grice, H. P., 259
 Gross, Mason, 248

 Grossi, Marie, xii
 Grünbaum, Adolf, 107, 258

 Habermas, J., 116, 200
 Hacking, Ian, 147
 Hahn, Hans, 19, 103, 106
 Hahn, Lewis, 36
 Hahn-Neurath, Olga, 103
 Hailperin, T., 188
 Hampshire, S., 174
 Hardy, G. H., 235, 239
 Harman, G., 259
 Harrod, Roy, 105
 Hartmann, Nicolas, 55, 139
 Hartshorne, Charles, 125
 Hegel, G. W. F., x, 28, 31, 32, 41, 55, 58,
 60, 61, 109, 115, 177, 195
 Hegelism, 102
 Heidegger, Martin, 32, 113, 139, 172, 193
 Helmer, O., 250
 Helmholz, Hermann von, 104
 Hempel, Carl G., 123, 148, 250, 258, 259
 Henle, P., 258
 Heraclitus, 93
 Herbrand, J., 69, 180
 Hermeneutics, 32, 193
 Herrnstein, R., 259
 Hertz, Paul, 242
 Hierarchical worldview, 43
 Higher logic, 15, 129
 Hilbert, D., 80, 104, 106, 133, 179, 180
 Hilbert school, 7, 15, 34, 70
 Hintikka, J., 259–260
 History, xi, 28, 87, 102, 113
 History of philosophy, 1, 43, 85, 102,
 108–109, 140, 179–181, 193, 195
 chronological table of (recent), 231–260
 Holism, 50, 123, 158, 160–161, 164–165,
 174–175
 Holistic pragmatism, 17, 18, 20
 Homberger, E., 239
 'How I know,' 62, 65, 201–202, 208
 Human nature, 31
 Hume, David, 7, 27, 93, 104, 107, 122,
 127, 169, 202, 203, 204
 Husserl, E., x, 27, 32, 37–38, 202, 206
 Hylton, P., 66, 67
 Hyper-Pythagoreanism, 166

 Idealism, 102, 113
 Idealized models, 124

- Identity, 171, 178
 Identity theory, 134
 Ideologies, 26
 Implication, 79, 178
 Impossibility proofs, 138
 Impredicative set theory, 149–150
 Inclusive approach, 169. *See also* Union
 Incomplete symbol, 67
 Incomplete symbol defined by use, 140
 Incompleteness theorems, 8, 18, 177, 179, 186
 Indefinability of truth theorem, 144
 Indefinables, 77–80
 Independence proofs, 81
 Indeterminacy, 137
 of translation, 162, 164, 176
 Indian philosophy, 193, 194
 Individual, 164
 Individual morality, 26
 Individuation, 158
 Induction, 71, 107, 109, 148, 169
 Inductive logic, 65, 121, 206
 Inference, 56, 57, 63, 81, 91
 Infinite cases, 70
 Infinity, 150
 Inhumanism, 46–47
 Inner models, 145
 Inscrutability of reference, 164, 176
 Inscrutinability, 137
 Inscrutinizability of reference and of ontology, 163
 Instinct, 26, 40
 Institute for Advanced Study (Princeton, New Jersey), 30
 Integers, 14, 18, 19, 20, 136
 Intellectual intuition, 41
 Intension, 176
 Intensional objects, 97, 162
 Intensional paradoxes, 5, 73
 Intensionality, 6, 73, 77
 Intention, 164
 Intersection, 83, 213. *See also* Exclusive approach
 Intersubjectivity, 37
 Intrinsic views, 6
 Introspection, 164
 Intuition, 5, 18–21, 35, 47, 132, 149, 164, 208
 Intuitionistic arithmetic, 179
 Isolation of concepts and problems, 35
 Iterative concept of set, 48, 72–73, 135–136, 148
 Jacob, F., 29
 James, William, 45, 113, 114, 118, 195, 237
 Jeffrey, R., 259
 Jensen, Ronald B., 177, 189, 259
 Johnson, D. S., 178
 Johnson, W. E., 239
 Jourdain, Philip, 81, 237
 Kaila, E., 103
 Kallen, H. M., 251
 Kamenev, president of the Moscow Soviet in 1920, 240
 Kant, Immanuel, ix–xi, 21, 27–28, 32, 43, 55, 58, 60–61, 65, 82, 86, 103, 109, 115–116, 127–128, 139, 161, 170, 202–204, 206, 208–209, 212
 Kaplan, A., 258
 Kaplan, D., 259
 Kasper, Maria, 243
 Kemeny, J. G., 258
 Keynes, John Maynard, 236, 239, 242, 248
 Kierkegaard, S., 32, 82
 Kinematics, 65
 Kleene, S. C., 180
 Kneale, M., 177
 Kneale, W., 105, 177
 Knowledge, 5, 33–34, 40–41, 44, 52, 55, 62, 65, 93, 131, 162, 199–201
 Kolakowski, L., 197
 Kraft, Victor, 103
 Kreisel, G., 147
 Kripke, S. A., 113
 Kuhn, T. S., 110, 113, 196
 Lackey, D., 66, 67, 68
 Language, 31–32, 86, 89–90, 92, 94, 101, 120, 158, 164–166, 171
 perfect logical order of, 89
 and theories, 9, 143
 Wittgenstein on, 77
 Language-games, 39, 43, 76, 86, 92
 Language learning, 158, 165–166, 171–172, 203
 Laski, Harold J., 238
 Lauener, H., 260
 Law, 29, 210
 Law of identity, 14
 Lawrence, D. H., 33
 Legal order, 31

- Leibniz, G. W. von, 60, 79, 96, 104, 109, 127, 194, 202
 Lenin, V. I., 31, 240
 Leontief, Wassily, 208
 Levi-Strauss, Claude, 196
 Levy, A., 189
 Lewin, Kurt, 242
 Lewis, C. I., 46, 101–102, 104–105, 112–118, 126, 154, 245
 ‘Liberated epistemology,’ 165, 170, 208
 Life sciences, 31
 Limitation of size, 5–6, 67, 90
 Lindström, Per, 134
 Linguistic grammar, 164
 Linguistic meaning, 165
 Linguistic naturalism, 94
 Linguistic paradoxes, 5. *See also* Semantic paradoxes
 Linguistic philosophy, 34. *See also* Analytic empiricism; Oxford philosophy
 Linguistics, 31, 68
 Linguistism, 46–47
 Literary culture, 42
 Literature, 27, 28, 87, 102, 196
 Löb, H. B., 178
 Local precision, 11, 35
 Locke, John, 27, 54, 202, 203
 Locus of ontology, 136
 Logic, 3, 7–8, 12–13, 18, 31, 101, 179–181. *See also* Elementary logic; Set theory
 Gödel on, 4–5, 73
 and logical positivism, 106
 Quine on, 16, 130, 132–134, 181–189
 Russell on, 4–5, 64–65, 68–70, 72–73, 75–81, 107
 of ultimate simplicity, 5
 universality of, 69, 75, 77, 79–81, 84, 96
 and the Vienna Circle, 105, 107–108
 Wittgenstein on, 4–5, 14
 Logic of common sense, 174
 Logical atomism, 62, 141
 Logical constants, 4, 5, 77, 78, 80, 91, 97
 Logical construction, 33, 65, 122
 Logical empiricism. *See* Analytic empiricism; Logical positivism
 Logical grammar, 76, 133
 Logical inference, 91
 Logical intuition, 18
 Logical negativism, 8, 19, 23n20, 163, 174–176
 Logical picture, 77
 Logical positivism, 3, 5, 8, 12, 82, 103–104, 106, 197, 198. *See also* Analytic empiricism; Vienna Circle
 Logical syntax, 122
 Logical truth, 4–5, 132–134, 158
 Logicism, 12–13
 Logico-epistemological consciousness, 193
 Löwenheim-Skolem theorem, 145, 179
 Lu, Xun, 252
 Lukacs, G., 172
 Lukasiewicz, J., 179
 Lyndon, Roger, 252–253
 MacCarthy, Desmond, 249
 McCarthy, T., 200
 Mace, C. A., 105
 McGuinness, Brian, 231
 Mach, Ernst, 102–104, 122
 McLendon, Hiram, 257
 McNaughton, R., 156
 McTaggart, J. E., 60, 235
 Makanin, G. S., 178
 Malament, David, 107
 Malcolm, N., 231, 251, 254, 255
 Mannheim, K., 29
 Markov, A. A., 178
 Martin, E. A., 259
 Martin, R. M., 258
 Marx, Karl, 27–28, 31, 32, 37, 55, 104, 113, 206, 208, 212
 Mathematical induction, 71
 Mathematical intuition, 15, 18–19
 Mathematical logic, 7, 102, 177, 181, 183–189, 195, 206–207. *See also* Logic
 Mathematical objects, 46
 Mathematics, 3, 8, 13, 16–20, 28, 31, 100–101, 107, 110. *See also* Logic foundations of, 7, 33, 65–66
 if-then interpretation of, 13
 logic within, 7
 and physics, 20–21
 as syntax, 124
 Matrix, 73
 Mead, George, 113
 Meaning, 132–133, 158, 164, 175–176
 Meaning postulates, 127
 Meinong, Alexius, 50, 67
 Membership relation, 78–79, 90, 143, 182

- Mendel, Gregor, 43
 Menger, Carl, 103
 Menger, Carl (the Elder), 104
 Mental monism, 168–169
 Mental states and events, 167
 Mention, 121
 Merleau-Ponty, M., 32, 203
 Metalanguage, 15, 79, 92
 Metamathematics, 10
 Metaphilosophy, 10, 32, 39, 135, 162, 192
 Metaphysical propositions, 138
 Metaphysics, 77, 119, 131, 132, 139, 210
 Metatheoretic considerations, 79–80, 92
 Methodological monism, 160–162
 Mill, John Stuart, 12, 27, 59, 104, 233
 Modal logic, 114, 117, 164
 Modal quantificational logic, 126
 Modality, 65, 158
 Model theory, 140
 Modus ponens, 17–18, 19, 20, 78
 Molecular sentences, 129
 Moore, G. E., 29, 40, 61, 70, 78, 95, 97, 101–102, 196, 234, 239, 244, 253
 Moral sciences, 113
 Morality, 26, 27, 29
 Morrell, Lady Ottoline, 50, 51, 59, 213, 237
 Morris, C., 258
 Müller-Lyer, J., 104
 Multiplicative axiom, 68. *See also* Axiom of choice
 Myhill, J., 258
 Mysticism, 93–94, 100
 Myth, 158
 Nagel, E., 258
 Names, 90, 97, 144
 Natkin, Marcel, 103
 Natural axiom system, 46
 Natural deduction, 100
 Natural knowledge, 54
 Natural numbers, 186. *See also* Integers
 Natural science, 17, 54, 86, 92–93, 109–111, 113, 132, 206
 Naturalism, 161
 Nature, 31
 Necessity, 8, 26
 Negation, 79, 91, 178
 Neumann, John von, 110, 125, 135, 179
 Neurath, Otto, 103, 160
 Newton, Sir Isaac, 43, 49, 57, 202
 Newtonian physics, 58, 128
 Nietzsche, F. W., 28, 32, 194–195, 212
 Nobel Prizes, 30
 No-class theory, 6, 46, 50, 67. *See also* Ramified theory of types
 Nominalism, 3, 14, 140, 150, 151, 158, 159, 162, 198
 Nomological statements, 123
 Non-demonstrative inference, 63
 Nonanalytic propositions, 22n6
 Nondenoting terms, 69
 Nonelementary propositions, 91
 Nonessentialism, 198
 Nonfinitary concepts, 15, 18
 Norton, Warder, 238, 249
 Notational precision, 118
 Number theory, 13
 Object, 4, 5, 73, 90, 91, 141, 208
 Objective knowledge, 32, 42, 46
 Objectivism, 198, 208
 Objectivity, 21, 37, 39, 101
 Objectual quantification, 150
 Observation, 165, 169, 175
 Observational sentences, 176
 Occam's razor, 66, 69, 139, 159. *See also* Economy
 Occasion sentences, 171
 One, 67, 81, 134
 One and the many, 96
 Ontic commitment, 8, 9, 117, 141–142, 172
 Ontological commitment, 139, 141, 149. *See also* Ontic commitment
 Ontological criterion, 149
 'Ontological debacle,' 167
 Ontological economy, 150
 Ontological minimalism, 115
 Ontological reduction, 9, 139, 140, 145, 146
 Ontological relativity, 139, 162, 176
 Ontology, 8–9, 35, 66–67, 77, 138–147, 149–151, 167, 172
 Orenstein, A., 231, 260
 Organic chemistry, 206
 Ostension, 171
 Ostwald, W., 240
 Oxford philosophy, 30–31, 105, 112
 Pap, Arthur, 128, 258
 Papert, S., 203

- Paradox of small numbers, 128
 Paraphrasis, 140
 Parry, W. T., 154
 Parsons, Charles, xii, 107, 128, 186
 Particles, 171
 Particular, 208
 Particularity in human nature, 26
 Pascal, Fania, 247
 Pasch, M., 104
 Pauli, Wolfgang, 110, 125, 253
 Peano, G., 50, 61, 64, 104, 179, 235
 Peano axioms, 7, 18, 64. *See also*
 Dedekind, R.
 Pears, David, 47, 50, 96–97
 Peirce, C. S., 113–114
 Perception of shapes and physical
 objects, 21
 Perry, R. B., 237
 Phenomenalism, 50, 115, 122, 159, 174,
 198
 Phenomenography, x, 10, 32, 37–44
 Phenomenology, x, 32, 37–38
 Physical experience, 5
 Physical knowledge, 65
 Physical monism, 168
 Physical objects, 21
 Physical theories, 176
 Physicalism, 50, 65, 122, 159, 164,
 166–169, 174
 Physics, 26, 28–29, 100–101, 110, 167,
 202
 foundations of, 33, 65, 126
 and mathematics, 20–21
 and set theory, 7
 and the Vienna Circle, 105, 106, 107
 Piaget, J., 196, 203
 Pictures, 77, 89
 Pieri, Mario, 104
 Pinsent, David, 238, 239
 Pitcher, George, 243
 Planck, Max, 28
 Plato, 39, 93, 107, 109, 202, 212
 Platonic realism, 67
 Platonism, 159
 Plausibility, 66
 Poetry, xi, 87
 Poincaré, Henri, 33, 50, 61, 67–68, 104,
 175, 236
 Political order, 31
 Political philosophy, 29, 41–42, 193,
 210
 Politics, 26, 34, 84
 Polyani, M., 196
 Popper, K. R., 258
 Popper-Lynkeus, J., 104
 Posits, 158
 Possible-worlds semantics, 107, 126
 Post, E. L., 179
 Post-philosophy, 32
 Postulates of scientific inference, 56, 57
 Practice, x, 41
 Pragmatics, 76, 121
 Pragmatism, 102, 113–118, 121, 132
 Prall, David W., 245, 248
 Precision, 101, 102
 Predicate calculus, 68–69, 133, 172. *See*
 also Elementary Logic
 Predicates, 140–141
 Predicative and nonpredicative
 definitions, 67
 Predicative mathematics, 152
 Predicative propositional functions, 79
 Predicative set theory, 134, 147, 150. *See*
 also Ramified theory of types
 Predicative type theory, 148
 Presuppositions of philosophers,
 191–192, 212
 Price, H. H., 253
 Prime numbers, 134
 Primitive concepts, 64, 67, 78
 Primitive predicate, 143
 Principle of atomicity, 4, 75, 95, 97
 Principle of finiteness, 4, 92, 95, 97, 98
 Principle of necessary reason, 22n6,
 43–44, 57–58, 128
 Principle of precarious sufficiency, 58,
 128
 Principle of tolerance, 39, 124–125
 Probability, 65, 96, 121, 169
 Probability logic, 109
 Probability theory, 206
 Problems of philosophy, 83–88
 Pronouns, 141
 Proof theory, 179
 Proper names, 140–141
 Propositional calculus, 5, 78, 80, 98, 141,
 178
 Propositional connectives, 91, 92
 Propositional functions, 66, 69, 73, 78–80
 Propositional tautologies, 92
 Propositions, 4, 14, 68–69, 71, 77, 89–92,
 95, 97, 164

- Propronouns, 141
 Protocol sentences, 123
 Proxy function, 145–146
 Pseudo-sentence, 120
 Psychoanalysis, 203
 Psychology, 26, 29, 100, 140, 164, 166, 200, 202–204
 Pure concepts, 4, 73
 Pure sets, 136
 Putative names, 144
 Putnam, H., xii, 258
 Pythagoreanism, 145
- Quantification, 69, 71, 79, 141, 182
 Quantification theory, 8–9, 133, 141–142, 149–150, 178. *See also* Elementary logic
 Quantifiers, 68–69, 78–79, 91, 95, 97–99, 145, 149, 170, 172
 Quasi-analysis, 123
 Quasi-permanence, 56
 Quasi-spatial objects, 21
 Quine, W. V., xi, xii, 6, 33–36, 56, 101, 102, 110, 117, 126, 195
 Carnap's influence on, 124, 136–138, 154–155
 on empiricism, 130–133, 160, 165
 on holism, 160–161
 on logic, 16, 130, 132–134, 181–189
ML, 177, 179, 181, 183–189
 on naturalism, 161
 on ontology, 8–9, 139–147, 149–151, 167, 172
 philosophical beliefs of, 17–21, 137, 158–163, 197–199, 205
 philosophical system of, 10–13, 163–177, 201–202, 204–206
Philosophy of Logic, 133
 Russell's influence on, 52, 66, 118
 on set theory, 16–18, 134–136, 173–174
 'Two dogmas,' 131–132, 176
 works by, 25n23, 156–158
- Radakovic, Theodor, 103
 'Radical translation,' 176
 Ramified theory of types, 5, 47, 71–72, 147, 149. *See also* Predicative set theory
 Ramsey Frank P., 5, 48, 70–72, 88, 94, 101, 103, 123, 149, 179, 182, 244, 246, 249
- Rational reconstruction, 65, 122–123, 127, 169–170, 200
 Rational reconstruction program, 65
 Rationalistic optimism, 32
 Rationality, 42, 172, 200
 Rawls, John, 25n23, 29, 113, 210
 Read, Herbert, 33
 Real closed fields, 136
 Real variable, 79
 Realism, 3, 120, 140, 159
 Realm of being, 77, 81
 Reason, 26
 Recognition-of-similarity, 122
 Recursive functions, 180
 Reduction, 123, 141, 163, 174, 199
 Reductionism, 11, 111, 132, 159, 167–168
 Reference, 141, 158, 164, 171, 175, 176
 Referential quantification, 9, 142, 149
 Reflection, 189
 Reichenbach, Hans, 25n23, 101, 103, 106–113, 195, 206, 242
 Reinhardt, W. N., 189
 Relations, 78–79, 140, 164
 Relations of ideas, 127
 Relative clauses, 170
 Relative empiricism, 163
 Relative interpretation, 145
 Relativism, 1–2
 Relativity, 137
 Religion, 26, 28, 31, 34, 193
 Rhees, R., 256
 Richard, J., 67–68
 Ricoeur, Paul, 31–32
 Riemann, G. F. B., 104
 Robinson, Abraham, 198
 Robinson, Joan, 199
 Rolland, Romain, 240
 Romanos, G. D., 260
 'Roots of reference,' 170–171
 Rorty, Richard, 25n23, 108–112, 131, 158, 161, 205–207
 Rosser, J. B., 180, 183, 186, 252
 Royce, Josiah, 114, 118, 237
 Rubinstein, D., 208
 Rules of elimination, 14
 Rules of formation, 78
 Rules of inference, 79
 Russell, Bertrand, xi, 2–3, 27, 30, 36, 43–45, 51, 102, 104, 195, 208, 213
 Carnap influenced by, 52, 65–66, 118–119

- development of philosophy of, 32–34, 59–64, 137
External World, 52, 56, 169
 Frege's influence on, 121
History of Western Philosophy, 107
Human Knowledge, 46, 48, 52, 56–58
 on logic, 4–5, 64–65, 68–70, 72–73, 75–81, 107
 on logical positivism, 106
 on ontology, 139–141
PD, 63
PM, 46–47, 51, 64–65, 68–69, 71, 119, 148, 182
Principles, 4, 46, 66, 77, 80, 140
The Problems of Philosophy, 51
 Quine influenced by, 52, 66, 118
 on set theory, 5–7, 68
 Wittgenstein's influence on, 46, 51–53, 59, 61–62, 69–71, 76, 81–82, 95, 102
 Russell, Frank, 233, 246
 Russell paradox, 3, 4, 62, 66–69, 77
 Ryle, Gilbert, 101, 256
- Santayana, George, 7, 47–51, 53, 54, 55, 59, 237
 Sartre, Jean-Paul, 30, 32, 193, 196, 203
 Satisfiability, 133
 Schilpp, P. A., 71, 231
 Schlick, Moritz, 19, 102–103, 106, 242, 244, 248, 249
 Schoenman, Ralph Benedek, 257
 Scholz, H., 177
 Schönfinkel, M., 179
 Schopenhauer, Arthur, 82, 86, 194, 201, 236
 Schröder, E., 104
 Schrödinger, Erwin, 29
 Schütte, K., 147
 Science, 162, 199
 Scientific culture, 42
 Scientific Empiricism, 105. *See also* Logical positivism
 Scientific knowledge, 3, 43, 110, 204
 Scientific language, 165, 168, 206
 Scientific method, 54, 111, 113, 161, 166, 198–201, 204
 Scientific philosophy, 106–110, 172, 193, 202, 204–206
 Scientific theory, 165, 172
 Scientific worldview, 26–27, 31
 Second order theory, 184
 Second order theory of arithmetic, 64
 Self, conception of, 93
 Sellars, W., 25n23, 104, 110, 258, 259
 Semantic paradoxes, 73. *See also* Linguistic paradoxes
 Semantics, 16, 65, 76, 120–122, 126
 Semiotics, 121
 Sensations, 21
 Sense, 121
 Sense data, 159, 169
 Sense experience, 19
 Sentences, 133, 134, 140, 160
 Separable causal lines, 57
 Set, 5, 79. *See also* Iterative concept of set
 Set theory, 3, 5, 13, 66, 77, 91, 98–99, 159, 182. *See also* Logic and physics, 7
 Quine on, 16–18, 134–136, 173–174
 Russell on, 5–7, 68
 Shahān, R. W., 260
 Shakespeare, William, 43
 Shared beliefs, 42
 Sheffer, H. M., 154, 188, 238, 245
 Shen, Yuting, 154, 253
 Shimony, Abner, 107, 201, 259
 Σ_ω , 8, 48, 147–152
 Simple theory of types, 5, 48, 72, 99, 135
 Simplified case, 70
 Skinner, B. F., 247
 Skinner, Francis, 247
 Skolem, T., 180, 182
 Smart, J. J. C., 259
 Smith, Adam, 43
 Smith, Aly Pearsall, 233, 234, 235, 236
 Smullyan, R., 178
 Social order, 31
 Social policy, 31
 Social practice, 113
 Social sciences, 31
 Society, 164
 Socrates, 202
 Solipsism, 93
Sosein, 139
 Souslin's hypothesis, 135
 Spatio-temporal continuity, 57
 Specialization, 28–29, 35, 195–198
 Specker, Ernst, 183, 188–189
 Spector, C., 147, 151
 Speculative philosophy, 108–109, 132
 Spence, Patricia Helen, 233, 236, 249
 Spencer, Herbert, 55, 104

- Spinoza, B., 109, 200, 202
 Sproul, Robert, 251
 Sraffa, P., 88, 244
 Statements, 17
 Stein, Howard, 25n23, 65, 107
 Stenius, E., 259
 Stich, S., 259
 Strawson, P. F., xii, 257, 258, 259
 Stroud, B., 259
 Structural invariance, 57
 Subject, 208
 Subjectivism, 208
 Subjectivity, 21, 31, 37
 Subsistent propositional functions, 141
 Substantial factualism, 63
 Substitutional quantification, 8–9, 142, 147, 149–151
 Successor relation, 143
 ‘Such that’ notion, 78
 ‘Summary,’ 55–56
 Swoyer, C., 260
 Symbolic logic, 64, 79–80
 Symbols, 79
 Symmetry law, 57
 Synonymy, 127, 132, 133, 158, 164, 175–176
 Syntactical conventions, 15
 Syntax, 15, 19, 65, 76, 120, 122, 124–126
 Synthesis, 27
 Synthetic propositions, 17, 22n1, 37, 60, 123, 126–128, 130, 133, 164, 174
 Systems of sentences, 160
- Tarski, Alfred, 126, 130–131, 143–144, 155, 180, 251–252
 Tautological sense of analytic, 13
 Tautologies, 5, 15, 71–72
 Technical logic, 33, 197
 Technical philosophy, 45
 Technological order, 31
 Technology, 94
 Term, 4, 67, 69, 73, 81, 171. *See also Object; One*
 Tharp, Leslie H., 107, 145
 Theoretical sentences, 174, 176
 Theories and languages, 9, 142–144
 Theory, 41–42, 142, 158
 Things, 4, 90, 140
 Things in themselves, 47
 Thomas, Helen, 250
 Thomason, R., 259
- Thought, 77, 86, 90, 93, 164, 200
 Tolstoy, Leo, 239
 Tooke, John Horne, 160
 Toynbee, Arnold, 33, 258
 Transcendental esthetics, 86
 Transcendental logic, 86
 Transfinite numbers, 67, 185
 Translatability, 122, 140
 Translation, 145, 158, 162, 164, 176
 Trotsky, Leon, 240
 True, 79, 128
 Truth, 12, 78–79, 115, 143–144, 160, 175, 180, 193, 208, 211
 Truth-functional connectives, 5
 Truth-functional tautologies, 92
 Truth-functions, 70–71, 79, 89–92, 97–98, 141, 173, 178, 182
 Truth-operations, 100
 Truth-values, 91
 Truths by essential predication, 132
 Truths of fact, 127
 Truths of reason, 127
 Turing, A. M., 138, 144, 180
 Type theory, 143, 183, 188
- Ulam, S., 155, 156
 Ullian, J. S., 153
 Ultimate truth, 109
 ‘Ultimately,’ 165
 Unamuno, M. de, x
 Unanalyzable, 95–96
 Unanalyzed, 96
 Underdetermination of theories, 164, 176
 Union, 83, 213. *See also Inclusive approach*
 Unity, 94
 of nature and person, 193
 of science, 65
 Universal concept, 73
 Universality, 26, 38
 of logic, 69, 75, 77, 79–81, 84, 96
 of variables, 69
 Universals, 96, 97
 Urelements, 183
 Use, 121
- Vailati, G., 104
 Validity, 133, 180
 Valuation, 113, 202
 Values, 72
 Variables, 69, 76, 78–79, 81, 129, 141, 171

- Veblen, O., 250
 Verbs, 140
 Vicious circle principle, 67, 147. *See also*
 No-class theory
 Vienna Circle, 9, 15, 34–35, 102–111,
 126, 128, 131, 155, 244. *See also*
 Logical positivism
 Virtual theory of classes and relations,
 147, 173, 185–186
 Virtue, 93
 Waismann, F., 101, 103, 105, 133, 243,
 244, 245
 Wang, Hao, 25n23, 36–37, 63–64, 78, 94,
 101, 147, 250–260
 Wang, Sian-jun, 251
 Warranted assertibility, 115, 160
 Watson, John B., 247
 Weber, Max, 207
 Weiss, Paul, 154
Weltanschauung, 209. *See also* Worldview
 Weyl, H., 250
 ‘What can be said,’ 92–93
 ‘What can be shown,’ 92
 ‘What can I know,’ x, 209
 ‘What do we know,’ 209
 ‘What we know,’ x, 2, 62, 65, 201, 208
 Whitehead, A. N., 51, 61–62, 64, 104,
 105, 153–154, 195, 238, 239, 245
 Whitehead, Evelyn, 236
 Whole philosophy, 210
 Will, 93
 Williams, Donald C., 114
 Windelband, W., 85, 139, 195, 228
 Wish, 40, 41
Wissenschaft, 27. *See also* Science
 Wittgenstein, L., 2, 12, 36, 39, 42, 104,
 109, 149, 193, 196, 201, 206, 242, 243
 attitude of toward philosophy, 81–89
 on grammar, 76–77
 on logic, 4–5, 14
PI, 88
 Ramsey influenced by, 72
 Russell influenced by, 46, 51–53, 59,
 61–62, 69–71, 76, 81–82, 95, 102
Tractatus, 3, 5, 15, 47, 68–71, 75–77,
 80, 82–100, 128–129
 Wolff, C., 139
 Woolf, Virginia, 201
 Worldview, 1, 27–32, 194