

Index

- a fortiori* arguments, 204–205
 abduction. *See* retrospective hypotheses
 accessibility, evaluation of evidence and, 96
 accuracy, evaluation of evidence and, 98
 acknowledging the argument, 190
 ad baculum, 150, 160
 ad hominem, 138, 148–149
 abusive, 142–148
 ad personam as, 138, 148
 bias, 148
 circumstantial, 148–149
 ad ignorantiam, 151
 ad misericordiam, 150–151
 ad personam, 138, 148
 ad populum, 150
 ad verecundiam, 149–150
 adequacy, evaluation of evidence and, 98
 affirmative cases, 161
 affirming the consequent, 142
 scientific argumentation and, 244
 agreeing to disagree, 9, 57, 236–237
 agreement
 evidence and, 84
 personal sphere, preferred in, 237, 240
 preconditions for argumentation and,
 9–10
 algorithms, search engines using, 93
 alternative facts, 211
 ambiguity, 144–159
 amphiboly, 145
 amplitude, claim selection and, 166–169
 analogy-based warrants, 111–115
 in exercises, 131
 fallacies and, 140
 false analogy and, 140
 figurative analogies as, 112–113
 literal analogies as, 111–112
 tests for, 113–115
 analytic statements, 221–222
 anecdotal generalizations, 109
 antithesis, 219–220
 appropriateness, evaluation of evidence and,
 98–99
 argument from residues, 205
 argument order
 arrangement and, 176–181
 attacks and, 198–199
 audience familiarity and, 178–179
 Declaration of Independence and, 183–184
 organizational patterns used for, 180–181
 salience and, 179
 strength of arguments and, 178
 topical, 179
 argument presentation, 226–230
 argumentative essay as, 226–227
 argumentative speech and, 227–229
 visual argumentation and, 229–230
 argument schemes, 104–136
 argument structures, combining, 44–49, 176
 argumentative essay, 226–227
 suggestions for, 226–227
 argumentative speech, 227–229
 informal expressions and, 228
 parallel structure and, 227–228
 reflexive references and, 228
 repetition and, 227–228
 signposting and, 228
 suggestions for, 227–229
 verbal clutter and, 228–229
 argumentativeness, as personality trait, 1
 Aristotle, 26, 74, 250
 rhetoric and, 7–8
 sign-based warrants and, 117
 arrangement, 176–181
 anticipatory refutation and, 179–180
 argument order in, 176–181
 attacks and, 198–200
 case outline as, 181–182
 coordinative structure, choosing, 177–181
 Declaration of Independence and, 183–185
 defense and, 202–203
 inoculation and, 179–180

- arrangement (cont.)
 multiple structure, choosing, 177–181
 strategic maneuvering and, 177–181
 subordinative structure, choosing, 176–177
- asking a question, 194–195
 as building no equity, 195
 unanswerable questions and, 195
- assent, freely given
 controversies requiring, 57–58
 as precondition for argumentation,
 9–10
- assertion and denial, interaction of, stases and,
 70–71
- assumptions underlying argumentation, 26
 audience as, 11–13
 cooperativeness as, 17–18
 restrained partisanship as, 16–17
 risk as, 18–20
 uncertainty as, 13–16, 26
- attacks, 186–187, 194
 argument order and, 198–199
 arrangement of, 198–200
 asking a question as, 194–195
 claim selection to withstand, 170
 claims and, 190–191
 clear-cut outcomes, lack of, in, 188
 context and, 193–194, 197–198
 contradictions and, 196–205
 cooperativeness and, 187
 coordinative structure and, 188
 counterargument as, 197
 credibility and, 191–192
 defense demonstrating inadequacy of, 201
 defense using structure of, 202–203
 evidence and, 191–192
 in exercises, 205–207
 fully developed, 199–200
 generalizations and, 192–193
 inconsistencies identified by, 196–197
 inconsistencies in, 189–190
 internal deficiencies identified by,
 195–196
 labeling the strategy of the opposing argument
 as, 197
 multiple structure and, 187–188
 on-balance considerations and, 193
 opportunity costs and, 200
post hoc fallacies and, 192, 195–196
 pragmatic inconsistencies and, 196
 reasons not to, 188–190
 stases and, 190–191
 straw man and, 199
 subordinative structure and, 187
 time limitations and, 188–189
 warrants and, 192–193, 207–208
- audience, 5–6, 33
 as assumption underlying argumentation,
 11–13
 claim selection and, 168–170
 evidence and, 84–85
 in exercises, 28
 fallacies and, 139
 pandering to, 12
 rhetoric and, 8
 universal, 12–13, 163–164
 audience familiarity, argument order and, 178–179
- backing, 208
- begging the question, 78–79, 152, 222
- Booth, Wayne, 12
- briefs, 165–166, 181
- building equity, asking a question and, 195
- burden of proof
 burden of proving assertions and, 77
 burden of rejoinder and, 77
 controversies and, 72, 76–79
 debate and, 255
 persuasion burden and, 76–77
 presumption, strength of, and, 76–77
 production burden and, 77
- burden of proving assertions, 77
- burden of rejoinder, 77, 186
- Burke, Kenneth, 127
- business argumentation, 243
 evidence and, 243
 policy claims and, 243
 satisficing in, 243
- case construction, 161–185
 briefs in, 165–166, 181
 case outline in, 181–182
 constraints and choices in, 164–165
 Declaration of Independence, U.S., and,
 183–185
 dialectical obligations met in, 170, 180, 208
 in exercises, 182–183
prima facie cases and, 161–164, 182
- case outline, in case construction, 181–182
- cases. *See also prima facie* cases
 affirmative, 161
 negative, 161
- categorical reasoning, form-based warrants and,
 142
- categorical syllogism, 29–33, 52
- causal generalizations
 as explanations, 122
 as predictions, 122
- cause-based warrants, 119–134
 Collingwood on, 135
 constant conjunction and, 134

- correlations versus, 123–124
- in exercises, 131–133
- explanations as, 121–122
- fallacies and, 140–141
- Hart on, 135
- human actions and, 135
- Hume on, 134
- influence and, 119–120, 134
- legal argumentation and, 242
- method of difference and, 120
- method of similarity and, 120
- Mill on, 120, 134
- necessary conditions and, 134
- post hoc* fallacies and, 124, 141
- predictions as, 121–123
- sufficient conditions and, 134–135
- tests for, 123–125
- central tendency, measures of, 87, 103
- characterization, visual argumentation and, 230
- chiasmus, 220–221
- circular reasoning, 151, 160
- claim selection, 165–171
 - amplitude in, 166–169
 - attacks, withstanding, and, 170
 - audience and, 168–170
 - briefs, preparing, in, 165–166
 - contradictory claims in, 168
 - credibility and, 167
 - on-balance considerations and, 167–168
 - time limitations and, 166–167
- claims, 3–4. *See also* policy claims; value claims
 - attacking, 190–191
 - contradictory, 168
 - controversies and, 63–67
 - definition, 65–68
 - diagramming complex arguments and, 38–48
 - diagramming simple arguments and, 33–34, 36–38
 - in exercises, 26–27, 52–53, 79–80
 - fact, 64–65, 67–68, 79–80
 - justifying, 3
 - main, 38–45, 48, 51
 - previously established, 90
 - subsidiary, 38–48, 51
- coalescent argumentation, 238
- Collingwood, R. G., 135
- color, visual argumentation and, 230
- common knowledge, controversies and, 59
- common language, 18
- commonplaces, 90, 243
- communication, 5–6
- communicative clues, controversies and, 58–62
- comparative value, 4
- complex arguments, diagramming. *See* diagramming complex arguments
- complex sentences, 223
- composition
 - fallacies of, 110–111, 139
 - visual argumentation and, 230
- compound sentences, 222–223
- conciseness, evidence selection and, 175–176
- condensation symbols, 248
- confirmability, evaluation of internet evidence and, 101
- conjecture, stases in, 69, 71
- connotation
 - in exercises, 231
 - persuasive definitions and, 210–211
- constant conjunction, cause-based warrants and, 134
- constructive speeches, in debate, 256–257
- context. *See also* spheres of argumentation
 - attacking, 193–194, 197–198
 - evaluation of evidence and, 98
 - fields as, 233
 - formal logic and, 32
 - issues derived from, 162–163
 - van Eemeren on, 233
- contradictions
 - attacking, 196–205
 - refutation and, 205
- contradictory claims, in claim selection, 168
- contradictory statements, 221–222
- controversies, 56–81
 - assent, freely given, and, 57–58
 - burden of proof and, 72, 76–79
 - claims and, 63–67
 - common knowledge and, 59
 - communicative clues to, 58–62
 - duration of, 61
 - ending of, 61–62
 - in exercises, 27, 79–81
 - initial assertions in, 72
 - issues and, 62–63
 - migrating, 235–236
 - mixed versus unmixed, 14
 - positive impact of, 61, 81
 - as precondition for argumentation, 8–9
 - preconditions for, 56–58, 79
 - presumption and, 72–79
 - recognition of, 8–9, 56–57
 - resolutions and, 63–64
 - simpler means, lack of, and, 58
 - single versus multiple, 14–15
 - stases and, 69–72
 - taste, expressions of, and, 59
 - topoi* and, 67–68
 - triviality and, 9, 57, 59–60
 - uncertainty and, 13–15
 - value judgments and, 59

- conversational dialogue, 237
 narrowed versus expanded, 237
 cooperativeness
 as assumption underlying argumentation,
 17–18
 attacks and, 187
 common language and, 18
 debate and, 17
 defense and, 187
 coordinative structure, 44, 51, 176
 arrangement and, 177–181
 attacking, 188
 Declaration of Independence and, 184
 diagramming complex arguments and, 41–42,
 45–48, 53–55
 in exercises, 53–55
 main claims in, 41
 subsidiary claims in, 41, 47
 core beliefs, argumentation impact on, 21–22
 correlations, 119
 cause-based warrants versus, 123–124
 statistics measuring, 119
 counterargument, 197
 covering laws. *See* causal generalizations
 credentials, evaluation of internet evidence and,
 100
 credibility, 19
 attacking, 191–192
 claim selection and, 167
 evaluation of evidence and, 96
 evidence selection and, 173–174
 expertise and, 91
 self-interest and, 91–92
 testimony and, 91–92, 96, 125
 track record and, 91, 174
 critical discussion
 freedom rule in, 159
 functional missteps in, 159–160
 personal sphere and, 237–238
 relevance rule in, 159
 van Eemeren on, 159–160, 237–238
 cross-examination, in debate, 256
 cumulation, 41–42

 debate, 17, 24–25, 254–258
 burden of proof and, 255
 constructive speeches in, 256–257
 cross-examination in, 256
 decision-maker in, 24–25, 257–258
 formats for, 256–257
 preparation for, 257
 rebuttals in, 256–257
 resolutions in, 254–255
 sides in, 255
 time limitations and, 256
 debate teams, 256
 debate tournaments, 255–256
 decision rules, presumption providing, 73
 decision-maker, debate and, 24–25, 257–258
 Declaration of Independence, U.S.
 argument order and, 183–184
 arrangement and, 183–185
 case construction and, 183–185
 coordinative structure and, 184
 deduction, 6
 defense, 186–187, 200–204
 arrangement and, 202–203
 attack structure used in, 202–203
 cooperativeness and, 187
 error demonstrated by, 201–202
 inadequately established attack demonstrated
 by, 201
 inapplicability demonstrated by, 200–201
 original case structure used in, 202
 pre-emptive moves as, 203–204
 self-, 26
 triviality demonstrated by, 201
 definition claims, 65–68
 definition of the situation, 212–213
 in exercises, 231
 scope of conflict and, 213
 definitions, 79–80, 224–225. *See also* persuasive
 definitions
 expertise and, 210
 for the sake of argument, adopted for, 210
 stases in, 69–71
 deliberation, 22–24
 accidental, 23–24
 planned, 24
 democracy, public sphere importance to, 249–251
 denotation, persuasive definitions and, 210–211
 denying the antecedent, 142
 Dewey, John, 250–251
 diagramming arguments, 49–52
 in exercises, 52–55
 formal logic and, 29–33, 51
 as reconstruction, 49–52
 as systematization, 50
 diagramming complex arguments
 argument structures, combining, and,
 44–49
 claims and, 38–48
 coordinative structure and, 41–42, 45–48, 53–55
 evidence and, 38–39, 43–45, 48
 in exercises, 53–55
 main claims and, 38–45, 48, 51
 multiple structure and, 40, 48, 53–55
 subordinative structure and, 42–46, 48, 53–55
 subsidiary claims and, 38–48, 51
 warrants and, 43, 48

- diagramming simple arguments, 33–38, 50–51, 106
 claims and, 33–34, 36–38
 evidence and, 34–38, 51
 warrants and, 35–38, 51
 dialectic, 6–7
 Marx and, 6
 Plato and, 6–7
 pragma-dialectics and, xi, 7, 159–160
 dialectical obligations, case construction meeting, 170, 180, 208
 dialogue, fallacies in, 158–159
 dilemmas, 204
 direct observations, 89
 discourse communities. *See* fields
 dissociation, 213–217
 countering, 216–217
 in exercises, 231–232
 negation and, 215–216
 oxymorons and, 215
 philosophical pairs and, 214–215
 recognizing, 215–216
 tautologies and, 215
 documents, 88–89
 domain names, evaluation of internet evidence and, 100
 domino theory, 123, 147

 eager testimony, 92
 effective reasoning, justification and, 5
 either/or, exclusive versus nonexclusive sense of, 142–143
 electronic databases, evidence found in, 93
 entailment, formal logic and, 104–105
 enthymemes, 238–240
 equivocation, 138–139, 145–146
 error
 defense demonstrating, 201–202
 procedural, 137
 essence, sign-based warrants showing, 117
 ethical argumentation, 245–246
 ethics, 20–22
 core beliefs, argumentation impact on, and, 21–22
 persuasion and, 20–21
 euphemisms, 224
 in exercises, 232
 evaluation, of evidence, 94–101. *See also* evidence selection
 accessibility and, 96
 accuracy and, 98
 adequacy and, 98
 appropriateness and, 98–99
 context and, 98
 credibility and, 96
 in exercises, 103
 external consistency and, 97
 internal consistency and, 97
 relevance and, 97
 timeliness and, 97
 evaluation, of internet evidence, 99–101, 173–174
 basic standards and, 100
 confirmability and, 101
 creator of content and, 100
 credentials and, 100
 domain names and, 100
 in exercises, 103
 purpose of site and, 100
 scholarship and, 101
 timeliness and, 101
 evidence, 84–97. *See also* objective data; social consensus; testimony
 agreement and, 84
 attacking, 191–192
 audience and, 84–85
 business argumentation and, 243
 diagramming complex arguments and, 38–39, 43–45, 48
 diagramming simple arguments and, 34–38, 51
 electronic databases, found on, 93
 in exercises, 52–53, 97–101
 fake news and, 85, 95, 173
 finding, 92–94
 formal logic and, 34–35
 legal argumentation and, 242
 libraries, physical, found in, 94
 photography as, 96
 probative force of, 107
 religious argumentation and, 246
 search engines, found on, 93
 social media and, 85
 evidence selection, 171–176
 conciseness and, 175–176
 credibility and, 173–174
 expertise and, 172–174
 relevance and, 172
 replicability and, 172
 timeliness and, 174–175
 track record and, 174
 underlying reasoning and, 172–173
 example-based warrants, 108–111
 in exercises, 131
 fallacies of composition and, 110–111, 139
 fallacies of division and, 111, 139
 generalizations as, 108–111
 hasty generalizations and, 139
 illustrations as, 108–109
 as representative, 109
 tests for, 110–111

- examples
 - illustrations as, 86
 - as objective data, 86
- exercises
 - analogy-based warrants in, 131
 - attacks in, 205–207
 - audience in, 28
 - case construction in, 182–183
 - categorical syllogism in, 52
 - cause-based warrants in, 131–133
 - central tendency, measures of, in, 103
 - claims in, 26–27, 52–53, 79–80
 - connotation in, 231
 - controversies in, 27, 79–81
 - coordinative structure in, 53–55
 - definition of the situation in, 231
 - diagramming arguments in, 52–55
 - diagramming complex arguments in, 53–55
 - dissociation in, 231–232
 - euphemisms in, 232
 - evaluation of evidence in, 103
 - evaluation of internet evidence in, 103
 - evidence in, 52–53, 97–101
 - example-based warrants in, 131
 - fallacies in, 154–157
 - fallacies of clarity in, 157
 - fallacies of relevance in, 156–157
 - fallacies of vacuity in, 157
 - fields in, 252–253
 - formal logic in, 130–131
 - form-based warrants in, 133–134
 - genres of argumentation in, 28
 - migration between spheres of argumentation in, 252
 - multiple structure in, 53–55
 - objective data in, 101–102
 - personal sphere in, 252
 - persuasion in, 27–28
 - prima facie* cases in, 182
 - public sphere in, 252
 - refutation in, 207
 - sign-based warrants in, 131–133
 - social consensus in, 101–102
 - spheres of argumentation in, 251–253
 - stases in, 79–81
 - subordinative structure in, 53–55
 - technical sphere in, 252
 - testimony in, 101–102
 - testimony-based warrants in, 133–134
 - topoi* in, 79–80
 - warrants in, 52–53
- existing institutions, natural presumption for, 74–75
- expert testimony, 125–126, 172
- expertise
 - credibility and, 91
 - definitions and, 210
 - evidence selection and, 172–174
 - public sphere and, 247
- explanations
 - causal generalizations as, 122
 - as cause-based warrants, 121–122
 - resolution of paradox as, 121–122
 - retrospective hypotheses as, 121
- external consistency, evaluation of evidence and, 97
- fact claims, 64–65, 67–68, 79–80
- facts
 - alternative, 211
 - legal argumentation and, 242
 - persuasive definitions and, 211–212
- fake news, evidence and, 85, 95, 173
- fallacies, 137–160
 - affirming the consequent as, 142, 244
 - analogy-based warrants and, 140
 - audience and, 139
 - cause-based warrants and, 140–141
 - of composition, 110–111, 139
 - denying the antecedent as, 142
 - in dialogue, 158–159
 - of division, 111, 139
 - either/or, exclusive versus nonexclusive sense
 - of, and, 142–143
 - in exercises, 154–157
 - false analogy as, 140
 - formal logic and, 137
 - form-based warrants and, 141–143
 - functional missteps as, 159–160
 - hasty generalizations as, 139
 - informal logic and, 158–159
 - narrative arguments and, 143
 - post hoc*, 124, 141, 192, 195–196
 - pragma-dialectics on, 159–160
 - procedural errors versus, 137
 - sign-based warrants and, 140
 - testimony-based warrants and, 141
 - undistributed middle term as, 142
 - warrants as deficient in, 138
- fallacies of clarity, 144–147
 - ambiguity as, 144–159
 - amphiboly as, 145
 - equivocation as, 138–139, 145–146
 - in exercises, 157
 - heaps as, 146–147
 - slippery slopes as, 147
 - vagueness as, 144
- fallacies of relevance, 147–151
 - ad baculum as, 150, 160
 - ad hominem as, 138, 148–149

- ad ignorantiam as, 151
- ad misericordiam as, 150–151
- ad personam as, 138, 148
- ad populum as, 150
- ad verecundiam as, 149–150
 - in exercises, 156–157
- fallacies of vacuity, 151–154
 - begging the question as, 152
 - circular reasoning as, 151, 160
 - in exercises, 157
 - ignoring the question as, 152–153
 - non sequitur as, 153
 - self-sealing arguments as, 154
 - straw man as, 153
- false analogy, 140
- fields, 233
 - in exercises, 252–253
 - technical sphere and, 241–246
- figurative analogies, 112–113
 - phoros and, 113
 - theme and, 113
- figures of speech, 217–221
 - antithesis as, 219–220
 - chiasmus as, 220–221
 - metaphors as, 217–219
 - parallel structure as, 221
 - similes as, 217–218
 - synecdoche as, 217–218
 - word order and, 219
- formal logic
 - categorical syllogism and, 29–33, 52
 - context and, 32
 - diagramming arguments and, 29–33, 51
 - entailment and, 104–105
 - evidence and, 34–35
 - in exercises, 130–131
 - fallacies and, 137
 - inference and, 34–35
 - truth of statements in, 32–33
 - validity in, 104–106, 127, 130–131
- form-based warrants, 127–129
 - affirming the consequent and, 142
 - categorical reasoning and, 142
 - denying the antecedent and, 142
 - either/or, exclusive versus nonexclusive sense
 - of, and, 142–143
 - in exercises, 133–134
 - fallacies and, 141–143
 - narrative arguments and, 128–129, 143
 - quasi-logical arguments and, 128
 - quasi-mathematical arguments and, 128
 - resonance and, 129
 - tests for, 129
 - undistributed middle term and, 142
- framing. *See* definition of the situation
- freedom rule, in critical discussion, 159
- functional missteps, in critical discussion, 159–160
- generalizations, 108–111
 - anecdotal, 109
 - attacking, 192–193
 - causal, 122
 - hasty, 139
 - scientific argumentation and, 244
 - statistical, 109
- genres of argumentation, 22–26, 28. *See also*
 - debate
 - deliberation as, 22–24
 - negotiation as, 25
 - public address as, 25
- Goodnight, G. Thomas, 233
- Greece, ancient, argumentation in, 2
- Grootendorst, Rob, 29, 40, 159–160
- Hamblin, C. L., 137–138
- Hample, Dale, 240
- Hansen, Hans V., x
- Hart, H. L. A., 135
- hasty generalizations, 139
- heaps, 146–147
- Herrick, James A., 96
- heuristics, 10–11
- Hultzén, Lee, 82–83
- human actions, cause-based warrants and, 135
- Hume, David, 134
- iconic images, 229
- Iden, Randall E., x
- identity politics, presumption and, 78–79
- ignoring the argument, 190
- ignoring the question, 152–153
- illustrations, 86, 108–109
- inapplicability, defense demonstrating, 200–201
- inconsistencies
 - in attacks, 189–190
 - attacks identifying, 196–197
 - pragmatic, 196
 - refutation and, 205
- independent structure. *See* multiple structure
- index numbers, 87
 - measurable index and, 116
- inference, 34–35, 48. *See also* warrants
 - formal logic and, 34–35
 - justification and, 15–16
 - uncertainty and, 15–16
 - validity and, 106
- influence, cause-based warrants and, 119–120, 134
- informal expressions, argumentative speech and, 228
- informal logic, 6, 158–159

- initial assertions, in controversies, 72
 inoculation, arrangement and, 179–180
 institutional regularity, 116
 internal consistency, evaluation of evidence and, 97
 internal deficiencies, attacks identifying, 195–196
 issues
 context, derived from, 162–163
 controversies and, 62–63
 prima facie cases and, 162–164
 resolutions, derived from, 162
 topoi determined by, 163
 universal audience and, 163–164
- Jackson, Sally, 240
 Jacobs, Scott, 240
 Johnson, Ralph H., 170, 180, 208
 Johnson, Wendell, 81
 judging. *See* decision-maker
 justification, 3, 26
 effective reasoning and, 5
 inference and, 15–16
 proof versus, 3, 16
- Kahneman, Daniel, 10
 Kuhn, Thomas, 244–245
- labeling the strategy of the opposing argument, 197
 lay testimony, 125–126
 legal argumentation, 242–243
 cause-based warrants and, 242
 evidence and, 242
 facts and, 242
 literal analogies and, 242
 precedents and, 242
 stare decisis and, 242
 stases in place in, 242–243
 libraries, physical, evidence found in, 94
 linguistic consistency, 209–210, 223
 linguistic intensity, 225
 Lippmann, Walter, 250–251
 literal analogies, 111–112
 legal argumentation and, 242
 precedents as, 112
 logic, 6. *See also* formal logic
 deduction and, 6
 informal, 6
- main claims
 coordinative structure and, 41
 diagramming complex arguments and, 38–45, 48, 51
 multiple structure and, 40, 48
 subordinative structure and, 43
- Marx, Karl, 6
 materials, visual argumentation and, 230
 means-end predictions, 122–123
 measurable index, 116
 memes, 230
 metaphors, 217–219
 method of difference, cause-based warrants and, 120
 method of similarity, cause-based warrants and, 120
 migration, between spheres of argumentation, 235–236, 252
 Mill, John Stuart, 120, 134
 multiple structure, 44, 51, 176
 arrangement and, 177–181
 attacking, 187–188
 diagramming complex arguments and, 40, 48, 53–55
 in exercises, 53–55
 main claims in, 40, 48
 subsidiary claims in, 40, 48
 van Eemeren, Grootendorst, and Snoeck Henkemans on, 40
- narrative arguments, 128–129, 143
 natural presumption, 73–75
 existence of, 75
 existing institutions and, 74–75
 paradoxes and, 74
 necessary conditions, 134
 negation
 dissociation and, 215–216
 self-, 216
 negative cases, 161
 negotiation, 25
 non sequitur, 153
 normal science, revolutionary science versus, 244–245
- objective data, 85–89
 direct observation as, 89
 documents as, 88–89
 examples as, 86
 in exercises, 101–102
 statistics as, 86–88
 tangible objects as, 88–89
 observations
 direct, 89
 physical, 115
 Olbrechts-Tyteca, Lucie, 213–214
 on-balance considerations
 attacks and, 193
 claim selection and, 167–168
 opportunity costs, attacks and, 200
 organizational patterns, for argument order, 180–181
 oxymorons, 215

- pandering, 12, 170
 paradigms, in scientific argumentation, 245
 paradoxes
 natural presumption against, 74
 resolutions of, 121–122
 parallel structure. *See also* multiple structure
 argumentative speech and, 227–228
 as figure of speech, 221
 paraphrased testimony, 126
 percentages, 87
 Perelman, Chaim, 12, 164, 213–214
 personal relationships, 237–240
 personal sphere, 234, 236–240
 agreeing to disagree in, 236–237
 agreement preferred in, 237, 240
 coalescent argumentation in, 238
 conversational dialogue in, 237
 critical discussion in, 237–238
 enthymemes in, 238–240
 in exercises, 252
 politeness conventions in, 237
 shared belief in, 238
 personhood, argumentation bestowing on
 adversary, 20
 persuasion
 ethics of, 20–21
 in exercises, 27–28
 persuasion burden, 76–77
 persuasive definitions, 210–212
 connotation and, 210–211
 denotation and, 210–211
 facts and, 211–212
 public sphere and, 248–249
 philosophical pairs, 214–215
 phoros, figurative analogies and, 113
 photography, 96
 physical observations, 115
 place, stases in, 70–72, 242–243
 Plato, 6–7
 policy claims, 4, 79–80
 business argumentation and, 243
 stases and, 82–83
 topoi and, 68, 82, 163
 value claims and, 66–67
 politeness conventions, 237
 pontificating, 126
 popular culture, argumentation in, 1–2
post hoc fallacies
 attacks and, 192, 195–196
 cause-based warrants and, 124, 141
 Powell, Colin, 88, 95–96
 pragma-dialectics, xi, 7, 159–160
 pragmatic arguments. *See* means-end predictions
 pragmatic inconsistencies, attacking, 196
 precedents, 112, 242
 preconditions for argumentation, 8–11
 agreement and, 9–10
 assent, freely given, as, 9–10
 controversies as, 8–9
 simpler means, lack of, as, 10–11, 19–20
 predictions, 4
 causal generalizations as, 122
 as cause-based warrants, 121–123
 means-end, 122–123
 sign-based warrants and, 117
 slippery slopes as, 123
 pre-emptive moves, 203–204
 presumption. *See also* natural presumption
 artificial, 73–74
 controversies and, 72–79
 decision rules, providing, 73
 identity politics and, 78–79
 initiator of dispute determined by, 72–73
 prima facie cases and, 76
 proof, providing standard of, 73
 question-begging epithets and, 78–79
 resolutions determining, 75–76
 risk and, 76
 strategic value of, 78–79
 strength of, 76–77
 previously established claims, 90
 prima facie cases, 186
 case construction and, 161–164, 182
 in exercises, 182
 issues in, 162–164
 presumption and, 76
 probability statements, 88
 probative force, evidence and, 107
 production burden, 77
 proof. *See also* burden of proof
 justification versus, 3, 16
 presumption providing standard of, 73
 properties, sign-based warrants and, 117
 propositions, 26
 proximate cause. *See* sufficient conditions
 public address, 25
 mediation of, 25
 public decision-making, argumentation
 promoting, 250
 public philosophy, 251
 public sphere, 234–235, 246–249
 commonplaces and, 247
 condensation symbols in, 248
 contemporary, 249
 democracy, importance to, 249–251
 in exercises, 252
 expertise in, 247
 heterogeneity of, 247–248
 persuasive definitions and, 248–249
 warrants in, 247

270

quality, stases in, 70–71, 191
 quasi-logical arguments, 128
 quasi-mathematical arguments, 128
 question-begging epithets, presumption captured by, 78–79
 quoted testimony, 126

rates of change, 88
 ratios, 87
 raw numbers, 86–87
 reasoning
 argumentation as, 1–3
 categorical, 142
 circular, 151, 160
 effective, 5
 underlying, 172–173
 rebuttals, 186, 208, 256–257
 recency. *See* timeliness
 reconstruction of arguments, diagramming as, 49–52
reductio ad absurdum, 204
 reflexive references, argumentative speech and, 228
 refutation, 186, 204–205
 a fortiori arguments as, 204–205
 anticipatory, 179–180
 argument from residues as, 205
 contradictions and, 205
 dilemmas as, 204
 in exercises, 207
 inconsistencies and, 205
 reductio ad absurdum as, 204
 turning the tables as, 204
 relativism, 21–22
 relevance. *See also* fallacies of relevance
 evaluation of evidence and, 97
 evidence selection and, 172
 relevance rule, in critical discussion, 159
 religious argumentation, 241, 245–246
 evidence in, 246
 timeliness and, 246
 reluctant testimony, 92
 repetition, argumentative speech and, 227–228
 replicability
 evidence selection and, 172
 testimony and, 172
 representation, visual argumentation and, 229
 reservations. *See* rebuttals
 residues. *See* argument from residues
 resolutions, 26
 controversies and, 63–64
 debate and, 254–255
 issues derived from, 162
 of paradoxes, 121–122
 presumption determined by, 75–76

Index

resonance, form-based warrants and, 129
 restrained partisanship, as assumption underlying argumentation, 16–17
 retrospective hypotheses, 121
 revolutionary science, normal science versus, 244–245
 rhetoric, ix, 7–8
 Aristotle on, 7–8
 audience and, 8
 as ornamentation, 7
 reality opposed to, 7
 risk
 as assumption underlying argumentation, 18–20
 of being wrong, 18–19
 presumption and, 76
 system of beliefs, modification of, as, 19

salience, argument order and, 179
 satisficing, business argumentation and, 243
 Schattschneider, E. E., 213
 Scholastics (philosophers), 81
 scientific argumentation, 241, 244–245
 affirming the consequent and, 244
 generalizations and, 244
 normal science in, 244–245
 paradigms in, 245
 revolutionary science in, 244–245
 scope of conflict, definition of the situation and, 213
 search engines, 99
 algorithms used by, 93
 evidence found on, 93
 self-defense, argumentation as means of, 26
 self-interest
 ad hominem and, 148
 credibility and, 91–92
 testimony-based warrants and, 127
 self-negation, 216
 self-sealing arguments, 154
 sentences, 222–223
 complex, 223
 compound, 222–223
 simple, 222
 series. *See* subordinative structure
 shared belief, personal sphere and, 238
 shared historical understandings, 90
 shared value judgments, 90
 sign-based warrants, 115–119
 Aristotle on, 117
 correlations as, 119
 essence known by, 117
 in exercises, 131–133
 fallacies and, 140
 fallible versus infallible, 117

- institutional regularity as, 116
 measurable index as, 116
 physical observations as, 115
 predictions and, 117
 properties and, 117
 tests for, 117–119
- signposting, argumentative speech and, 228
- similes, 217–218
- simple arguments, diagramming. *See* diagramming simple arguments
- simple sentences, 222
- simpler means, lack of
 argumentation, as precondition for, 10–11, 19–20
 controversies requiring, 58
- size, visual argumentation and, 230
- slippery slopes
 domino theory as, 123, 147
 as fallacies of clarity, 147
 as predictions, 123
- Snoeck Henkemans, Francisca, 29, 40
- social consensus, 89–91
 commonplaces as, 90
 in exercises, 101–102
 previously established claims as, 90
 shared historical understandings as, 90
 shared value judgments as, 90
 stipulations as, 91
- social media, 85
- spheres of argumentation, 233–249
 in exercises, 251–253
 migrating controversies and, 235–236
 migration among, 235–236, 252
 personal sphere as, 234, 236–240
 public sphere as, 234–235, 246–249
 technical sphere as, 234, 240–246
- standpoints. *See* claims
- stare decisis*, 242
- stases
 assertion and denial, interaction of, and, 70–71
 attacks and, 190–191
 in conjecture, 69, 71
 controversies and, 69–72
 in definition, 69–71
 in exercises, 79–81
 in place, 70–72, 242–243
 policy claims and, 82–83
 as progressive, 71
 in quality, 70–71, 191
- statements, 32–33, 221–223
 analytic, 221–222
 contradictory, 221–222
 synthetic, 221–222
- statistical generalizations, 109
- statistics, 86–88
 central tendency, measures of, as, 87, 103
 correlations measured by, 119
 index numbers as, 87
 percentages as, 87
 probability statements as, 88
 rates of change as, 88
 ratios as, 87
 raw numbers as, 86–87
- Stevenson, Charles L., 210
- stipulations, 91
- strategic imprecision, 223–225, 232
- strategic maneuvering, 177–181
- straw man, 153, 199
- stylistic devices, 217–225
 figures of speech as, 217–221
 linguistic intensity as, 225
 sentences, types of, as, 222–223
 statements, types of, as, 221–223
 strategic imprecision as, 223–225
- subordinative structure, 51, 176
 arrangement and, 176–177
 attacking, 187
 diagramming complex arguments and, 42–46, 48, 53–55
 in exercises, 53–55
 main claims in, 43
 subsidiary claims in, 43
 van Eemeren, Grootendorst, and Snoeck Henkemans on, 43
- subsidiary claims
 coordinative structure and, 41, 47
 diagramming complex arguments and, 38–48, 51
 multiple structure and, 40, 48
 subordinative structure and, 43
- sufficient conditions, 134–135
- synecdoche, 217–218
- synthetic statements, 221–222
- system of beliefs, modification of, 19
- systematization, diagramming as, 50
- tacit knowledge. *See* enthymemes
- tangible objects, 88–89
- taste, expressions of, 59
- tautologies, 215
- technical sphere, 234, 240–246, 250
 business argumentation in, 243
 ethical argumentation in, 245–246
 in exercises, 252
 fields in, 241–246
 legal argumentation in, 242–243
 religious argumentation in, 241, 245–246
 scientific argumentation in, 241, 244–245

272

testimony
 credibility and, 91–92, 96, 125
 eager, 92
 in exercises, 101–102
 expert, 125–126, 172
 lay, 125–126
 paraphrased, 126
 quoted, 126
 reluctant, 92
 replicability and, 172
 testimony-based warrants, 125–127
 in exercises, 133–134
 expert testimony and, 125–126
 fallacies and, 141
 lay testimony and, 125–126
 multiple sources for, 127
 paraphrased testimony and, 126
 pontificating and, 126
 quoted testimony and, 126
 self-interest and, 127
 tests for, 126–127
 timeliness and, 127
 theme, figurative analogies and, 113
 time limitations
 attacks and, 188–189
 claim selection and, 166–167
 debate and, 256
 timeliness
 evaluation of evidence and, 97
 evaluation of internet evidence and, 101
 evidence selection and, 174–175
 religious argumentation and, 246
 testimony-based warrants and, 127
 topical argument order, 179
topoi
 case outline and, 181
 controversies and, 67–68
 definition claims and, 67–68
 in exercises, 79–80
 fact claims and, 67–68
 issues determined by, 163
 policy claims and, 68, 82, 163
 value claims and, 67–68
 Toulmin, Stephen, 29, 36, 51, 208, 233
 track record
 credibility and, 91, 174
 evidence selection and, 174
 triviality
 of controversies, 9, 57, 59–60
 defense demonstrating, 201
 truisms, 222
 turning the tables, 204
 ultimate value, 4
 uncertainty, 4–5

Index

as assumption underlying argumentation,
 13–16, 26
 controversies and, 13–15
 inference and, 15–16
 value and, 4
 underlying reasoning, evidence selection and,
 172–173
 undistributed middle term, 142
 universal audience, 12–13, 163–164
 vagueness, 144
 validity, 30, 104–107
 formal logic and, 104–106, 127, 130–131
 inference and, 106
 in ordinary argumentation, 106–107
 warrants and, 106–130
 value
 comparative, 4
 ultimate, 4
 uncertainty and, 4
 value claims, 66–67, 79–80
 absolute versus comparative, 66, 80
 policy claims and, 66–67
 terminal versus instrumental, 66, 80
topoi and, 67–68
 value judgments
 controversies and, 59
 shared, 90
 van Eemeren, Frans, xi, 29
 context and, 233
 critical discussion and, 159–160, 237–238
 multiple structure and, 40
 pragma-dialectics and, xi, 7, 159–160
 strategic maneuvering and, 177–178
 subordinative structure and, 43
 verbal clutter, argumentative speech and, 228–229
 visual argumentation, 229–230
 characterization and, 230
 color and, 230
 composition and, 230
 iconic images and, 229
 materials and, 230
 memes and, 230
 representation and, 229
 size and, 230
 suggestions for, 229–230
 Walton, Douglas, 158–159
 warrants, 15–16, 35, 48, 106–107. *See also*
 analogy-based warrants; cause-based
 warrants; example-based warrants; form-
 based warrants; inference; sign-based
 warrants; testimony-based warrants
 attacking, 192–193, 207–208
 backing and, 208

Index

273

- challenging, 35–36
- diagramming complex arguments and, 43, 48
- diagramming simple arguments and, 35–38, 51
- in exercises, 52–53
- fallacies, as deficient in, 138
- public sphere and, 247
- rebuttals and, 208
- validity of, 106–130
- Weaver, Richard, 222
- Whately, Richard, 74
- Whitman, Walt, 74
- word order, figures of speech and, 219