

## Index

### A, B

abstract machine, 28, 32, 47-48, 96, 183, 219-221, 245, 260, 268  
affect, 16, 42, 58-59, 71, 78, 150, 174-176, 181, 208-211, 215-216, 255, 270, 313, 335, 347  
arithmetic and logical functions, 253-255  
artificial intelligence (AI), 8, 35-36, 48, 142, 186, 189-202, 205-206, 209, 222, 282, 291, 302, 316  
augmented  
  cognition, 191  
  intelligence, 186, 195-202, 205, 291  
automatic  
  manipulation of symbols, 7, 10, 194, 202, 292  
  symbol manipulation, 290  
biology, 6, 45, 49, 52, 56-57, 67, 124-125, 153-155, 168  
biosphere, 42-43, 68, 73, 121, 134-140, 144, 170, 199

### C

calculability, 8, 27, 32, 36, 120, 128, 132, 151, 180, 208-209, 217-221, 230-237, 270, 296, 312, 343-345  
calculation, 5, 8, 27-28, 32, 43-44, 62, 71, 83-85, 90, 109, 116, 124-128, 131-133, 147, 158, 161-162, 189, 194, 197-202, 206, 210, 229-231, 237, 246, 258, 272, 275, 284-285, 290, 293, 296, 316, 329, 344  
categorization, 34, 61-64, 67, 76-80, 84, 94, 100-104, 151, 167, 182, 210-211, 227-228, 238, 250, 255, 295-296, 300-302, 306-311, 315-317, 320, 327-329, 336, 347  
cloud computing, 128, 272, 280, 286  
collective  
  intelligence, 1, 4, 9-10, 20-24, 32-36, 43-44, 64, 70-72, 75, 80, 84-96, 122-124, 128-130, 133-143, 155, 158, 162-163, 170, 177, 183-198, 202, 235, 242, 269-270, 275, 280, 283, 288-299, 315-317, 323-328, 331, 341, 344, 352

- interpretation game, 135-137, 157, 178, 181-188, 198, 201-207, 267-273, 283, 292-299, 311-315, 318-320, 327-333, 346-349, 351
- complexity, 26, 30, 33, 41, 44, 50-53, 56-58, 63-64, 68-69, 72-73, 81, 91, 123-124, 128, 134-135, 141, 164, 170, 180, 199, 220, 227, 231-236, 264, 268-270, 287, 299-304, 308, 314, 334, 338
- computation, 5, 33, 36, 43, 47, 78, 111, 162, 200-201, 258, 262, 345
- concept, 3, 8-11, 15, 20-21, 29, 40-54, 57, 62, 71, 77, 80, 91, 98-102, 110-111, 114-117, 132, 136-141, 145-152, 155-156, 162, 166, 173-176, 181, 185, 195, 202, 207-216, 219, 224, 228-233, 238-240, 245-246, 251, 255-257, 266, 269-270, 281-282, 294, 304-306, 310, 326-327, 331, 334-338, 343, 346-347, 350
- conceptual machine, 247-251, 257-258, 261, 267, 293
- cosmos, 16, 19, 43-44, 69, 71-73, 134, 147-148, 168-170, 214, 220, 224-226, 232, 272, 294, 342, 344
- creative conversation, 4, 73-75, 89-105, 108-111, 120, 126-127, 132-137, 149, 157-158, 162, 179, 183-188, 191, 196-201, 270-272, 280, 283, 290-293, 296-302, 309-320, 327-341, 350-352
- D, E, F**
- dialectic, 4, 11-13, 19-20, 25-26, 30, 60, 90, 97-101, 118, 173-177, 289-290, 347
- digital medium, 1, 20-21, 32-36, 44, 75, 111-114, 125-133, 136, 149, 154-158, 161-164, 171, 176-177, 180, 183, 186-189, 192-193, 197, 200-202, 209-210, 217-219, 254-255, 258-259, 270, 275-280, 283-293, 297, 300-303, 320-324, 329-331, 341, 344
- distributed calculation, 76, 162, 316
- ecosystem of ideas, 136-137, 150, 154, 158, 183, 207, 297
- emotion, 58, 210, 291, 308, 335
- emptiness, 13, 21, 26, 30, 164
- empty, 17, 26-28, 334-338
- epistemology, 8, 52-54, 59, 150, 223, 242, 307, 331
- explication, 34, 47, 92, 95-101, 105, 124-125, 132-133, 155, 217, 290, 312, 335, 345
- explicit, 9, 31-33, 36, 44, 56, 66, 77, 79, 91, 94-105, 118, 124, 151, 158, 162, 186-188, 197, 200, 205, 209, 213, 216-217, 224, 229, 245-246, 268, 272, 281, 287-293, 297, 302, 307-314, 323, 326, 329-331, 334, 337, 343-346
- function of perception, phenomenal idea, 182, 211, 309-312, 315, 349
- function of thought, noumenal idea, 182, 211, 312-315, 349
- G, H**
- grammar, 11-13, 36, 45, 76, 80, 98, 125, 132, 164, 173-180, 205, 236-242, 250-251, 256
- group structure, transformation  
group, 3, 24, 27, 36, 44, 65, 71-72, 121-122, 179-181, 185, 189, 200-203, 216, 219-229, 259-264, 267-272, 287, 293, 311-315, 329-331, 344, 347
- hermeneutic function, 181- 183, 211, 215, 233, 248, 255, 296, 299, 311-314, 317-321, 336, 350

hermeneutics (tradition, memory, freedom), 1-5, 8, 15-20, 23, 28-30, 34-35, 42, 49-52, 57, 59-64, 71, 76, 85, 89, 93-111, 114, 118, 127-128, 133, 136, 142, 153, 158, 161, 167-170, 173-175, 178, 183, 186-188, 206-207, 227, 231-233, 245, 254, 272, 275-280, 283-286, 289-309, 312-320, 325, 328-333, 336-338, 343-346

human development, 1, 4, 22, 33, 35, 90-91, 105, 113-120, 124-125, 132-133, 138, 143, 156, 162, 184, 187, 191, 199, 273, 283, 297, 323, 326, 332, 350

humanities, 5, 6, 8, 35, 40, 44, 48, 60, 69-70, 113-115, 119-132, 136, 145-146, 150, 186, 196, 202, 205-206, 222-224, 272, 287, 294-296, 305, 310, 316, 323-332, 339, 350-351

Hypercortex, 32-36, 133, 136, 151-155, 158, 164, 176-177, 184-190, 194-201, 204-206, 245, 255, 264, 270-275, 288-300, 303-304, 308, 314-320, 323, 327, 330, 336, 341, 345-352

hypercortical cognition, 187, 275, 291, 313

hypertext, 8, 9, 14, 20, 27, 108, 127-128, 162, 167, 185, 191-194, 219, 232, 264, 271, 278-280, 283, 286, 289, 293, 297, 319, 325, 329, 331, 345

## I

idea, 2, 7, 14, 32, 42, 45-47, 51-53, 62, 89, 104, 109, 119, 129, 132, 146, 150-154, 165, 181, 198, 208-216, 222, 243-245, 248, 255-256, 269-271, 275, 313, 335-336, 345

inexhaustible complexity, 208, 230-233, 271, 326, 352

infomation, 1, 24, 35-37, 40-41, 45, 50-54, 66, 69-70, 100-102, 106, 119, 135, 142, 148, 191, 283, 286, 303, 318

economy, knowledge society (in the common sense), 23, 31-33, 92, 117, 120, 133-143, 146-150, 153, 156-157, 194, 283, 320

Information Economy Metalanguage (IEML), 1-5, 8-11, 14, 19-36, 40, 105-110, 120-122, 125-126, 131-132, 135-136, 150-158, 162-164, 171, 176-189, 194-211, 214-220, 225-226, 229-237, 240-241, 244-248, 251-275, 281, 288-299, 302, 308-309, 312-313, 316-320, 323-336, 339, 343-352

Internet, 21, 32, 97, 104-105, 126-129, 132, 136, 139, 154, 161-162, 184-186, 189-193, 198, 209, 254-255, 278-279, 282-288, 291-292, 296, 301

interoperability, semantic interoperability, 2, 40, 104, 120, 132, 163, 176, 183-184, 207, 218, 259, 270-272, 281, 294-296, 302, 309, 328

## K, L, M

knowledge management, 4, 9-10, 33, 35, 92, 95, 104-105, 113, 117, 143, 162, 183, 186, 191, 218, 269, 272, 286, 294, 299, 320

layers of complexity, 44, 56, 238, 302, 303

linguistic engine, STAR, 26, 180, 202, 247-248, 251, 257-258, 261, 264-267, 288, 293-294, 297, 309, 335, 346

mana, 145-148

media, 6, 9, 16, 20, 34, 71, 87, 90,  
97-102, 108-109, 118, 127-128,  
143, 154-155, 163-165, 169, 177,  
193-195, 199-201, 275, 277, 278,  
285, 301, 326, 337

meme, memetics, 124, 153, 314

### **N, O, P, R**

narrative, 81, 124, 165-168, 173, 182,  
200-201, 289, 296, 299, 307-308,  
315, 332, 336-337, 345, 349-350

natural language, 2, 15, 20-22, 26,  
29, 31, 34, 47, 51, 69, 110-111,  
124, 130-132, 178-185, 188, 200-  
201, 204, 207, 214, 219, 226-229,  
235-239, 241-246, 249-253, 259-  
272, 280-282, 293-294, 297, 301-  
302, 309, 317-319, 330, 335, 343-  
348

neural computation, 79

non-symbolic cognition, 172

noosphere, 44, 67, 68, 139-140, 155

opacity, 1, 280-282, 332, 337-339

paradigm, 29-31, 178-181, 185, 213,  
238, 241-246, 251, 257-259, 264-  
268, 334

percept (component of an idea), 174-  
176, 181, 208-211, 215-216, 255-  
256, 270, 313, 335, 347

perception, 5, 58, 61, 78-79, 99, 152,  
161, 165, 182-183, 211, 289, 295,  
306, 309-317, 336, 347-349

personal knowledge management, 34,  
89, 93-95, 104, 184, 301

pragmatics, 174, 204

radical hermeneutics, 304-308

reflection, reflexivity, 5, 32, 35-36,  
59, 62, 66, 69, 75, 78-80, 162, 187-  
189, 196, 199, 202, 289, 327, 331-  
341

regular language, 24, 27, 202, 223,  
236-238, 261-264, 330, 345

rhetoric, 11-13, 78, 81, 174-176, 205,  
275

### **S**

scientific knowledge (epistemology),  
47, 70, 139, 161, 165, 187, 217,  
227, 231, 271, 332

scientific modeling, 47, 162-163,  
224, 233, 238, 296, 320

semantic

circuit, 2, 27-33, 151, 166, 170,  
180-186, 200-203, 215-216,  
229-232, 238, 241-246, 252,  
256-269, 292-294, 309-313,  
317-321, 328-329, 334, 345-  
348

computation, 111, 247, 257-262

current, 136, 148, 182-185, 203,  
210-212, 215, 233, 255, 263,  
267-272, 308-315, 320, 328,  
347-348

function, 172-179, 255-262, 270-  
272, 293, 296, 316-317

inference, 244, 265-266

information economy based on  
IEML (in the specialized  
sense), 135-137, 145, 148-158,  
270, 295, 299, 321

information unit, 299, 309-317,  
321, 335, 347-350

machine, 178-180, 185-188, 201,  
207, 231, 238, 244-248, 251-  
253, 256-264, 270-272, 275,  
293-296, 299, 308, 317, 327-  
328, 335, 343

sphere, 2-5, 14, 28-36, 40-41, 44,  
65, 68, 72-73, 89, 109-111,  
120-122, 135-137, 148, 151-  
153, 157-158, 164, 171, 176-  
179, 183-189, 194, 197-203,  
207, 210, 214-222, 225-235,  
253, 260-261, 264-266, 267-

273, 287-299, 310, 314, 319-320, 328-330, 335, 339-348, 352

social

- capital, 116-118, 148, 222, 351
- computing, 191, 197-198, 302
- media, 1, 21, 93-94, 97, 100-105, 127, 139, 143, 191-192, 272, 282, 286, 301, 309, 329

symbolic

- cognition, 32-33, 40, 62-63, 66-68, 75-79, 82-85, 114, 120-122, 127-130, 133-134, 137, 144, 149, 162-168, 172-177, 188, 196-197, 201-208, 213, 216-219, 222-226, 231, 234, 246-253, 261, 268-272, 293, 303, 306-310, 316, 326, 331-335, 339-346
- manipulation, 35, 61, 68, 77, 80, 84, 124, 153, 170, 245, 290, 306, 346
- system, 1, 20, 34, 44-46, 51-56, 61-64, 76-77, 82-84, 105, 117, 121-124, 144-145, 155, 163, 168-170, 179, 185, 194-197, 202, 213-214, 218, 224-229, 246-248, 251, 256-261, 264, 275-283, 289, 295, 299-305, 308, 330-336

symmetry, 27, 30, 55, 118, 180, 208, 219-221, 225, 229-230, 234, 259, 291, 338

syntagm, syntagmatic, 29-31, 178-181, 185, 213, 238, 241-246, 251, 257-259, 264-265, 268, 344-346

syntax, syntactic function, 28, 31, 36, 172-180, 262, 266, 330, 343-344

system of coordinates, 2-3, 28, 36, 44, 68, 120-122, 130-133, 164-166, 188, 203, 207, 215-222, 225-234, 237, 260, 268-270, 273, 283, 296, 299, 324, 333, 343

## T, U, W

tacit, 9, 96, 124

text, 3, 21, 29-31, 57, 104-141, 153, 163, 179-180, 214, 235-251, 256-257, 264-266, 304-305, 310, 319, 331, 344-346

textual machine, 8, 247-251, 257-262, 293

thing (in the IEML model), 11-17, 20-26, 30, 46, 61-63, 93-95, 118, 121, 164, 168, 174-177, 180, 209-213, 250, 281, 287, 294, 346-351

transparency/implicit, 5, 9, 26, 79, 94-103, 133, 157, 162, 229, 245-246, 282-289, 344

triplication, 16-19, 26-28, 241, 262, 344

trivium, 11-13, 23, 78, 176, 205

ubiquitous computing, 128, 194, 201, 320

URL, 100, 104, 182-185, 203, 215-216, 255, 270, 286, 309-317, 347-349

USL, 27-31, 179-185, 202-203, 207, 214-216, 229-230, 235-238, 244-246, 255, 261-270, 294, 309-317, 329, 344-349

Web, 9-10, 21, 32-35, 43, 89, 97, 103-105, 108-109, 151-156, 162-163, 183-186, 191-194, 197-198, 203, 209, 255, 270-272, 278-279, 282-302, 309-313, 327-331, 345-347

- of data, 43, 186, 194-198, 209, 282, 287, 301-302, 310, 346

writing, 4, 8-11, 16, 21, 24-26, 32-34, 46, 57, 77, 80-84, 87, 90, 98, 106-110, 128, 140, 154, 162, 167, 172, 180-186, 194, 199, 214, 224, 232, 239, 243, 247, 262, 276-279, 302-305, 308, 319, 323, 329-331,