

Input actions, 6  
 Input quantities, 9  
 Interface, 355  
 Intermediary, 172  
 Internal control, 255  
 Inverse document frequency, 157, 175  
 Inverted file, 214  
 IR system. *See* Information retrieval system  
 IRL. *See* Information retrieval language

## J

Jahoda, G., 35, 50  
 Jarvelin, K., 59, 67, 68, 88  
 Johnson, E. D., 57, 67  
 Jones, J. W., 128, 134  
 Jung, G. S., 246, 258, 281, 315, 316

## K

Kamenoff, N. I., 88  
 Kay, M., 357  
 Kays, D., 175, 199  
 Keen, M., 288, 316, 325, 334  
 Keywords, 100, 105  
 Knowledge based, 340  
 Kochen, M., 50  
 Kolmogorov, A. N., 316  
 Kraft, D. H., 123, 134, 157, 164, 246, 258, 281, 316  
 Kruse, R. L., 221  
 Kucera, H. N., 108, 109, 134  
 Kupiec, J., 343, 344, 356  
 Kwok, K. L., 342, 356

## L

Lakuti, D. G., 266, 315, 319, 320, 324, 325, 334, 338, 357  
 Lancaster, F. W., 35, 38, 50, 64, 65, 67, 69, 88, 113, 129, 131, 132, 134, 135, 161, 164, 168, 170, 186, 199, 246, 258, 281, 316  
 Language, 52, 62  
 analysis, 143  
 artificial. *See* Artificial language  
 creation, 107  
 descriptor. *See* Descriptor language  
 for search, 62  
 natural. *See* Natural language

Language, 52, 62  
 analysis, 143  
 artificial. *See* Artificial language  
 creation, 107  
 descriptor. *See* Descriptor language  
 for search, 62  
 natural. *See* Natural language

nature, 91, 94  
 structure, 91  
 Learning systems, 343  
 Lewis, D. D., 357  
 Lexical component, 92  
 Linked list, 219  
 Lovins, J. B., 144, 146, 164  
 Luh, H. P., 143, 155, 156, 164, 168, 199

## M

Machine translation, 338  
 Macroevaluated objects, 318  
 Magnetic disk, 205  
 March, J., 174, 199  
 Marked document, 175  
 Marked set, 175  
 McCash, W. H., 175, 199  
 McCorduck, P., 336, 357  
 McDermott, D. V., 336, 356  
 McGill, M. J., 62, 67, 70, 88, 109, 124, 134, 138, 147, 157, 158, 159, 164, 165, 262, 316, 340, 357  
 Meadow, C. T., 67, 76, 88, 146, 164, 168, 199, 226, 258  
 Meaning. *See* Information, meaning  
 MEDLARS IR system, 158, 159  
 Mikhailov, A. I., 57, 67  
 Mills, J., 288, 316  
 Milstead, J. L., 163, 164  
 Modeling, 12  
 Moffat, A., 220, 221  
 Monitoring, 19  
 Moody, D. W., 175, 199  
 Mooers, C. N., 99, 101, 102, 110, 113, 134  
 Motion, 7  
 Multiversion IR system, 242

## N

Natural language, 52, 91, 94  
 Natural language processing, 337, 338  
 Negative feedback, 21  
 Nervous system, 30  
 Neural networks, 340, 342  
 Neuron, 31, 342  
 Nilsson, N. J., 336, 356  
 NLP. *See* Natural language processing  
 Noise, 115  
 Nonimportant words. *See* Stop-words

NOT operator, 180  
 Novikov, E. A., 68, 67  
 Psychological state, 35

## O

Object of control, 16  
 Occurrence frequency, 155  
 character, 156  
 descriptor, 156  
 document, 156  
 word, 155

O'Connor, J., 35, 50  
 Ofer, K. D., 122, 134  
 Optimal, 19, 20  
 Optimal control, 20  
 Optimal retrieval, 77  
 Optimal search, 86  
 Optimization, 19  
 OR operator, 121  
 Order preservation property, 293  
 Organized systems, 8  
 Output actions, 6  
 Output of retrieval, 80  
 Output quantities, 9

## P

Paice, C. D., 144, 164  
 Park, T. K., 128, 134  
 Partial parameters, 263  
 Pattern, 31  
 Pedersen, J., 343, 356  
 Performance, 263  
 Pertinent, 128  
 Perturbing actions, 10  
 Pevsner, B. R., 338, 357  
 Phonic component, 92  
 POIN. *See* Problem oriented information need

## P

Pointer, 219  
 Popov, C. B., 312, 313, 316  
 Porter, M. F., 144, 164  
 Positive feedback, 21  
 Potential information, 34  
 Pragmatically justified evaluation, 269  
 Precision, 128  
 Precision step, 128  
 Prefix, 144  
 Price, D. J., 57, 58, 67  
 Primary storage, 204  
 Problem oriented information need, 37

Program control, 17, 18  
 Properties of POIN, 37, 38  
 Psychological state, 35

## Q

Query. *See* Search request  
 Query formulation, 80  
 Quillian, M. R., 340, 357

## R

Raghavan, V. V., 246, 258, 281, 315, 316  
 Random access, 210  
 Random access device, 205  
 Ranging, 126  
 Ranking, 124  
 Recall, 128  
 methods for determining, 279  
 Recall step, 128  
 Receptor, 30  
 Record, 203  
 Relationships between need and query, 38  
 Relative file organization, 210  
 Relevance, 128  
 Relevant neighborhood, 186  
 Retrieval output  
 losses, 130  
 noise in, 130  
 Retrospective search, 193  
 Rickman, J. T., 177, 178, 180, 199, 224, 258  
 Risland, E. L., 343, 356  
 Robertson, S. E., 157, 164, 165  
 Rosenberg, V., 226, 258  
 Rosenbluth, A., 22, 26

## S

Salton, G., 62, 67, 70, 88, 107, 109, 123, 124, 134, 138, 144, 147, 157, 158, 159, 164, 165, 182, 183, 184, 185, 199, 200, 224, 226, 233, 249, 258, 262, 263, 269, 281, 312, 313, 316, 324, 325, 334, 340, 357  
 Saracevic, T., 135, 281, 316  
 Schaffer, F., 174, 199  
 Schamber, L., 48, 50  
 SDI. *See* Selective dissemination of information  
 Search algorithm, 61  
 Search characteristic, 252