

## **Index – Vicous Loops and Pendulums 2<sup>nd</sup> edition.**

Absence of feedback 23 64 73 149 218 271 282 286  
Absolute power 64 73  
Accountability 71 141 150 174 110 221  
Achievement 77 180 269 278  
Actuarial fairness 175  
Adaptation 113 283  
Addiction 82 109  
Adventure 71 105 286  
Advertising 32 75 87 125 165 188 227 271  
Aircraft 266 271  
Alcoholism 108  
Ambulance chasing 225 282  
Anticipation 27 36 135 146 167 191 186 198 207 263 282  
Anti-social behaviour 74 84 218  
Antisocial 74 85  
Anxiety 92 115 241  
Arbitrage 210  
Argument 33 96 135  
Army 24 181 229 186  
Asbestos litigation 229  
Asimov I 257  
Authorities 66 81 128 190 218 229 291  
Auto-control 271  
Automatic 12 39 59 237  
Bad money 174  
Badge of honour 118  
Bailey S 119  
Baker and Henderson 232  
Baker 147 36 140  
Bang-bang control 56  
Bank rate 26 170 206  
Banks 143 168 180 190 196 263  
Banman 115  
Bantock G 129 138  
Bateson G 109 111  
Bath 58  
BBC 73 148 110 205  
Bear market 164 170  
Beneficial loop 10 21 34 63 81 101 119 123 149 170 181 194 266  
Benevolence 80 88 114 167  
Betamax 172 179  
Biofeedback 101 239 241  
Bistable systems 17  
Black Monday 210  
Blood glucose 237  
Bonds 206  
Bonfire 17 38  
Book distribution 265  
Boulding K E 171 190 201  
Bouncers 84 231  
Boxing 51  
Bridge 24 186  
British Association 115 126 134 173 267 284  
Buffet W 123 126  
Bulk buying 53  
Bull market 195 208  
Bureaucracy 26 30 36 41 127 144 166 184 218 230 281  
Butterfly economics 171  
CAD 271  
Call option 212

Capital gain 207  
Car 10 25 71 82 105 188 248 255 273  
Carbon dioxide 245  
Career politicians 286  
Cash flow 142 146  
Central heating 12 56  
Centre of gravity 61  
Chaos 106 201 172 264 272  
Chicago futures market 210  
Child development 49 70 78 106 136  
Child support agency 66  
China 89 120 183  
Civil Service 72 89 125  
Clock 24  
Cochrane P 267  
Cocktail party 46  
Compensation 10 18 54 62 105 154 175 219 227 232 275  
Competition 17 49 97 135 146 165 182 218 259  
Complexity 67 113 138 170 190 207 220 266 287  
Compound interest 110  
Computer aided design 271  
Computer illiteracy 267  
Computer literacy 267  
Computer spam 267  
Computer trading 210  
Computer virus 267  
Confidence 28 49 76 89 98 150 168 190 263 271  
Conflict 51 89 109 136 177 258 285  
Confucius 94  
Conkers 30  
Connectors 117  
Coombs A 111  
Copycat 74 84 116  
Cost 47 66 143 153 173 184 190 110 211 224 229 251 278  
Coupon 206  
Crane 30  
Credit cards 110  
Cricket 48 49  
Criminal Justice and Public Order Act 222  
Criminal 74 117 222 228 282  
Crowd behaviour 43 10 116 172  
Culpaphilia 228  
Curriculum- education 127  
Cycle of deprivation 119  
Cyclist 10 22  
Cyclones 247  
Damping 15 30 33  
Danger 16 41 53 70 96 105 114 138 167 209 224 238 244 252 262 286  
Daniels A 11  
Dasgupta P 122 126  
Decline of companies 72 141 155  
Decline of nations 89 260  
Delay 23 72 96 113 127 150 160 192 197 205 219 249 274 286  
Delayed assessment 127  
Delinquents 64 118  
Democracy 52 64 115 120 285  
Demonstrations 67 109 118  
Desensitize 65  
Detached 66 122  
Developing situations 52 119 155 180 201 283  
Deviation 10 14 72 83 233 284  
Diabetes 202 237  
Diamond J 287

Digital systems 271  
Disability 175 230  
Disaster 34 64 81 108 110 258 286  
Disease 66 202 228 258 291  
Disruptive pupil 130 132  
Distortion 69 84 156 204  
Dominant 37 44 121  
Double bind 109  
Dow Jones 210  
Dropdown list 137  
Drug baron 81  
Drug dealer 83  
Drunk 11 150  
Due diligence 104 196  
Ecology 73 245 262  
Economics 22 52 85 121 143 160 163 184 198 218 230 260  
Economy 26 42 82 145 152 162 180 196 219 250 281 287  
Efficiency issues 36 50 128 141 158 182 260 273  
Efficiency of transfer 159 273 276  
Electroencephalograph 241  
Electromyogram 240  
Element of surprise 77  
Elitist 88  
Elsworth C 73  
Email 118 268 285  
Embarrassment 91 151  
EMG 240 241  
Encapsulation 113  
Energy use 273 283  
Energy 24 33 46 132 262 273 286  
Engineering graduates 156 287  
Engineers 30 50 134 153 180 283  
Euro 200  
Euthanasia 65  
Excessive consumption 283  
Expectations 33 48 87 115 125 153 171 199 211 281  
Explosion 16 37 65 95 258  
Extinction - of incentive 104  
False data 220  
Fashion 25 43 75 116 136 177 186 228 250 283  
Fear 73 84 90 107 109 196 223 229  
Financial systems 178 206  
Finite element analysis 271  
Fire 10 16 21 34 39 56 65 185 225 275  
Fishermen 31 216  
Flexibility 28 149 251  
Fluctuation 15 30 72 198 206  
Fluid resistance 60  
Football 72310 121  
Footpath 61 70 84  
Forced vibrations 186  
Forecasting 27 36 106 141 145 178 110 207 231 263 270  
Forest 34 38 245  
Forgotten evidence 83  
Forgotten lines 91  
Free market 14 159 163 170 203 219 230 263 278  
Freighter management 266  
Fulcrum 30 33  
Future the 52 95 121 167 199 220 253 270 282  
Futures 210 263  
Gain of loop 38 43 10 120 140 169 188 199 250 285  
Gang culture 106 118 223 286  
Gearing 95 134 144 168 196 213 226

Genetically modified foods 284  
Genetics 201 225 284  
Ghouls 121  
Gladwell M 117 126  
Global Positioning System 253  
Golf 49  
Good money 174  
Gosling W 26 27  
Government reports 269  
Government 26 36 53 64 73 83 119 152 165 173 194 201 221 250 269 285  
Governor 13 25 36  
GPS 253  
Graham J 129 139  
Gravity 10 21 23 34 61 244  
Groupthink 65 107 287  
Gynaecologists 225  
Heat exhaustion 235  
Heckler 91 93  
Hedging 210  
Helmsmen 26 27 152  
Hitting bottom 109  
Home ownership 190  
Homeostasis 233 239  
Hooliganism 75 231  
Hot water 56  
Housefire 36 56  
Human rights 74 85 131 218 231 284  
Hunting 25 51 72  
Hurricanes 247 262  
Hutton W 129 178  
Huxley A 135  
Hydraulic system 28 60  
Hype 19 69 271 285  
Hyperthermia 235 239  
Hypoglycaemia 238  
Hypothalamus 233 236  
Hysteresis 46  
Immediacy 13 30 59 71 78 82 120 152 167 184 221 275  
Inadequate feedback 128 177  
Inequality 48 131  
Information amplifier 74  
Information 22 27 53 68 81 93 110 117 137 166 183 198 233 256 263 274  
Insolvent thrifts 168 190  
Insomnia 241  
Insulation 65 99 120 291  
Insulin 236  
Insurance premiums 85 225  
Insurance 85 185 192 201 225 248 282  
Interactive programs 266  
Interdependence 81 287  
Interest rate 152 170 190 206  
Internet 53 118 137 252 267 285  
Investment 36 52 80 101 123 141 160 173 191 195 206 213  
Involvement 77 95 107 130 227  
Irving Janus 111  
Janus I 111  
Jesus 94  
JIT 184 287  
Jude Graham 129  
Judiciary 76 128  
Judo 46  
Juries 225 282  
Just in time 184 287

Kennedy J 54 96  
Kitchen 57  
Knight J 90 97  
Knowledge loop 108  
Kudos 78 85  
Leader 33 87 98 107 158 286  
Learner 11 150  
Legislation and planning 282  
Legislation 52 64 74 84 107 130 158 175 185 201 218 230 263 279  
Legislators 72 128 219 263 282  
Liability insurance 225 228  
Litigation 76 174 185 225 282  
London ambulance case 264  
Loop holes 222  
Lord Justice 79  
Loudspeaker 16 273  
Mafia 81  
Magnification 10 172 213 276  
Malpractice 225 283  
Management level 72  
Mandarin class 89 183  
Market 25 44 53 78 101 112 146 153 189 203 218 263 274  
Marks & Spencer 72 141  
Maslow A H 150  
Matching concept 153 203 273  
Maternal 90  
Maximisation of inequality 49 55 74  
McHughen A 281  
McKinnon A 288  
Meade R 245 262  
Media hype 19 69  
Media 19 52 65 74 116 125 134 188 197 220 231 250 283  
Members of Parliament 66 72 221  
Meter 27 239 241  
Methane 245  
Microelectronics 158 178  
Microphone 16 74 93  
Military aspects 50 76 183  
Mindset 109  
Minimum wage 153 218  
Minority groups 64 120  
Minority issues 10 120  
Misreporting 69  
Modelling 27 59 171 205  
Monopoly 21 36 47 52 88 165 201 218  
Motivation 77 104 122 194 250  
Mugging 76 82  
Murder 71 84  
Muscle control 233  
Nanny state 138 286  
National Health Service 202 228 282  
Negative equity 168  
Negative feedback 10 25  
Negative reinforcement 11  
Negotiation 33 55 65 96 145 154 166 110 276 284  
Net worth 190  
Neuro-feedback 242  
New York Stock Exchange 210  
Newspapers 74  
NHS 202 228 282  
No-hopers 53 79 83 98 114  
Norm 15 102 284  
Nursing homes 66 219 284

NYSE 210  
O'Loughlin J 126  
Obstetricians 225  
Oil crisis 19  
Old age 187 219 259 284  
Old boy network 88  
Older generation 84 112 121 152 175 187 230 273  
Ormerad P 171  
Opinion poll 70 231  
Opt out 113  
Optimisation 274  
Oscillation 11 24 30 72 82 102 112 134 153 186 198 260 275  
Osterholm M 290  
Overheads 53 141 159 269  
Oxygen control 21 34 56 288  
P/E 209  
Paedophilia 71 287  
Pancreas role of 237  
Pandemic 262 287  
Panic 70 91 10 197 208 238 288  
Paranoia 71  
Parkinson C Northcote 149  
Participation 83 115 189 221  
Partnerships 94 261  
Patents 185  
Paternal 90  
Paul Revere 117  
Peer groups 83 99 107 115  
Peer pressure 83 106 115 188  
Pendulum 15 23 60 82 95 102 119 127 149 219 260 284  
Pensions 120 158 173 110 284  
Perceval J 109 111  
Permafrost 247  
Personality 84 87 231  
Pituitary gland 236  
Plowden report 128 138  
Pneumatic system 60  
Political correctness 74 94 284  
Political 53 68 87 125 167 184 110 218  
Population 64 120 135 156 179 218 251 257 283  
Positive behaviour 130  
Positive feedback 10 15  
Positive reinforcement 102 150 157  
Poverty trap 118 203 218 224  
Power and influence 83  
Pressure group 83 120  
Price of perfection 278  
Price to earnings 209  
Prison 77 117  
Private education 107 135 287  
Probability of crime 84  
Production 32 53 104 117 165 184 208 237 258 274  
Professions 26 50 84 128 135 160 180 222 229 282  
Project MAC 265  
Proportional influence 13 37 44 53 83 95 102 144 258 278  
Psychosis 110  
Public speaking 90 241  
Put option 212  
Queue 10 19 197 225 256 265  
Qwerty keyboard 173  
Rachmanism 223  
Radiator 12 56  
Radio 25 62 74 117 225 257 289

Rain forests 245  
Rape 84  
Ratchet effect 88 116 125 283  
Ratcliffe J 91  
Realistic accounting 85 157 162  
Reasonable force 77  
Rebellion 67 99 177  
Recognition 46 130 155  
Reinforcement 64 63 90 95 99 102 201 130 150 243 250  
Religion 65 82 94 99 259 285  
Remoteness 65 219  
Rent (Control of Increases) 1969 Act 19701970223  
Rentier society 178  
Reporting 50 70  
Resources 36 53 66 80 140 182 218 259 283  
Retrospective sanctions 150 221  
Return on funds 190  
Reward 80 115 130 180 203 242  
Rigidity 28 235  
Risk benefit 215  
Risk 71 82 95 114 128 142 167 178 190 201 226 279 286  
Robertson R and Combs A 111  
Rote learning 127  
Rozenberg J 86  
Rumour 50 190 208 263  
Run on banks 190 197  
Runaway behaviour 41 106 232  
Salam A W 190  
Sales 32 53 140 163 172 182 203 270 274  
Sanctions 52 80 85 99 113 131 149 157 174 185 221  
Scoldent list 35 54 91 96 132 146 166 197 201 227 251 258 269 291  
Sea level 245  
Seed farmer 40  
Self-compensation 62  
Self-confidence 43 89 98 112  
Self-correction 99  
Self-effectiveness 115  
Self-esteem 115 120  
Self-fulfilling 263  
Self-limiting 34 63 81 256  
Self-perpetuating 77 135  
Self-regulating 163 165  
Self-reinforcement 64  
Self-righting 14  
Self-supporting 160  
Sensationalism 84 284  
Shaw G B 94 97  
Shipping 11  
Shower 58  
Sigmoid loop 43 258  
Signpost 46 108  
Silent majority 120 287  
Simulation 260 292  
Single parents 119 125  
Skinner B F 101 104 201 138  
Slop in system 154 276  
Smith Adam 163 185  
Snow 57 245  
Snowball 10 34  
Soap box speaker 91  
Social aspects 32 67 78 87 201 122 143 164 180 218 229 259  
Social benefits 122 159 175 225  
Social capital 122 126

Social conventions 118  
Social interaction 94  
Social relations 89  
Social services 83 225 286  
Social unrest 78 117 125 222  
Solvency 168 174 190 192  
Speculators 209  
Staff 30 50 71 129 181 225 264 288  
Start-up companies 140 161  
Start-ups 147 181  
Starving chicken 17 21 51 78 142  
Steam engine 12 25 36  
Stiction 58  
Stitch in time 37 62  
Stock market 25 70 101 164 207 263  
Straitjacket 30 95 149 167  
Stress 25 50 62 129 229 258  
Submarine 27  
Sub-prime liabilities 195  
Subsidies 143 153 194 228 252  
Successful 21 37 50 72 87 115 153 165 260 283  
Suicide bombers 285  
Supermarket 10 70 143 166  
Supervisor 66 238  
Surveillance 82 182  
Swing 23 29 82 119 130 170 186 198 219 275 284  
Switch 30 45 56 137  
Symbiosis 51 55 189  
Tanker 11 27 166  
Taxation 36 119 125 153 169 218 224 281 288  
Teachers 84 99 128 231 275  
Technology 53 67 72 89 112 121 127 135 145 157 174 178 253 263 271 284  
Telephone answering 108 271  
Television 52 62 74 10 114 121 132 178 273  
Temperature 12 19 27 39 56 233 246  
Tennis 48 274  
Terrorists 285  
Thalamus 234  
Thermometer 27  
Thermostat 12 39 56  
Tipping point 21 117 126  
Toast 57  
Toffler A 67 112 129 152 269  
Toilet-roll 59  
Tornadoes 247  
Totalitarian 115  
Tournament ploy 48 56 135  
Trade union 152 218  
Traffic 71 84 250 256  
Transfer of information 275  
Transport 122 143 166 248 288  
Trauma 79 225 229  
Tsunami 23  
Turney J 278  
Typhoons 247  
Undamped 30 102  
Unemployment 113 122 152 168 225  
Unequal opportunities 135  
Unfairness 50 90 177 184  
Unrest 68 79 117 125 222  
Unruly pupils 131  
Unstable system 25 61 209 235 237 266  
Urban renewal 67



US department of agriculture 278  
Vandalism 231 248  
Verhulot P F 258  
VHS 172 179  
Vicarious existence 121 137  
Vicious 16 34 108 116 110 248  
Vickers G 67 112 136  
Victim 66 76 10 108 183 197 232 285  
Video 75 82 93 116 172 179  
Vigilance 130 221  
Vigilantes 78  
Virtual reality 121  
Walker S 11  
War 51 89 94 121 183 258 285  
Warren Buffett 123 126  
Waves 186 239 244  
Web 286  
Welfare 67 119 149 199 223  
Wisdom 114 263  
Wise David 173  
Witnesses 78 229  
Worker performance 102  
Wragg E C 130  
Yacht 15 30 273  
Yield 41 110 170 206 284  
Young T R 111  
Youth club 87