Subject Index—Volume 45

Accident effects, escalation of, 237 Adaptability, urban transportation planning process and, 111 Africa, technological assessment and, 47 Age, telecommuting and, 285 Age of Light, 109 Alaska Wednesday Roundtable, 212 Amateurs, flawed forecasts and, 307 American life, transformation of, 219 Antimaterialism, 106 Ark experiment, 218 Armed forces, technological assessment and, 47 Asia, technological assessment and, 47 Australia, disaster management and, 119 Bhopal crisis, lessons from, 237 Bibliometrics, federal research impact evaluation and, 189 Borderless global market, innovation diffusion in, 221 Bottom-up approach technological development in Korea and, 31 transition from hierarchy and, 210 Brazil, technology futures in, 1 Buddhism, 104 Business strategies, in developing countries, 151 California Silicon Valley and, 313 telecommuting frequency and impacts for state employees, 275 Canada, futures movement in, 217 Capability development, integration of business and technology strategies and, 151 Capital intensity, North Sea oil development and, 169 Central planning, transition from hierarchy and, 207 Centralized decision making, North Sea oil development and, 169 Children, telecommuting and, 275 Chrestomathy, of flawed forecasts, 307 Collaborative synergy, leadership encourages, 208 Committment stage, technological development in Korea and, 31 Communications technology, mastery over, 47 Community development, in Japan, 79 Community participation, models for, 212

Compassion, 105, 211 Concentrated expertise, North Sea oil development and, 169 Conflicting perspectives, 212 Conflict resolution, 105 Consensus stage, technological development in Korea and, 31 Contingency-based policy, disaster management and, 119 Contradictions, industrial crises and, 237 Coordination stage, technological development in Korea and, 31 Corporate executives, in management of economic infrastructure, 208 Corruption, 212 Cost-benefit analysis, federal research impact evaluation and, 189 Cost overruns, North Sea oil development and, 169 Customer-support centers, 209 Decentralized market systems, 208 Decision makers, systems analysis and, 299 Demand-pull phenomenon, 93 Democratization of belief, 106 Demographic variables, telecommuting and, 275 Denial, flawed forecasts and, 308 Deregulation, integration of business and technology strategies and, 151 **Developing countries** integrating business and technology strategies in, 151 technology assessment and, 63 Development delays, North Sea oil development and, 169 Development flower, institutions and methods, 47 Dialogue, effective systems analysis work and, 299 Diffusion in borderless global market, 231 of industrial robots, 255 Disaster management, as contingent meta-policy analysis, 119 Ecofeminism, 110

Ecology, 106 Egocentrism, 212 Electronic byways,rural development through telecommunications and, 213 Employment, industrial robots and, 255 Enterprise level, technological innovation planning and, 1 Entrepreneurship, 209, 313 Environmental attitudes, technology assessment in developing countries and, 63 Epistemological types, heterogeneity and, 94 Ethics systems analysis and, 299 technology assessment in developing countries and, 63 Euro America, technology assessment and, 63 European Community, 1992 unification of, 221 Expert systems, disaster management and, 119 Ex-post research assessment, federal research impact evaluation and, 189 External enterprises, 208 Exxon Valdez crisis, lessons from, 237 Facility size and permanence, urban transportation planning process and, 111 Fanaticism, 212 Federal government, disaster management and, 119 Federal Republic of Germany, industrial robots and, 255 Federal research impact evaluation, quantitative and qualitative, 189 Fiber optic networks, 220 Fishing, off Canadian Atlantic coast, 217 Flat structures, 207 Flexibility North Sea oil development and, 169 urban transportation planning process and, 111 Flexible organizations, 207 Focal points, participatory technology assessment and, 47 Forecasts, flawed, 307 Foresight activities, technological development in Korea and, 31 Free enterprise, inside large organizations, 208 Free markets, future of, 211 Fundamental technologies, Korea and, 31 Futures studies flawed forecasts and, 307 futures orientation and, 104 looking back on future, 217 national development and, 1

transition to future, 211 Gatekeepers, technological, 47 Gender technology assessment in developing countries and, 63 telecommuting and, 275 Global marketplace innovation diffusion in, 221 integration of business and technology strategies and, 151 transition from hierarchy and, 207 Global policy, advice and planning capabilities, 119 Global thinking, 105 Global village, 106 Gompertz curves, with seasonality, 287 Government policy, community development in Japan and, 79 Greed, 212 Greenhouse effect, 119 G-type epistemological type, heterogeneity and, 95 HAN project, technological development and, 31 Hazardous systems, managing, 237 Health and healing, 106 Heterogeneity, interwoven and interactive, 93 Hierarchy, transition from, 207 History in action, 213 Holism, 105 Human contradictions, industrial crises and, 237 Image leadership, integration of business and technology strategies and, 151 Independent oil companies, North Sea oil development and, 169 Indigenous technology capability, Korea and, 31 Individual perception of risk, industrial crises and, 237 Industrial age, Japan and, 79 Industrial crises, technological and organizational roots of, 237 Information age Japanese community development in, 79 new form of organization evolving for, 207 Infrastructural requirements, North Sea oil development and, 169 Innovation

borderless global market and, 221 technology futures and, 1

Institutional arrangements, participatory technology assessment and, 47 Institutional conflict, disaster management and, 119 Integration, of business and technology strategies, 151 Interactive heterogeneity, in 21st century, 93 Interconnection of societies, 106 Internal customers, 207 Internal enterprise units, organization composed of, 208 Internal LBOs, 207 Internal markets, 207 Interwoven heterogeneity, in 21st century, 93 Intrapreneuring, 207 Intuition, 104 Island-state survival, water resource planning and, 119 I-type epistemological type, heterogeneity and, 95

Japan, new-thinking economic paradigm and, 79

Key technologies, Korea and, 31 Knowledge, expressions of, 189 Korea, HAN project and, 31

Lack of imagination, flawed forecasts and, 309 Latin America, technological assessment and, 47 Laws of the macrocosm and microcosm, 219 Lead time, North Sea oil development and, 169 Lean management, 207 Legislative process, future of, 211 Leontief-Duchin-Szyld dynamic input-output model, improved, industrial robot effect on employment and, 255 Life after television, 219 beyond economics, 109 Limited expertise, flawed forecasts and, 309 Local government, disaster management and, 119 Local knowledge systems, technology assessment in developing countries and, 63 Massachusetts Route 128, as technopolis, 313

Massachusetts Roue 128, as technopolis, 31 Mechanical extrapolations of trends, flawed forecasts and, 310 Media, transformation of, 219 Mediation, 105 Meditation, 104 Me-now syndrome, 212 Meta-policy analysis, disaster management as contingent, 119 Metastructures, market, 210 Misplaced expertise, flawed forecasts and, 309 Motherhood recommendation, 214 Multinational oil companies, North Sea oil development and, 169 Mystical experience, 104 National level development in Brazil and, 1 technological development in Korea and, 31 technological innovation planning and, 1 Neglect of constraints, flawed forecasts and, 310 Negotiation, 105 Networks, 207 New Age concepts, 103 New-thinking economic paradigm, community development in Japan and, 79 Niche, integration of business and technology strategies and, 151 Nonprofit organizations, transformation of, 131 North Sea oil, inflexibility in development of, 169 Ohne-mich-ism, 93 Oil fields, inflexibility in development of, 169 Operations level, technological innovation planning and, I Optimism, excessive, flawed forecasts and, 310 Organizational contradictions, industrial crises and, 237

Organizational economy, 208

Organizational strategies, transition to future and, 211

Overestimation, flawed forecasts and, 308

Overspecification, flawed forecasts and, 310

Pacific Basin region, water resource planning and, 119

Pantheism, 106

Paradigms in progress, 109

Participatory technology assessment, institutions and methods, 47

Partnership, systems analysis and, 299 Pasadena project, 212 Peace, 105 Peer review, federal research impact evaluation and, 189 Personal computers, telecommuting and, 275 Personal strategies, transition to future and, 211 Population growth, in poorest countries, 217 Post-perestroika migration, from east to west, 93 Preconditions, industrial crises and, 237 Prices integration of business and technology strategies and, 151 North Sea oil development and, 169 Private sector enterprises integration of business and technology strategies and, 151 transformation of, 131 Privatization, integration of business and technology strategies and, 151 Problem situations, systems analysis and, 299 Product-oriented technologies, Korea and, 31 Profit centers, 209 Prophecy, 105 Public organizations, transformation of, 131 Public sector enterprises developing high-tech centers and, 313 integration of business and technology strategies and, 151 R & D, technological development in Korea and, 31 Reengineering, 207 Research review, federal research impact evaluation and, 189 Research selection, federal research impact evaluation and, 189 Resistance to change, 212 Risk, industrial crises and, 237 Robots, industrial, 255 Rural development, through telecommunications, 213 Science and technology policies Korea and, 31 national development and, 1 Seasons, Gompertz curves and, 287 Sectoral level, technological innovation planning and, 1 Secular religion, 106

- Sensorium, 105
- Silicon Valley, as technopolis, 313

Simple transfer of concepts, technology assessment and, 63 Skill requirements, industrial robots and, 255 Social factors, technology assessment in developing countries and, 63 Social organizations, technology assessment in developing countries and, 63 Social Security system, future of, 211 Special task forces, technological development in Korea and, 31 Spiritual awareness, 104 State government, disaster management and, 119 State policies, for rural development through telecommunications, 213 Strategic management, in transformation of public and third sector organizations, 131 Strategy progression path, integration of business and technology strategies and, 151 S-type epistemological type, heterogeneity and, 95 Subordination, of technology to finalities, 47 Success, new measures of, 211 Supraorganizational sense of mission, North Sea oil development and, 169 Systemic contradictions, industrial crises and, 237 Systems analysis, as dialogue, 299 Taxes, future of, 211 Technological contradictions, industrial crises and, 237 Technology assessment developing countries and, 63 participatory, 47 Technology exploiter, integration of business

and technology strategies and, 151 Technology extender, integration of business and technology strategies and, 151

Technology follower, integration of business and technology strategies and, 151

Technology futures, national development and, 1

Technology leader, integration of business and technology strategies and, 151

Technology strategies, in developing countries, 151

Technopolis, emergence of, 313

Telecommunications, state policies for rural development through, 213

Telecommuting, by State of California employees, 275 Telecomputers, 219 Telefuture, 219 Television, life after, 219 Tender-minded people, 103 Third sector organizations, transformation of, 131 Third World nations, technological assessment and, 47 Top-down approach, technological development in Korea and, 31 Tough-minded people, 103 Transformation of media and American life, 219 need for, 103 of public and third sector organizations, 131 Transition, to future, 211 Tripartate-dialogue concept, systems analysis and, 299

Uncertainty, in urban transportation planning process, 111 Underestimation, flawed forecasts and, 308 Unexamined assumptions, flawed forecasts and, 308 Unification, market penetration and, 221 Unit size, North Sea oil development and, 169 Urban transportation, policy and planning, 111 Value, integration of business and technology strategies and, 151 Vicious circles of behavior, industrial crises and, 237 Videocassette recorders, diffusion of, 221 Virtual corporations, 207 Water resource planning, disaster management and, 119 Weapons technology, mastery over, 47 Western nations, technology assessment and, 63