THE PRESIDENT'S ADDRESS TO
THE SYSTEM DYNAMICS SOCIETY
July 1996

John Morecroft
IMPORTANT MILESTONES IN 1996

40 Year Retrospective
1956 Jay Forrester Moves to Sloan bringing the new ideas of feedback systems and computer simulation to the design of business and social enterprises, discovering the versatility of feedback and simulation, establishing and disseminating the discipline of system dynamics

25th Anniversary of System Dynamics in the UK
1971 Geoff Coyle forms the System Dynamics Group at Bradford University in England, bringing together the first critical mass of faculty and students in system dynamics outside North America

16 years of the System Dynamics Society
1980 David Andersen brings together friends at the MIT faculty club overlooking the Charles River to share his vision of a new society

A Personal Anniversary - 10 years at London Business School since MIT

Ist birthday of two new Society Chapters:
Japan (Professor Shimada) and Italy (Habib Sedehi)
A DECADE OF DEVELOPMENTS  1986 TO 1996
From System Dynamics to Learning Organisations and Back Again

The CEO as Designer
the vision of the senior manager as model builder, simulator and enterprise designer

Feedback Systems Thinking as the Fifth Discipline
a shift of mind - seeing interrelationships and processes of change, appreciating system dynamics modelling as a discipline of the Learning Organisation, intimately linked to team learning, mental models, shared vision and personal mastery

Misperceptions of Feedback - Structure and Dysfunctional Behaviour
behavioural decisionmaking, bounded rationality and 'invisible' forces that shape outcomes of well-intentioned policy, communicating our discipline seriously to academic peers

Modelling for Learning
mapping and qualitative system dynamics, microworlds and gaming simulation, model-supported case studies, transitional objects (and processes) for individual and team learning

Powerful Graphical Modelling and Simulation Software
THE GROWTH AND DISSEMINATION ENGINES OF SYSTEM DYNAMICS
Capitalising on a Decade of Development

ACADEMIC BASE
institutions
faculty teams
degree level courses
PhD programmes

COMMERCIAL BASE
software developers
microworld developers
distributors
training providers
consultants

THE 'MARKET'
EVIDENCE THAT GROWTH AND DISSEMINATION ENGINES CAN WORK

MIT and 'East Coast Network' - Jay Forrester's Entrepreneurs
MIT system dynamics group - John Sterman
Sterman protegees - Anjali Sastry, Michigan
- Nelson Repenning, MIT
MIT Organisational Learning Centre - Peter Senge, Dan Kim
Commercial R&D (practice research & software developers) -
High Performance Systems, Ventana
Specialist niche consultants and trainers - Pugh Roberts, GKA, Innovation Associates
Dissemination specialists - Pegasus Communications

History and Experience of the Bradford group under Geoff Coyle

Bergen Network - Paal Davidsen, Magne Myrtveit
Bergen European Masters degree in system dynamics
ERASMUS European exchange programme
Modelldata and Powersim
MANAGING DISSEMINATION
Role Identity, Competition and Collaboration

ACADEMIC BASE
- institutions
- faculty teams
- degree level courses
- PhD programmes

COMMERCIAL BASE
- software developers
- microworld developers
- distributors
- training providers
- consultants
ACADEMIC BASE

institutions -
norms for 'recognised' academic discipline

faculty teams -
critical mass, publications, funding, 'integration'

degree level courses -
transferrable core knowledge, attractive content

PhD programmes -
faculty champions, funding, research projects
CHALLENGES - LOOKING INSIDE THE COMMERCIAL BASE
The Players

COMMERCIAL BASE

software developers -
proliferation of powerful graphic packages

microworld developers -
interface design and training

distributors -
combining distribution with training and support

training providers -
systems thinking or system dynamics?

consultants -
proliferation of companies selling mix of 'hard' and 'soft'
BUILDING BLOCKS FOR THE FUTURE
Europe as a Microcosm

London
PhD, MSc, MBA
incorporating
System Dynamics

Bergen
European MSc
in System
Dynamics

Commercial R&D
Practice and Software Development Companies

Consultants
Major Companies

Other European Universities
Bogazici, Leeds, Mannheim, Nijmegen
Plymouth, RMCS, Sevilla, Stuttgart
and more ....

System Dynamics Society

Consultants
Specialist Niche Companies
INITIATIVES AND RESEARCH - FORGING THE FUTURE

A New Home for Society Administration
the search for a new professionally funded office - President's request for proposals
building on a generous history of volunteer administration by Julie Pugh

A New Image - Some Tangible Steps
virtual proceedings - WWW site with complete conference information
proactive growth of the journal as premier quality publication
broader geographical representation on the Policy Council
extra annual meeting of the Policy Council to be held in November in Europe
VP member and chapter activities - leverage from new chapters

Research - Modelling for the 'Living Company' and the Learning Society
scenario modelling and the dynamics of strategy
organisational dynamics and change programmes
computational organisational theory
non-linear dynamics
research and development in modelling methods and software design
microworld design and the measurement of learning
modelling for learning and group decision support
K-12 educational projects
VIRTUAL PROCEEDINGS

1996 An Experiment (launched by George Richardson and John Sterman)
WWW site with complete conference information including call for papers, registration form, session schedule, list of authors etc.
voluntary supplement to printed proceedings
broad geographic and institutional representation
nations: China, Croatia, Germany, Italy, Korea, Netherlands, Norway, Singapore, Spain, UK, USA
institutions: academic, corporate, personal author pages
links to full papers, models, related work on authors' servers

1997 and Beyond
web becomes cheaper, more widely accessible
virtual proceedings are main record of conference
one page abstracts are basis of paper acceptance and will be printed as a guide to the conference
Society administrative office maintains server, updates contents
future features: searchable index (by author, title, content), email links to all authors, links to other SD related sites (e.g. SD Society page), cumulative record of conferences
RESEARCH AND LINKS TO OTHER DISCIPLINES
The Need for Communication and Identity

RESEARCH THEME
scenario modelling and the dynamics of strategy
organisational dynamics and change programmes
(part of) computational organisational theory
(part of) non-linear dynamics
R & D in modelling methods and software design
microworld design and measurement of learning
modelling for learning and group decision support
K - 12 educational projects

RELATED DISCIPLINES
strategic management, economics & dec’n sci
operations management and org behaviour
organisational behaviour and strategic management
decision sciences and applied mathematics
decision sciences and computer science
computer science, educational & cognitive psychology
soft OR and strategic management
educational and cognitive psychology

Opportunities and Challenges in Future Research
many established disciplines are hungry for dynamic theories and simulation
need to communicate our discipline through academic peer groups with high
quality publications
a discipline not a technique
need for System Dynamics Society to maintain our shared identity and to
nurture the discipline