To Main Proceedings Document

THE EVOLVING DISCIPLINE OF SYSTEM DYNAMICS

International System Dynamics Conference

Bergen, Norway

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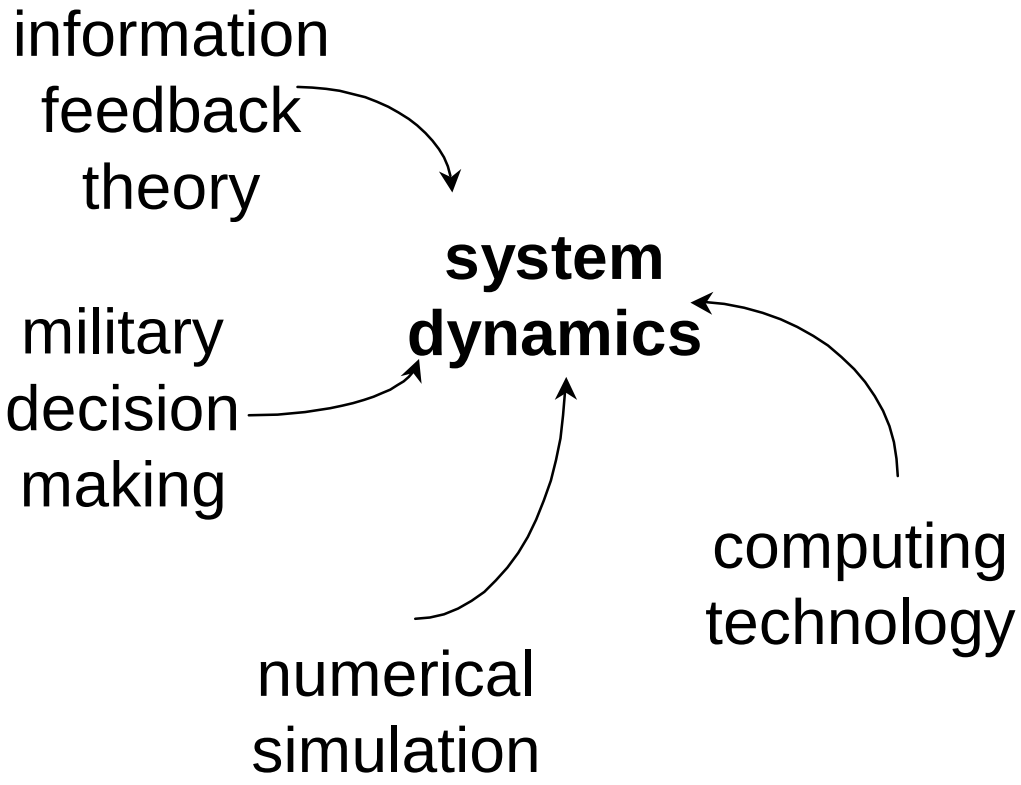
John Morecroft London Business School

SYSTEM DYNAMICS - ORIGINAL FOUNDATIONS
Visual Modelling and Simulation of Purposive Information Feedback Systems



NEW IDEAS THAT HAVE ENTERED THE FIELD

behavioural decisionmaking / bounded rationality

misperceptions of feedback in dynamic decisionmaking

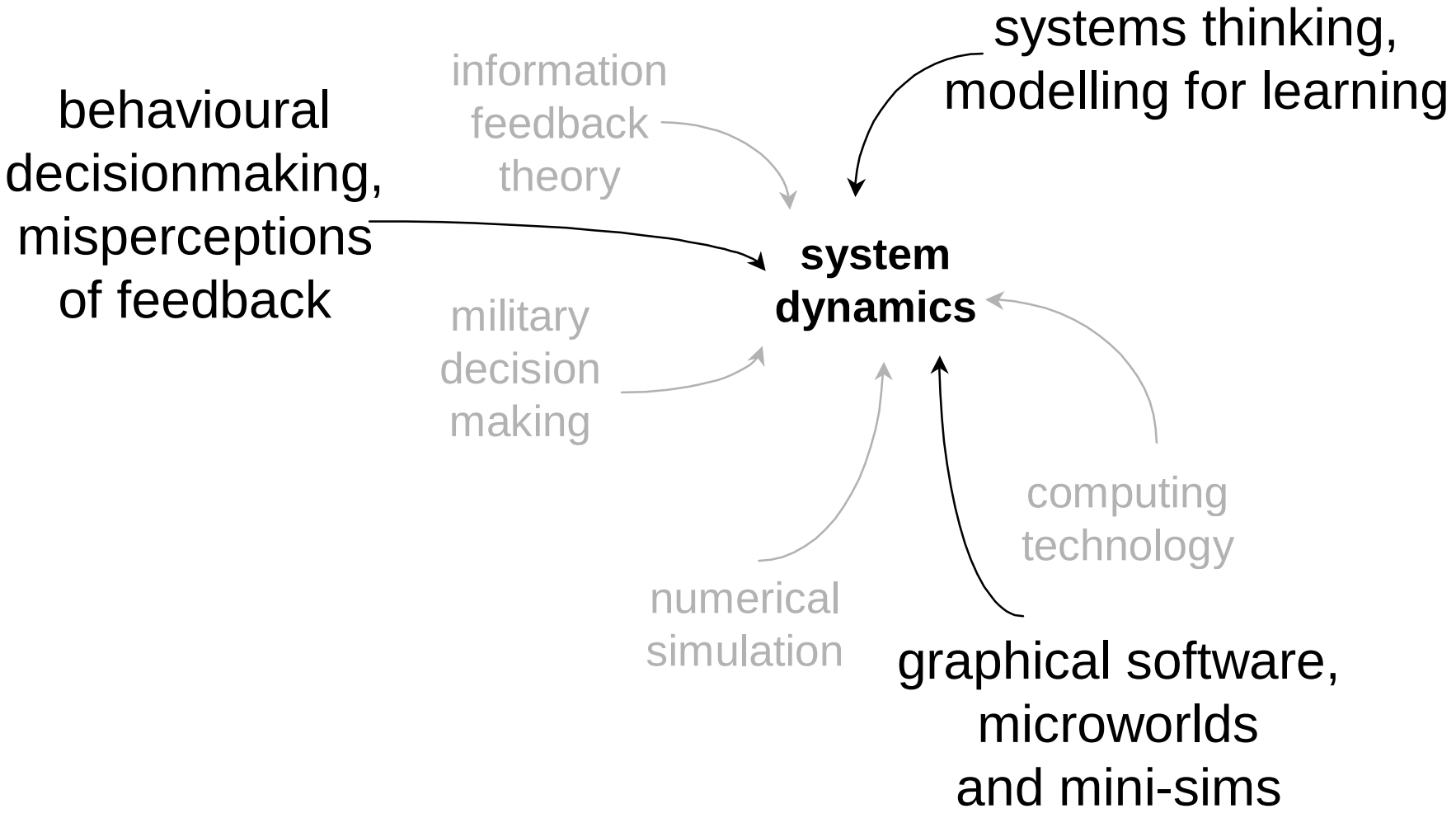
feedback systems thinking and the disciplines of the learning organisation

modelling for learning

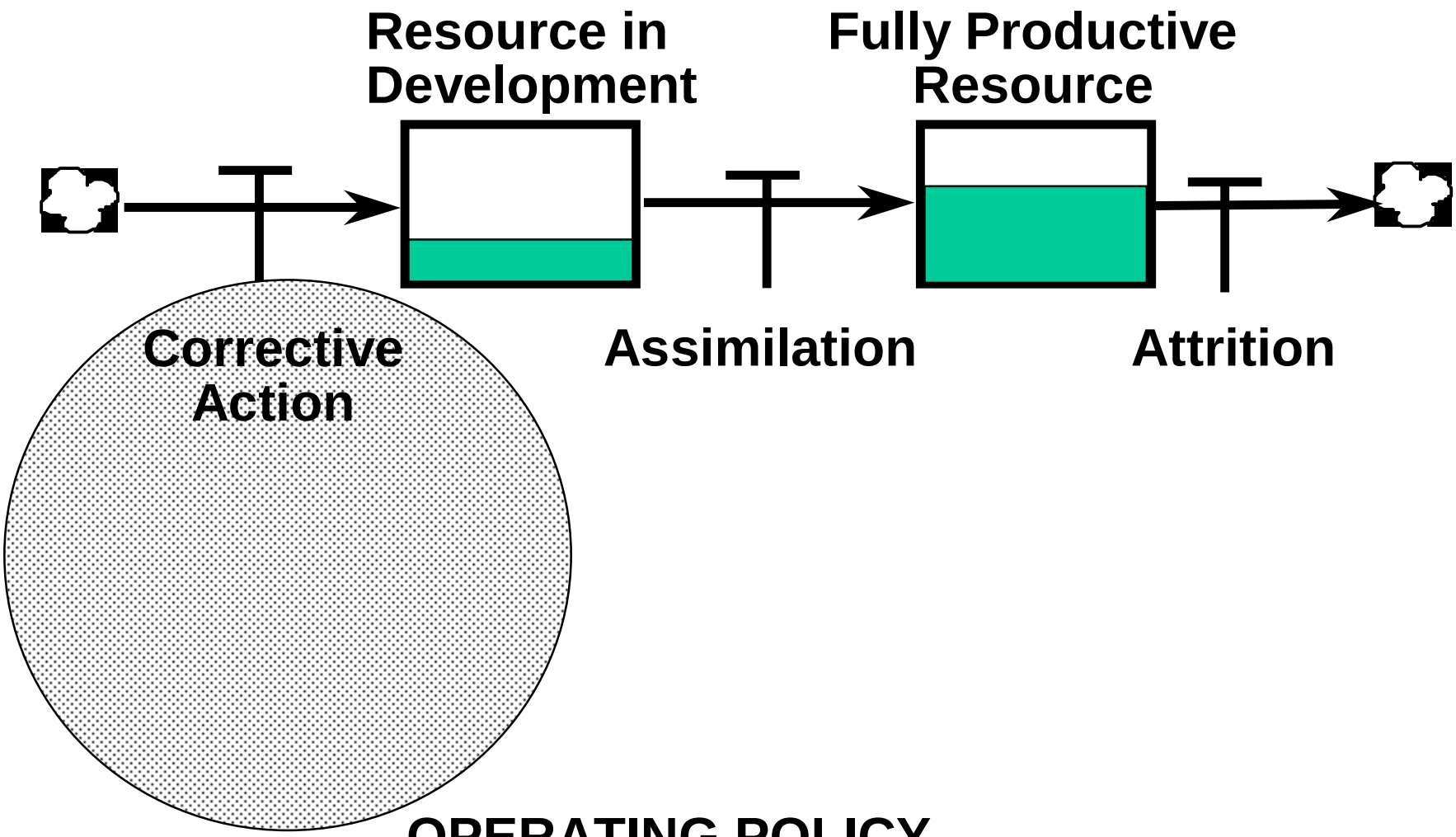
graphical modelling software for visualisation

microworlds, management flight simulators and mini-sims

SYSTEM DYNAMICS TODAY



POWER OF INFORMATION FEEDBACK VIEW
Portraying Purposive Behaviour in Organisations



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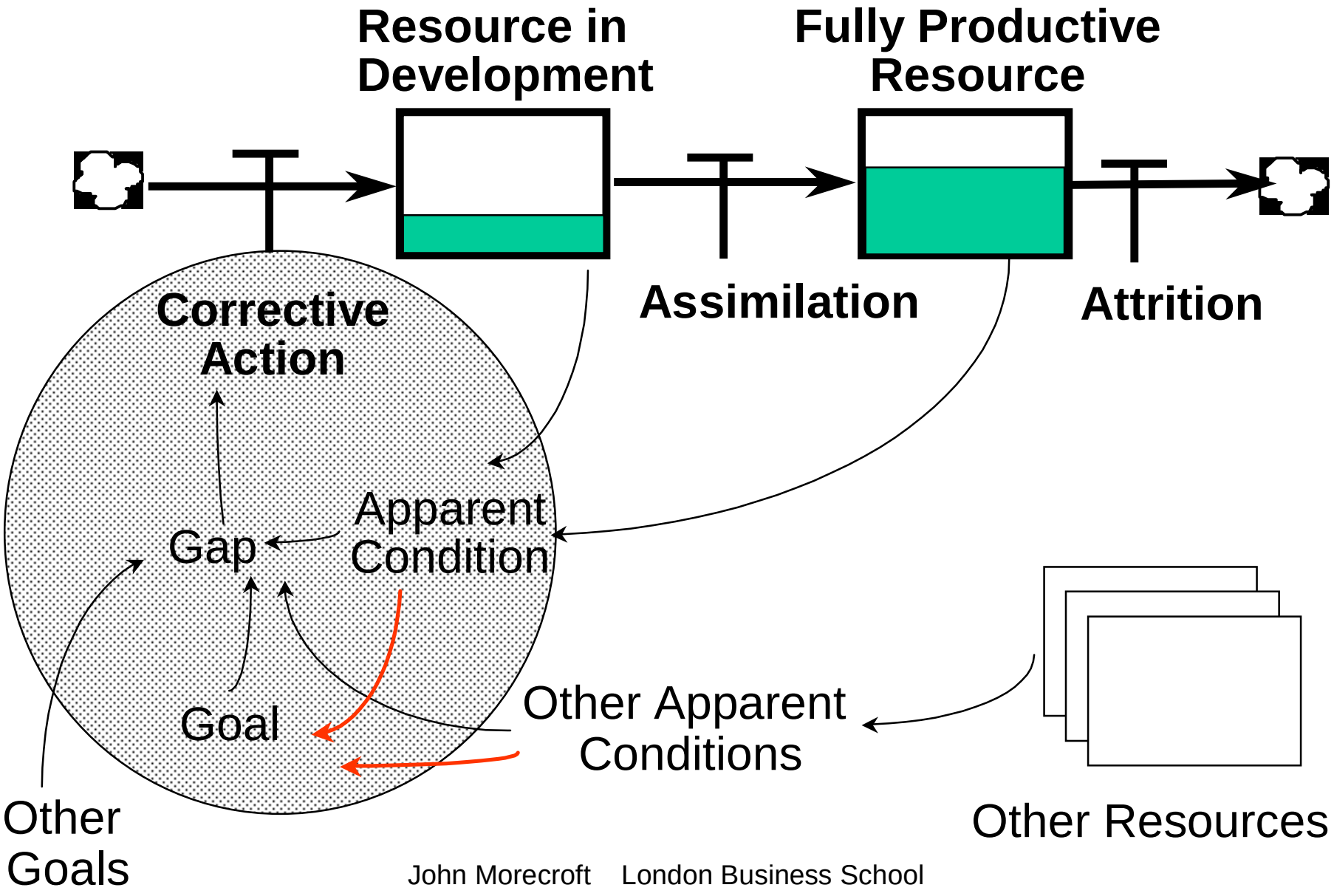
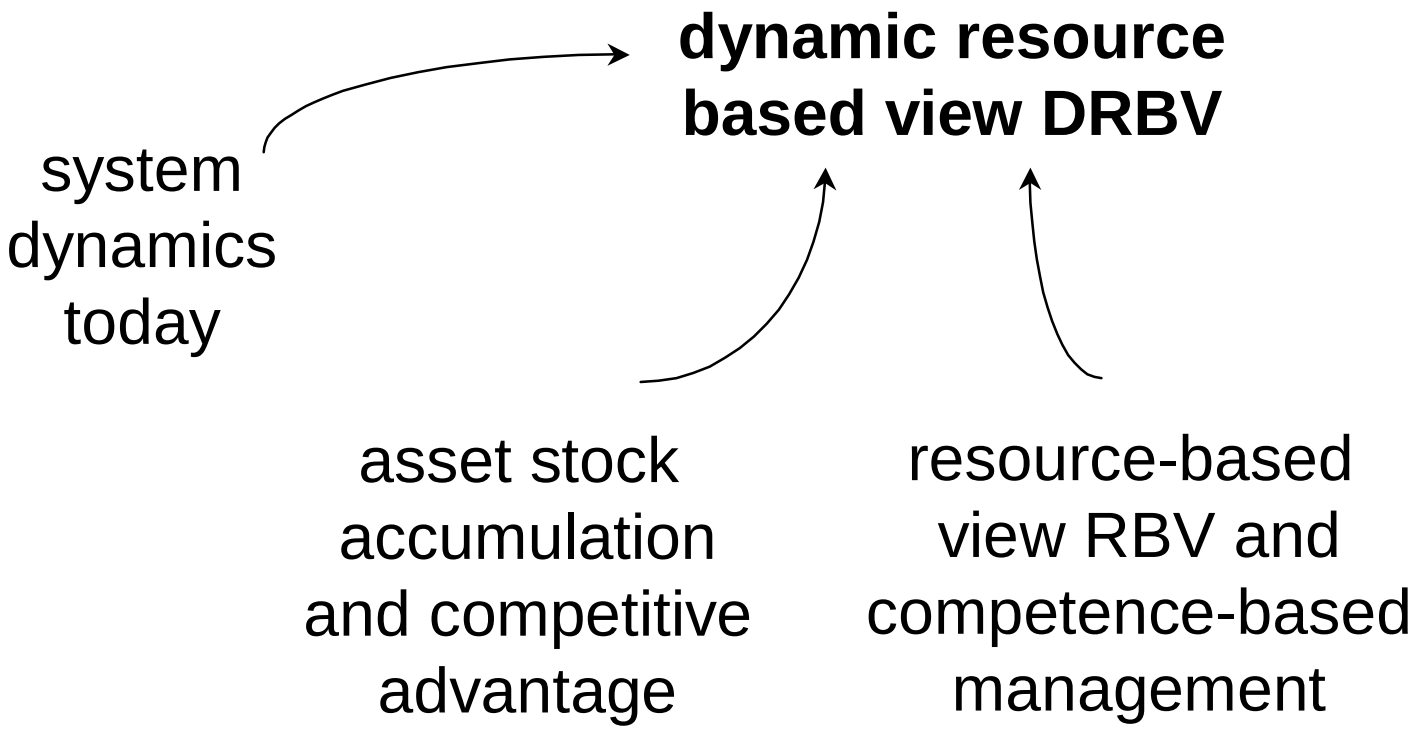
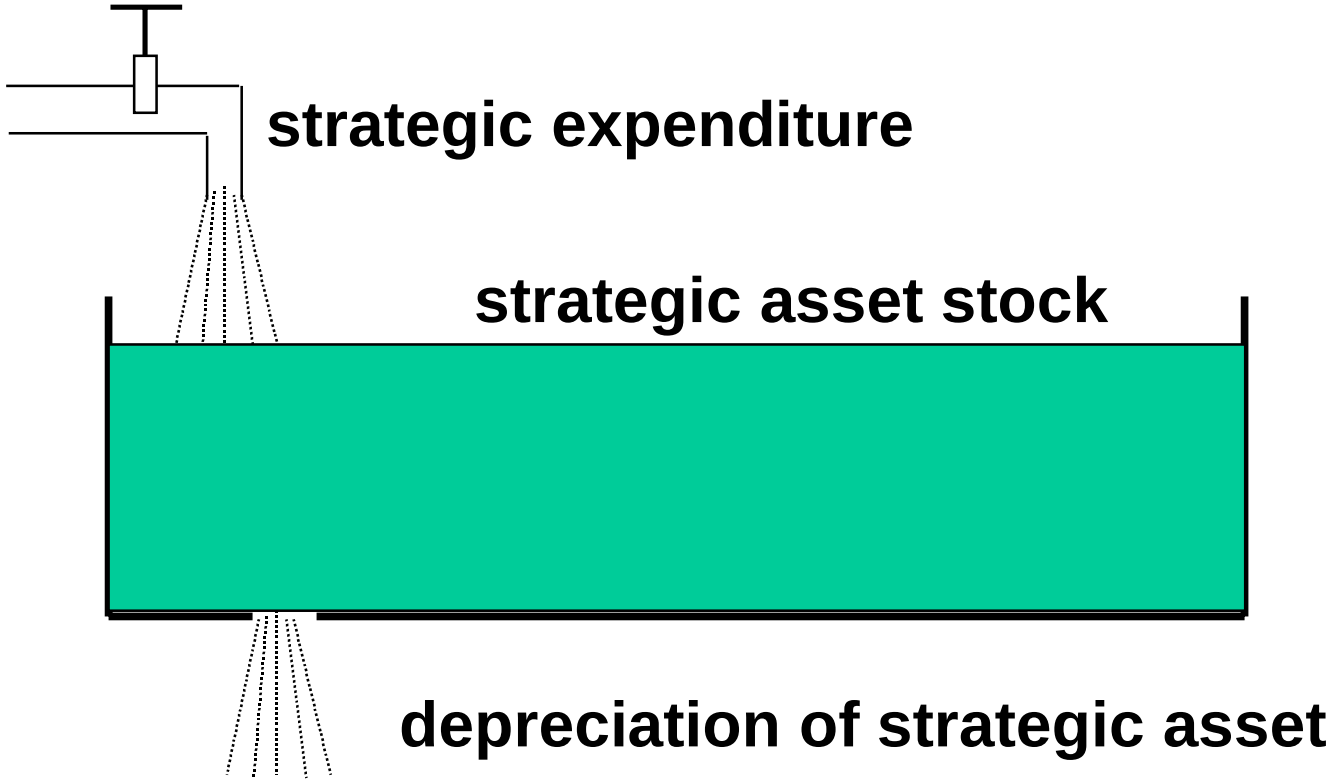


FOUNDATIONS OF A "DYNAMIC RESOURCE-BASED VIEW" OF STRATEGY

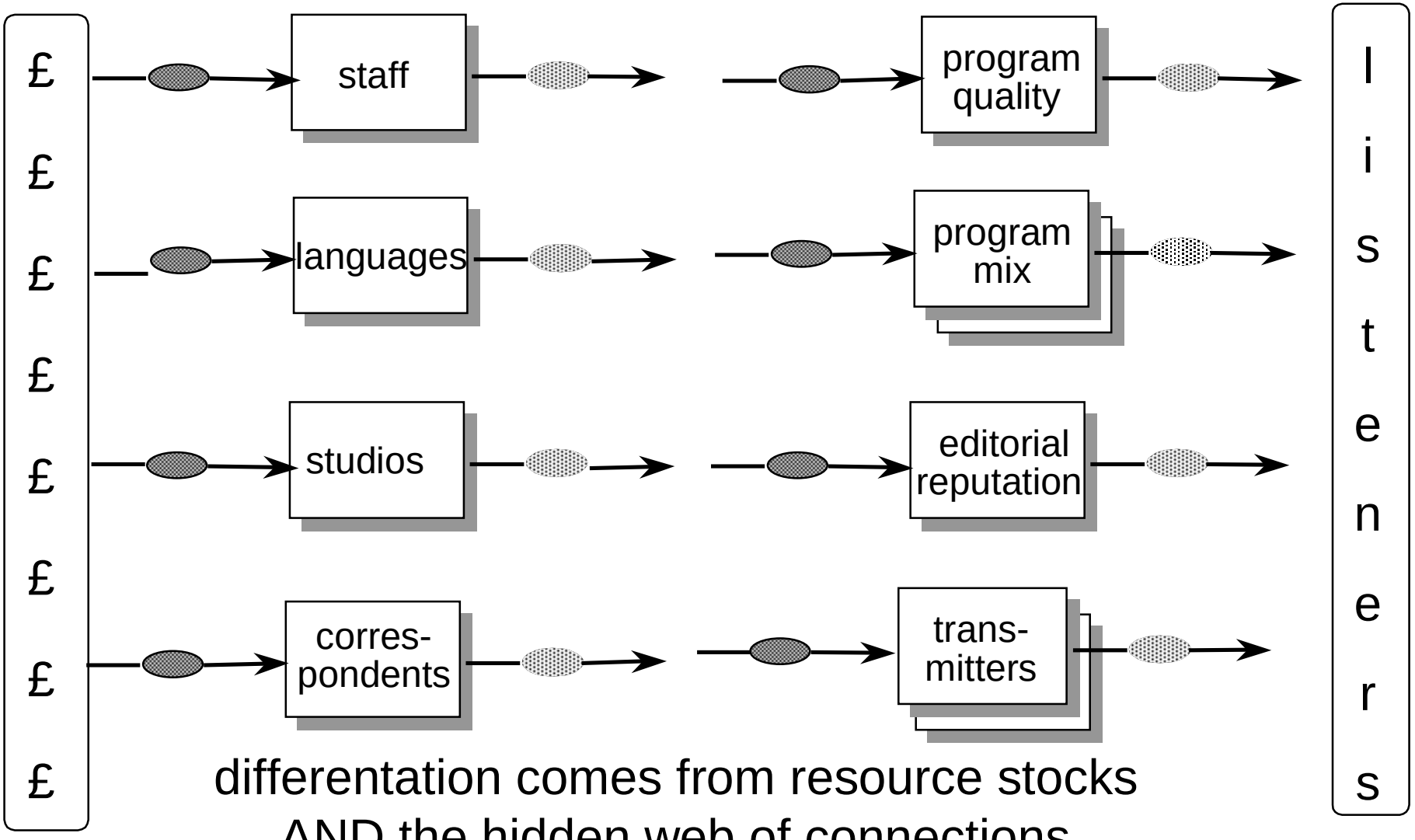


ASSET STOCK ACCUMULATION AND COMPETITIVE ADVANTAGE



"It takes a consistent pattern of resource flows to accumulate a desired change in strategic asset stocks" Dierickx and Cool, 1989

RESOURCE MENU OF RADIO BROADCASTER
Tangible and Intangible Resources



differentation comes from resource stocks
AND the hidden web of connections

HOW SYSTEM DYNAMICS HELPS STRATEGY

a visual language for resource mapping showing complementarity

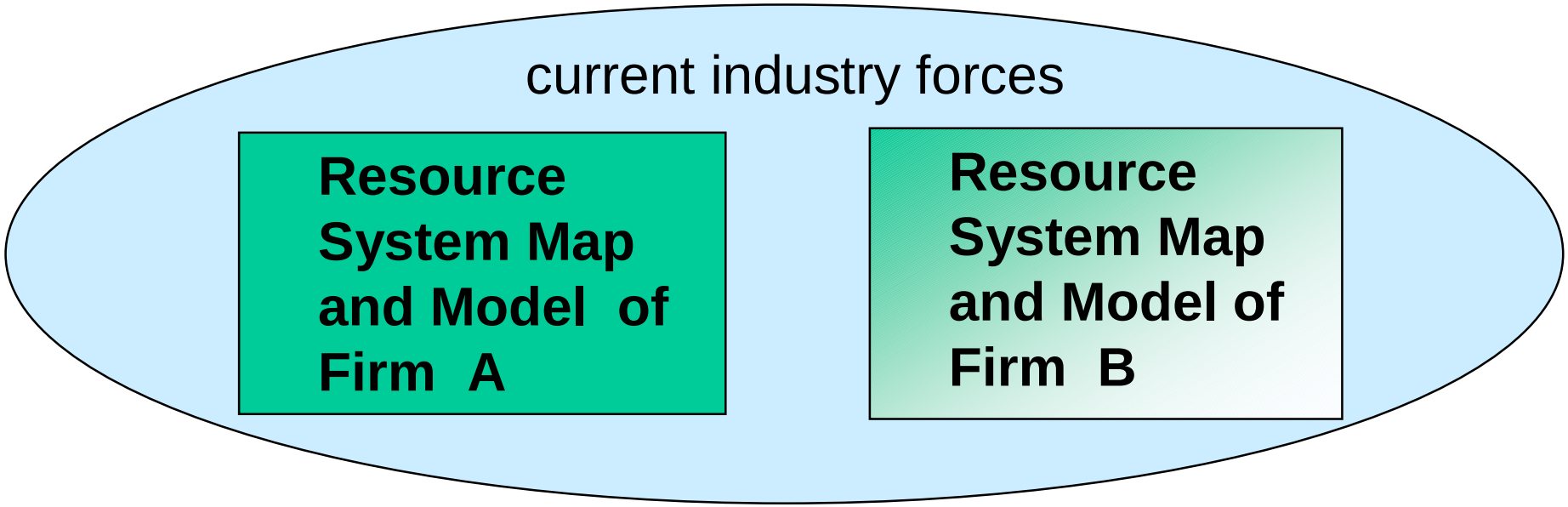
rules for specifying interconnections drawing on principles of information feedback systems and bounded rationality

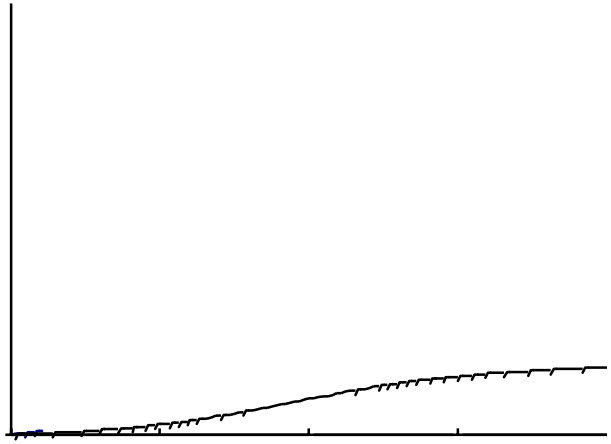
focus on "structure" (of the resource system) and "behaviour over time" (resource evolution and the dynamics of competitive advantage)

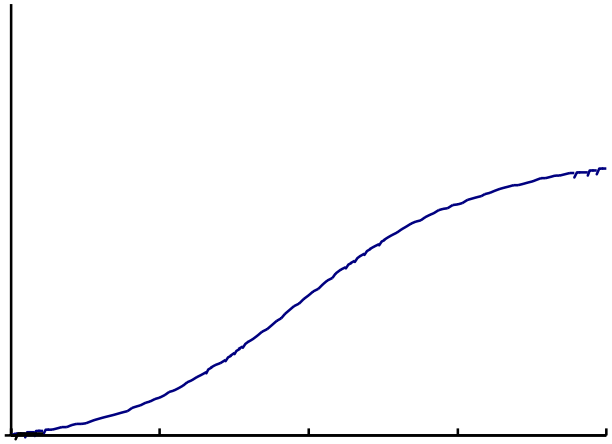
the rigour of algebraic modelling and simulation

mini-sims and microworlds to communicate insight into business dynamics

DYNAMICS OF COMPETITIVE ADVANTAGE







MANAGING METAMORPHOSIS