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Investigating the Optimum Manager-Subordinate
Relationship of a Discontinuity Theory of
Managerial Organizations

by Sergey Ivanov

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**Investigating the Optimum Manager-Subordinate
Relationship of a Discontinuity Theory of
Managerial Organizations:
an Exploratory Study of a General Theory of
Managerial Hierarchy**

Global Organization Design Conference - 2005

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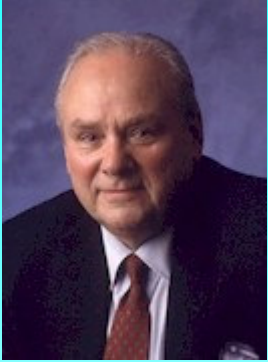
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Purpose

This research explores the requisite relationship between managers and their subordinates in managerial organizations as stipulated by a general theory of managerial hierarchy developed by Dr. Elliott Jaques

Tribute



Dr. Elliott Jaques, 1917 – 2003

Research Timeline: 1947 – 2003

Research Professor

The George Washington University

**Author of approximately 20 books and
numerous journal articles**

Theoretical Background

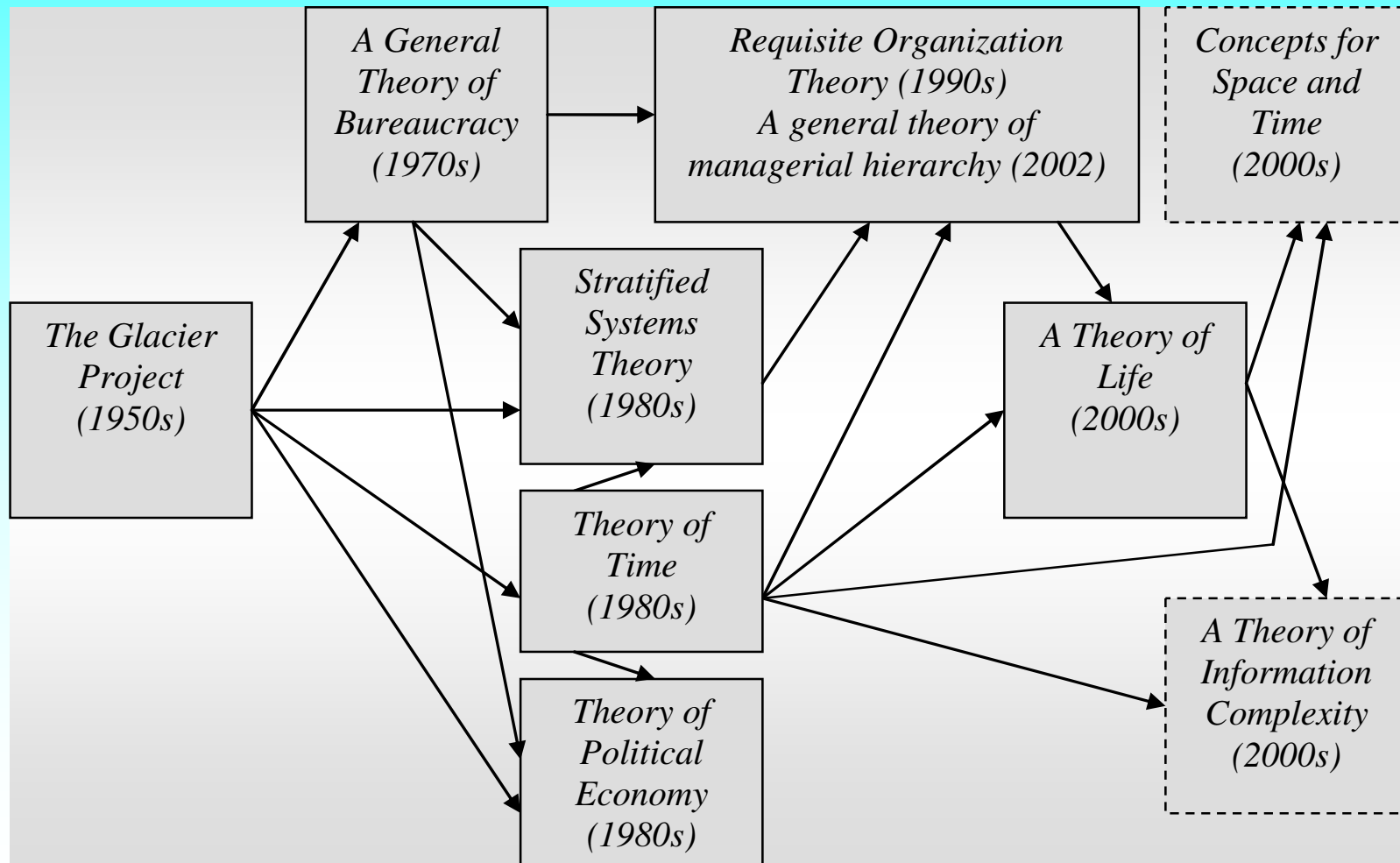
General Theory of Managerial Hierarchy

Jaques developed General Theory of Managerial Hierarchy during his 55 years of consultancy research

The theory was previously known as General Theory of Bureaucracy, Stratified Systems Theory, and Requisite Organization Theory

Theoretical Background

Dr. Elliott Jaques' Theories



Theoretical Background

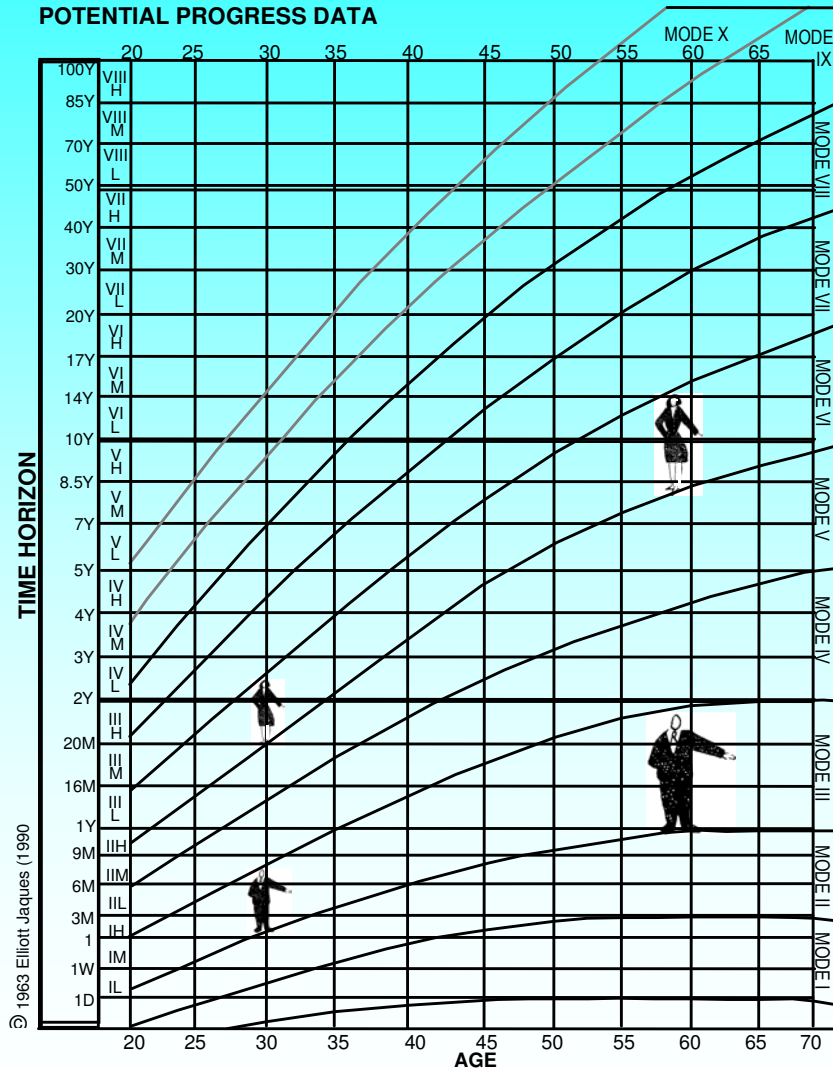
Jaques believed Managerial Hierarchy is an organizational expression of human capability

He defines Capability as “the ability of a person to do work,” and Current Potential Capability (CPC) as “a person’s highest potential capability in the sense of the maximum level (stratum) at which someone could work at the present time, given the opportunity to do so and provided that the work is of value to him/her, and given the opportunity to acquire the necessary skilled knowledge”

According to Jaques, human capability is discontinuous, and matures from birth to death in predictable patterns, from a stratum to a stratum, as follows:

Theoretical Background

Potential Progress Data Sheet



“The size of the maximum current working capability of any employee can be measured by what I have called a gearing process to establish the role with the longest time-span he/she could carry if he or she had the necessary skilled knowledge, commitment and experience for the work” (Jaques, 2002)

Key Charts © Elliott Jaques 1989, revised 2001. All rights reserved. Permitted to use freely by Mrs. Kathryn Cason

Theoretical Background

Discontinuity in Human Capability

“The managerial hierarchy is the organizational expression of the hierarchical structure of human capability.

The basic structure of managerial layers coincides with the layers of complexity of information processing.”

Elliott Jaques, Ph.D., M.D., 2002

Theoretical Background

Discontinuity

Stratum of the Role is Jaques' Empirical Finding of *Discontinuity of Roles in Managerial Hierarchy*

The stratum is determined by the longest assignment in the role assigned by the manager to the subordinate (time span of discretion)

Time-span of Discretion Period	Stratum of the Role
1 day – 3 months	Stratum 1
3 months – 1 year	Stratum 2
1 year – 2 years	Stratum 3
2 years – 5 years	Stratum 4
5 years – 10 years	Stratum 5
10 years – 20 years	Stratum 6
20 years – 50 years	Stratum 7
50 years – 100 years	Stratum 8

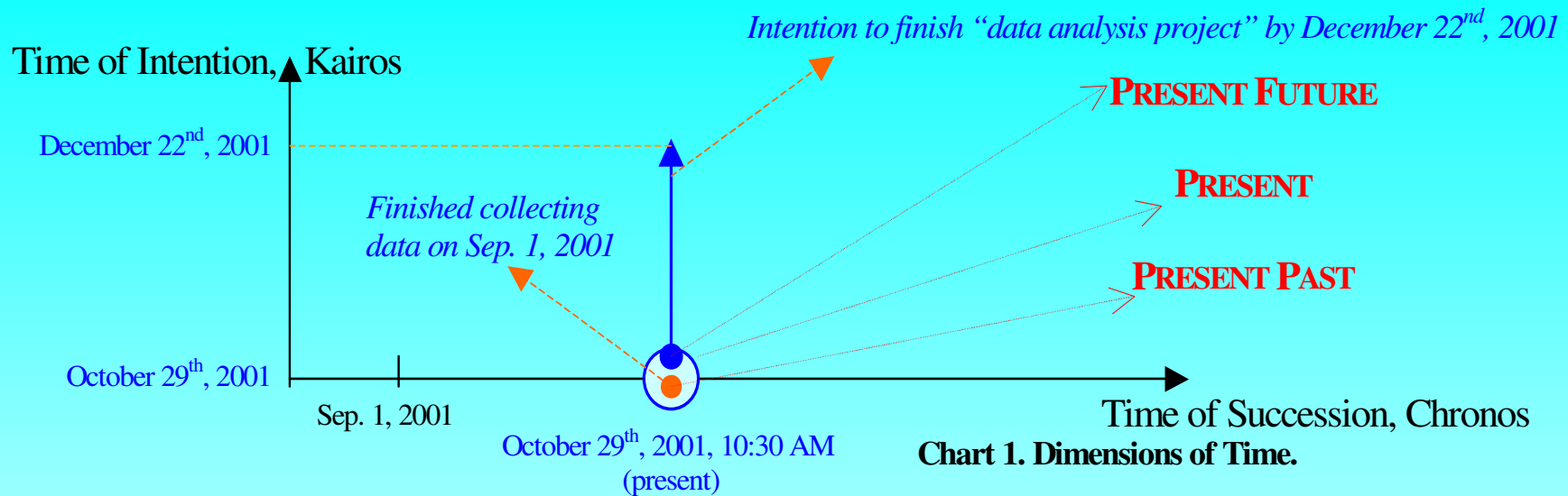


Chart 1. Dimensions of Time.

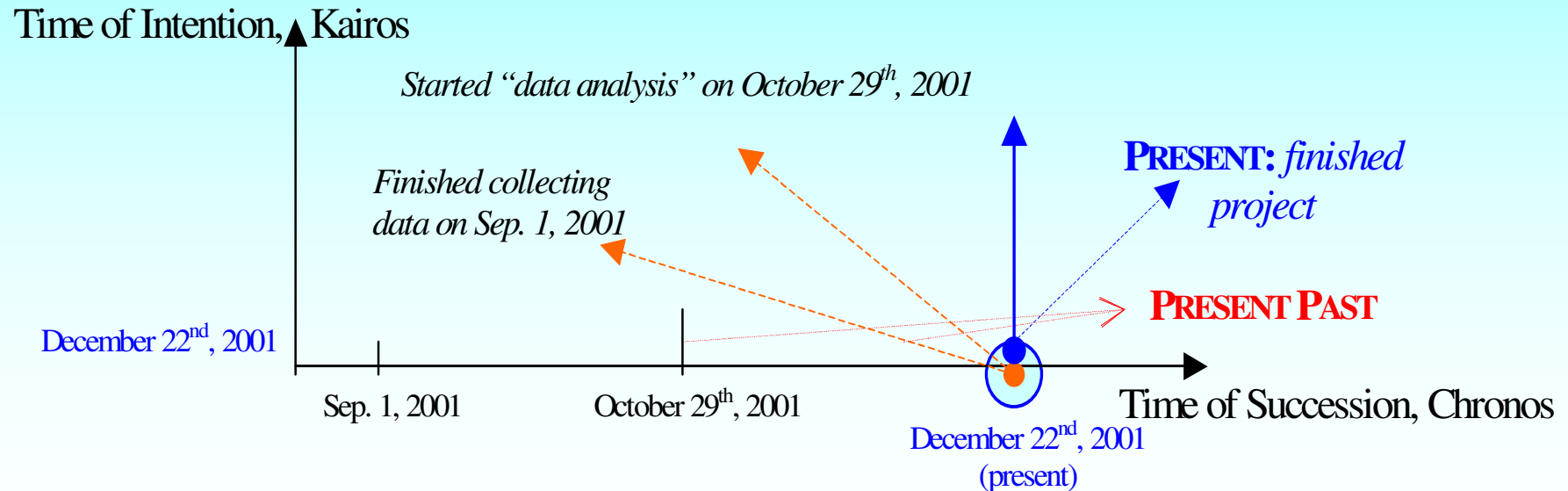


Chart 2. Dimensions of Time.

Basic Unit of Information (BUI)

Basic Unit of Information was discovered by Dr. Elliott Jaques in April 2002, and shared with the author, also in this unpublished manuscript:

Jaques, Elliott (2002). Orders of Complexity of Information and the Worlds We Construct. Gloucester, MA: Unpublished.

Basic Unit of Information is a tangible, something with can be pointed to which objectively exists

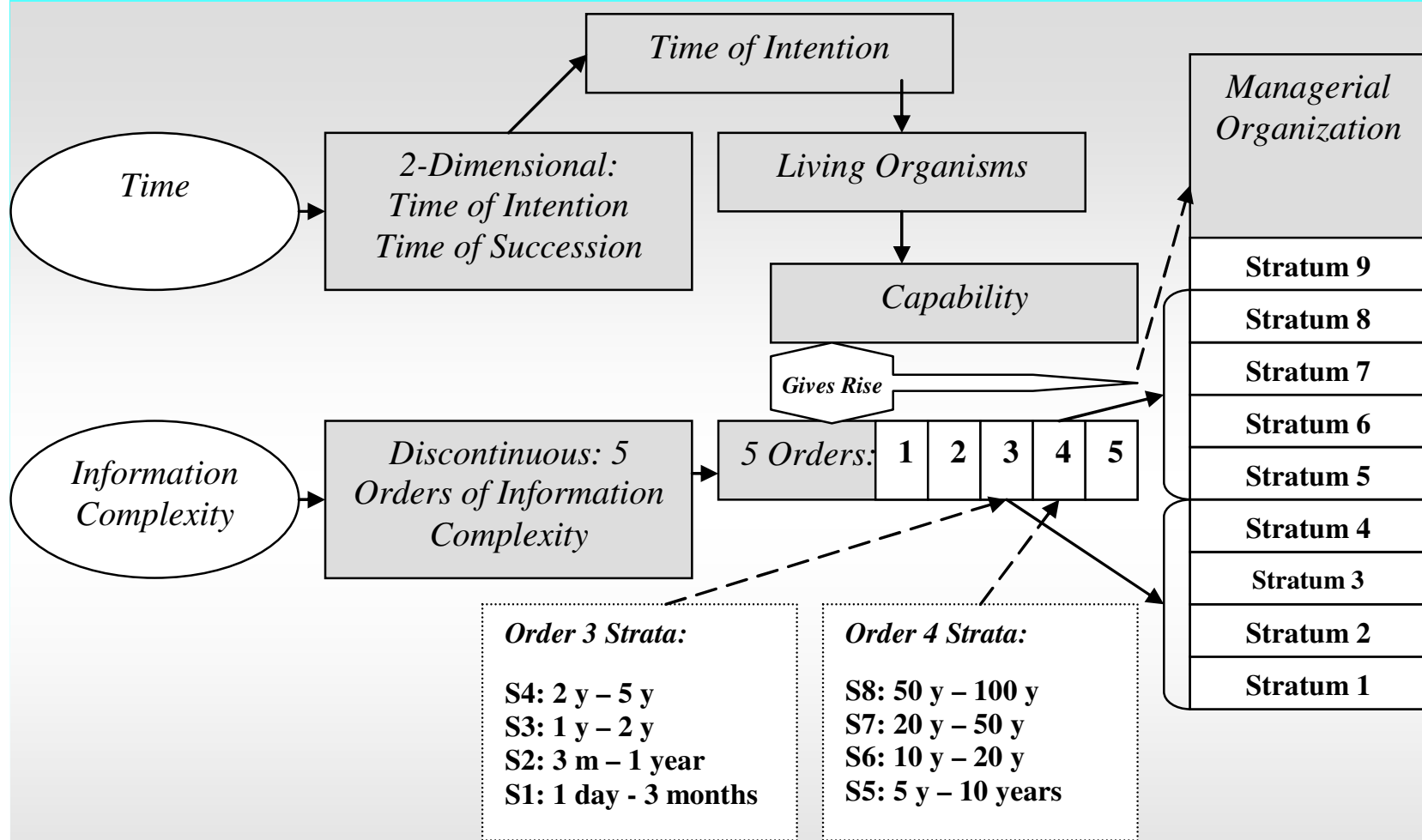
“Pick-up this stick” contains 2 BUIs

pick up → 1 BUI

this stick → 1 BUI

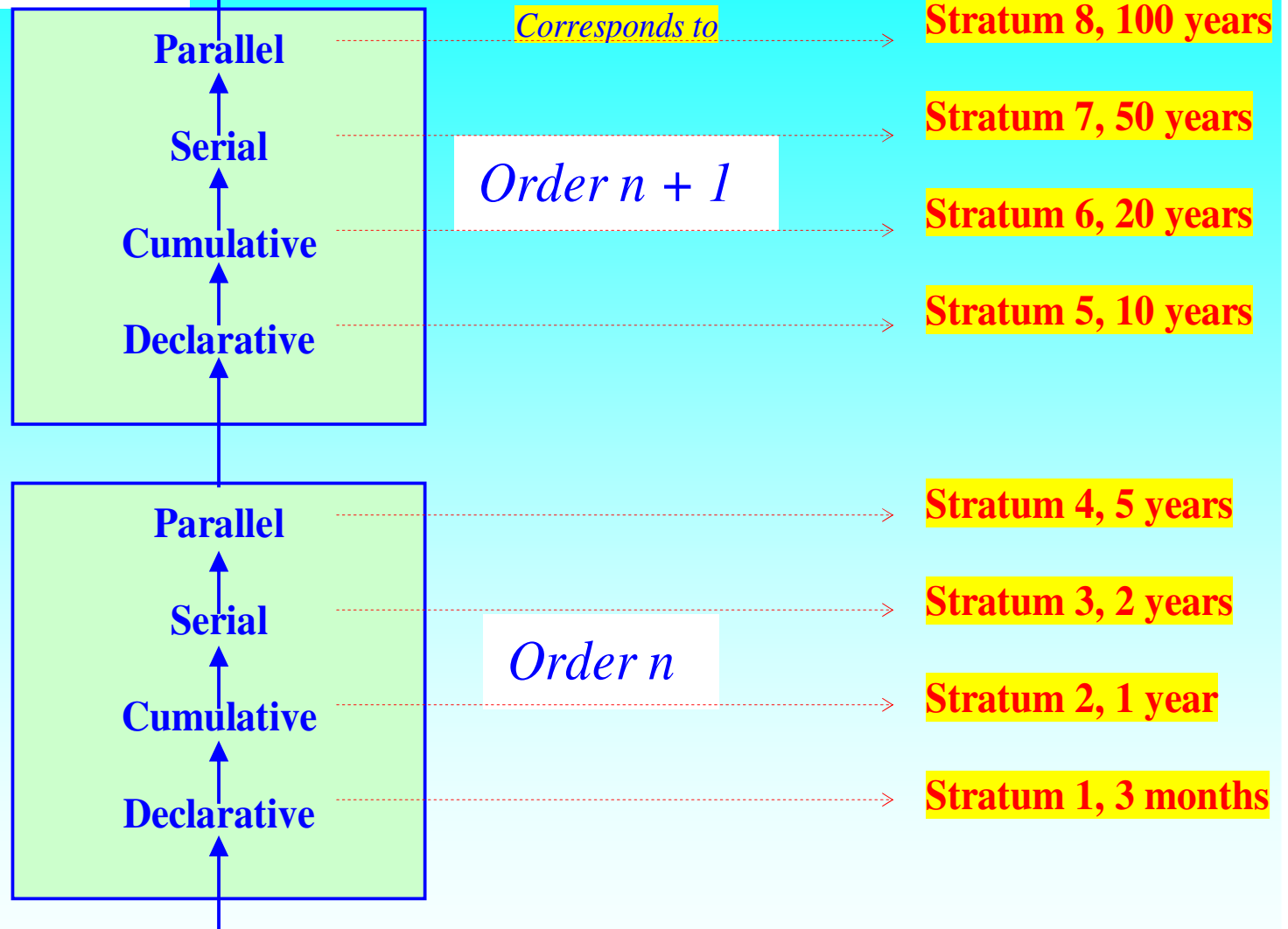
Theoretical Background

Theories' Foundation



Remarks: Each order of information complexity consists of four strata, which patterns (depicted in figure 3) are exactly repeated at the next higher order; most human adults mature to and reside in strata 1 through 4, and only a small percentage mature above stratum 4.

More Complex Mental Processing



Less Complex Mental Processing

Order n - 1

Types of Organizations

Share-holders/Members/Citizens

Association

Elected
Representatives

Managerial Hierarchy,

Bureaucracy, MAH

President

CTO

CFO

COO

Security
Engineer

Software
Engineer

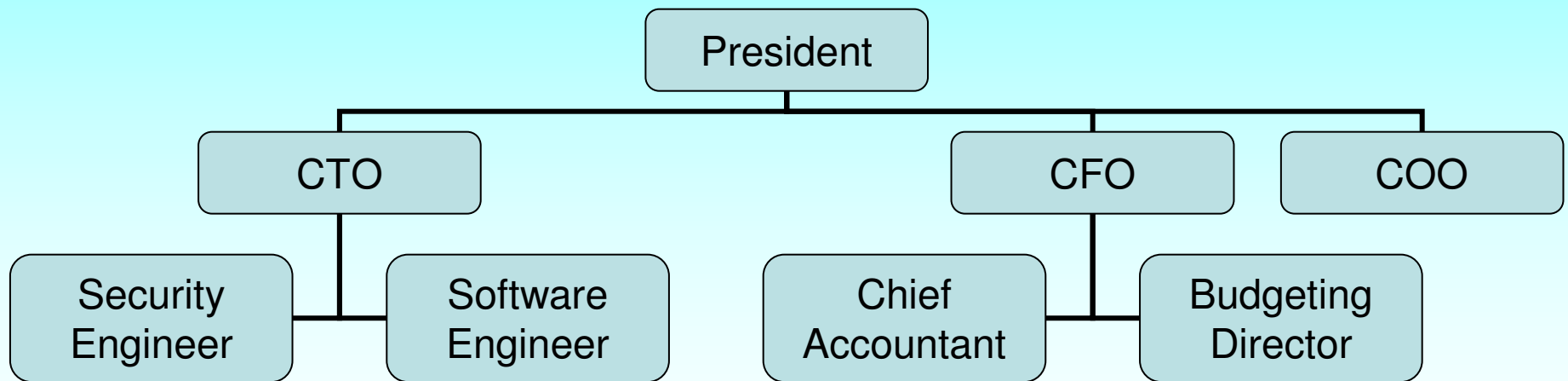
Chief
Accountant

Budgeting
Director

Theoretical Background

Managerial Hierarchy

*Consists of Roles:
Managers & Subordinates*



Theoretical Background

Managerial Hierarchy

Also called:

Managerial System

Managerial Accountability Hierarchy (MAH)

Bureaucracy

Characteristics:

Managerial Employment System

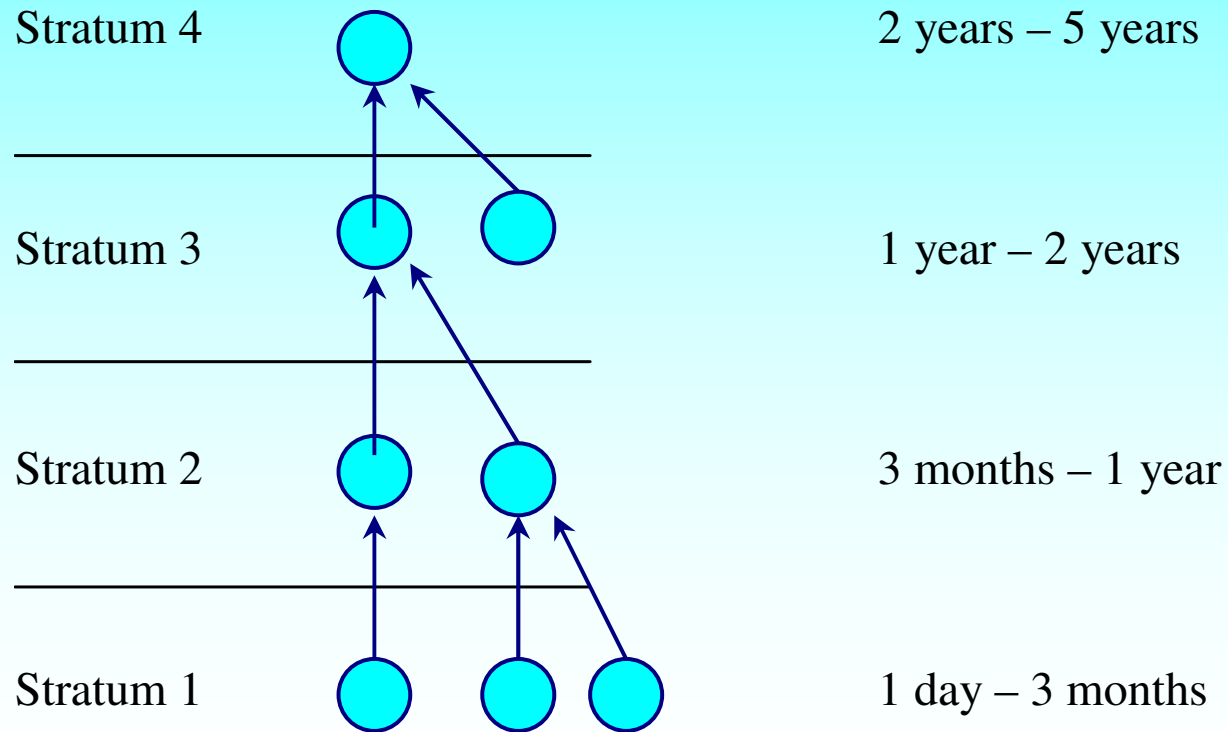
People employed for a wage or salary

Managers and Subordinates

Theoretical Background

Ideal Requisite Organization: Roles

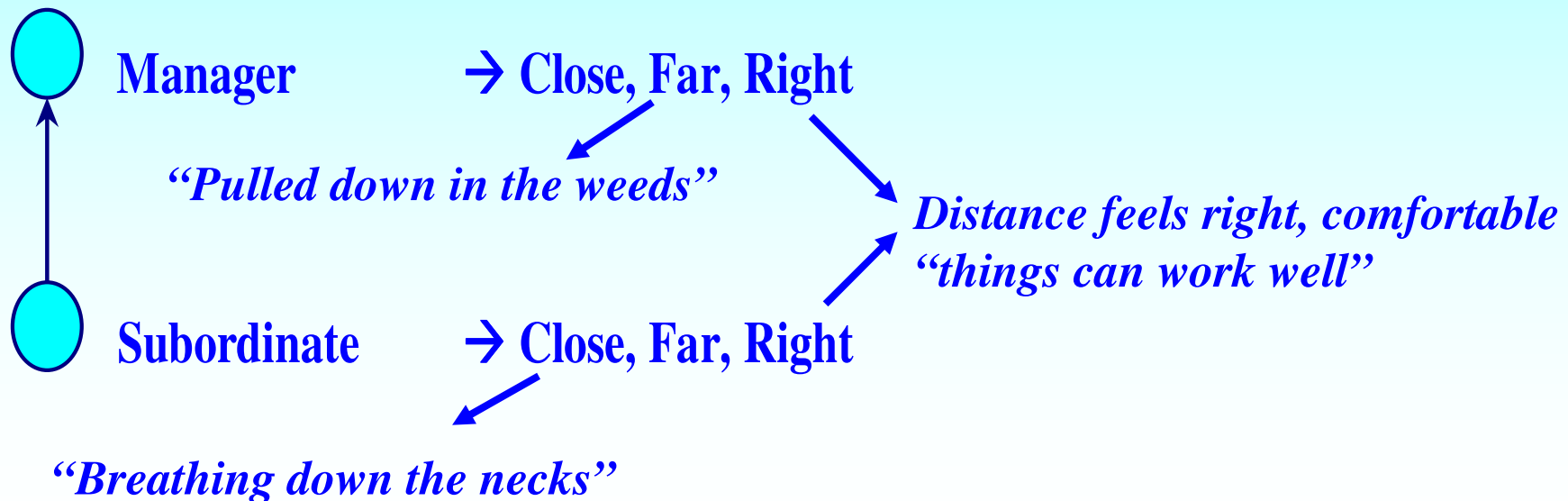
No manager-subordinate relationships exist within one role stratum or skipping one role stratum.



Theoretical Background

Manager-Subordinate Relationship

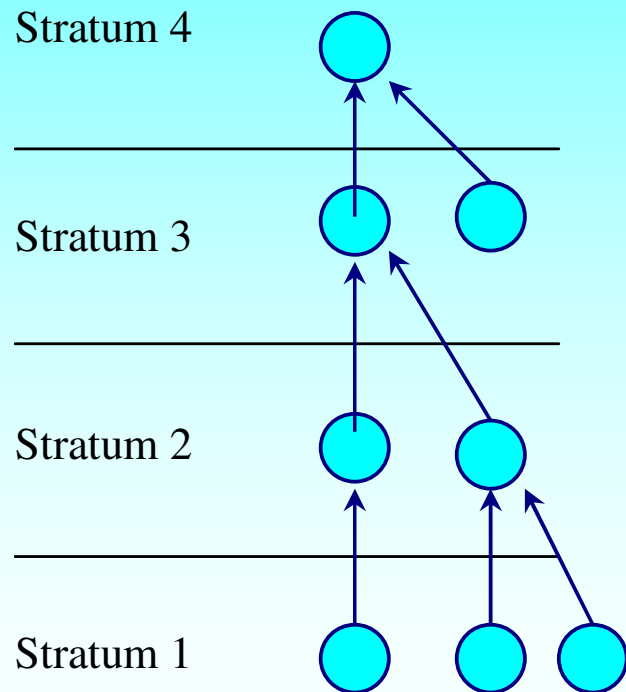
MSR is another Jaques' Empirical Finding in Managerial Organizations describing how a subordinate feels towards the manager, and how the manager feels towards the subordinate, consisting of three types: just right, too close or too far



Theoretical Background

General Theory of Managerial Hierarchy

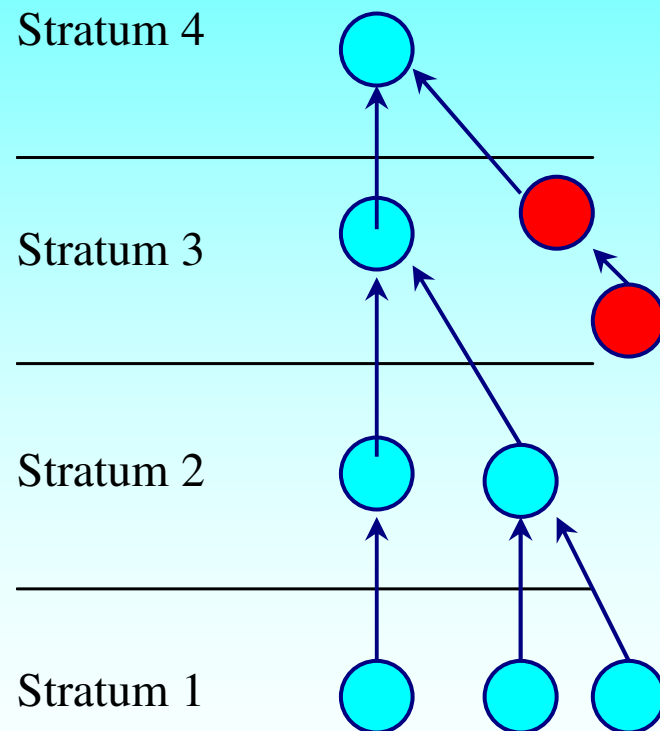
Optimum Manager-Subordinate Relationship: just right



Theoretical Background

General Theory of Managerial Hierarchy

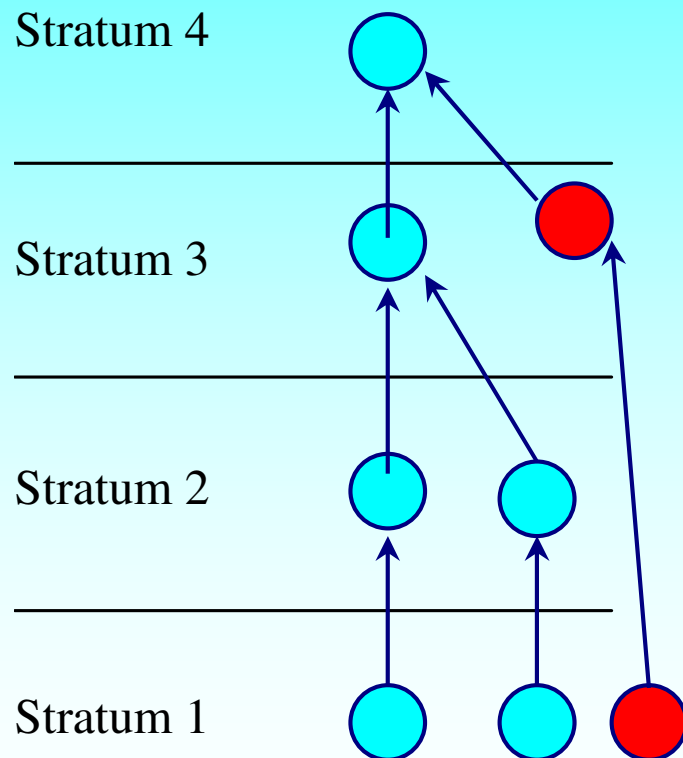
Non-Optimum Manager-Subordinate Relationship: too close



Theoretical Background

General Theory of Managerial Hierarchy

Non-Optimum Manager-Subordinate Relationship: too far



Theoretical Background

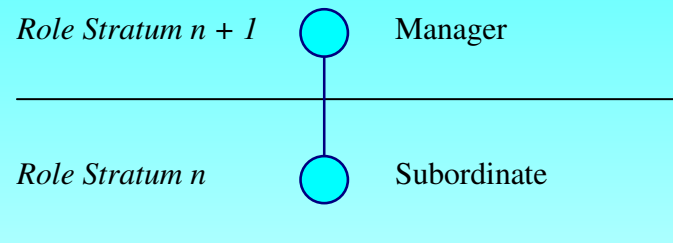
Research Question 1

The study's primary research question is that there is a relationship between the requisite working stratum of the manager and subordinate and the OMSR, and non-requisite structuring and the non-OMSR

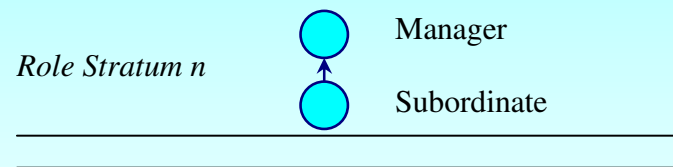
This proposition has not been tested

Theoretical Background

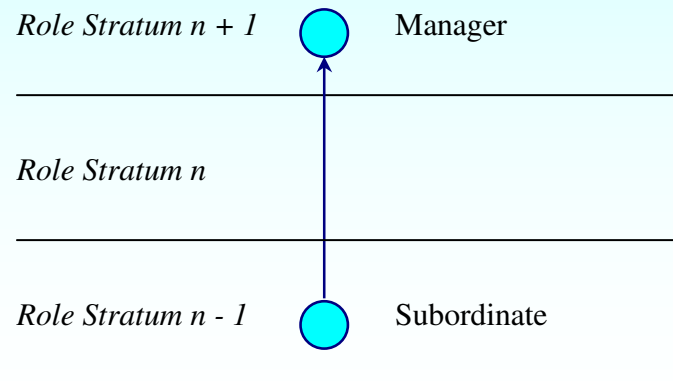
Research Question 1



Just Right?



Too Close?



Too Far?

Theoretical Background

Research Question 2

The study's secondary research question attempts to discover the effects of the current potential capability of manager and subordinate on the MSR

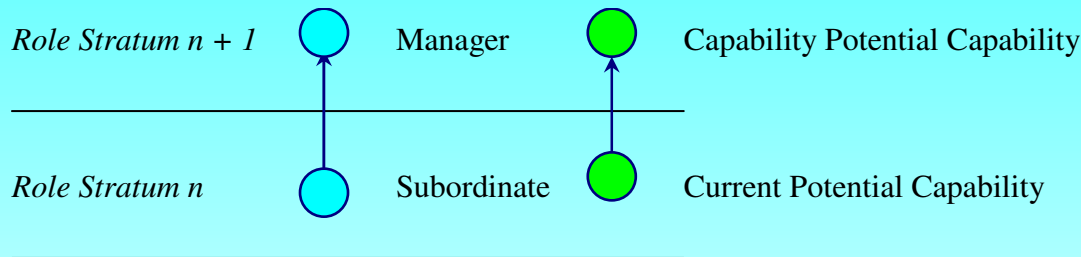
Current Potential Capability (CPC):

“A person's highest potential capability in the sense of the maximum level (stratum) at which someone could work at the present time”

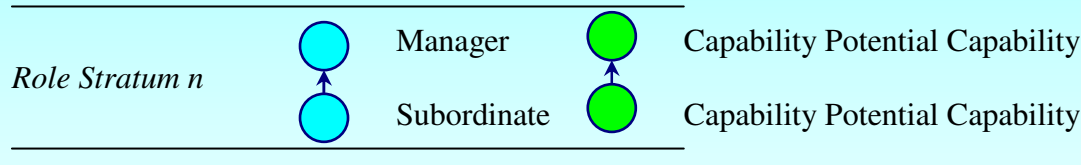
Theoretical Background

Research Question 2

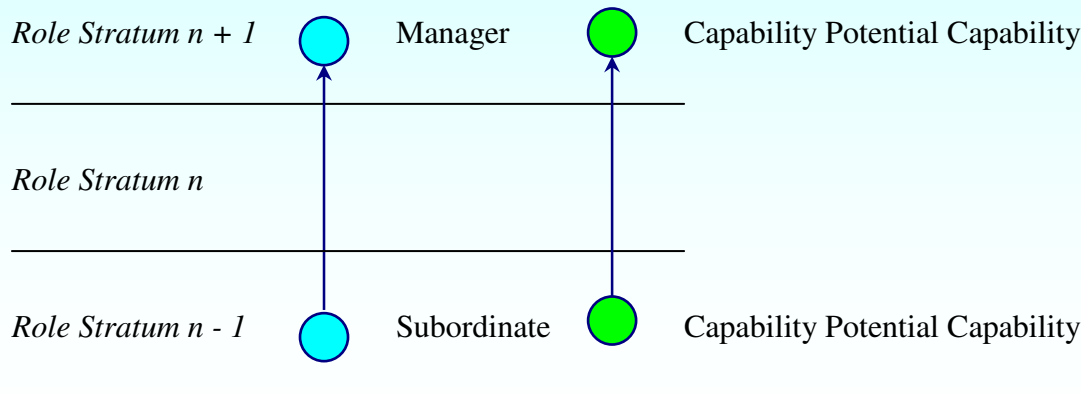
Discovery



Just Right?



Too Close?



Too Far?

Methodology

Approach

- Step 1: Identify a set of managerial organizations*
- Step 2: Use Jaques' instruments to conduct a survey*
IRB approved, IRB # U110411ER

Data to Be Collected:

- Stratum of Role of M & S*
- CPC of M & S*
- MSR of M & S*
- special notes*

- Step 3: Conduct Analysis*

Instrumentation (Step 1)

Identify a set of managerial organizations

- Ensure that the organization is a managerial hierarchy*
- Identify the hierarchy of managers and subordinates*
- Use clinical approach and strategic-purposive sampling*

Jaques believed that all managerial organizations are exactly alike in terms of discontinuities/stratification of work and manager-subordinate relationship, in all geographical regions and all types of industries, thus, even one organization should suffice the analysis. However, the research will attempt to collect data from several organizations

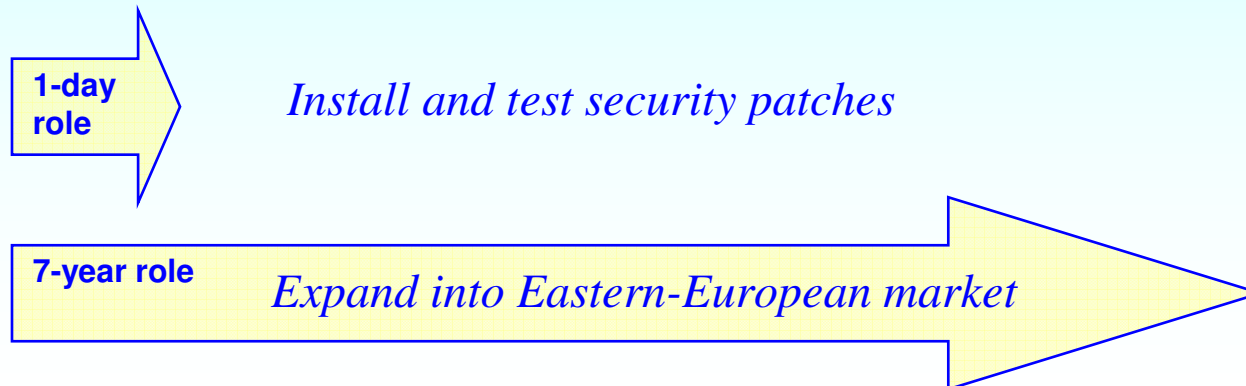
Instrumentation (Step 2)

Measuring Role in Managerial Hierarchy

Time-span of Discretion (Measuring Instrument)

- Developed by Jaques in 1960s*
- Measures the role on a ratio scale*
- Takes about between 1 to 3 minutes to measure*
- Not applicable to associations*
- Has been tested by Jaques and other researchers*

Example:



Instrumentation (Step 2)

Evaluating Capability

Subordinate, Manager and Manager-Once-Removed report (during survey) which maximum organizational level (stratum) the Subordinate can work at right now (assuming that the S has all necessary skills, knowledge and experience)

This maximum stratum is equivalent to subordinate's current potential capability level

Example: S' role is Stratum 2, but S, M and MoR agree that S can work at Stratum 4, thus, S' CPC is Stratum 4

Theoretical Background

Measuring in Social Sciences

- Nominal
- Ordinal
- Interval
- Log-Interval
- Ratio

Evaluation vs. Measuring



Figure 1. Preciseness of Measures.

Methodology

Instrumentation

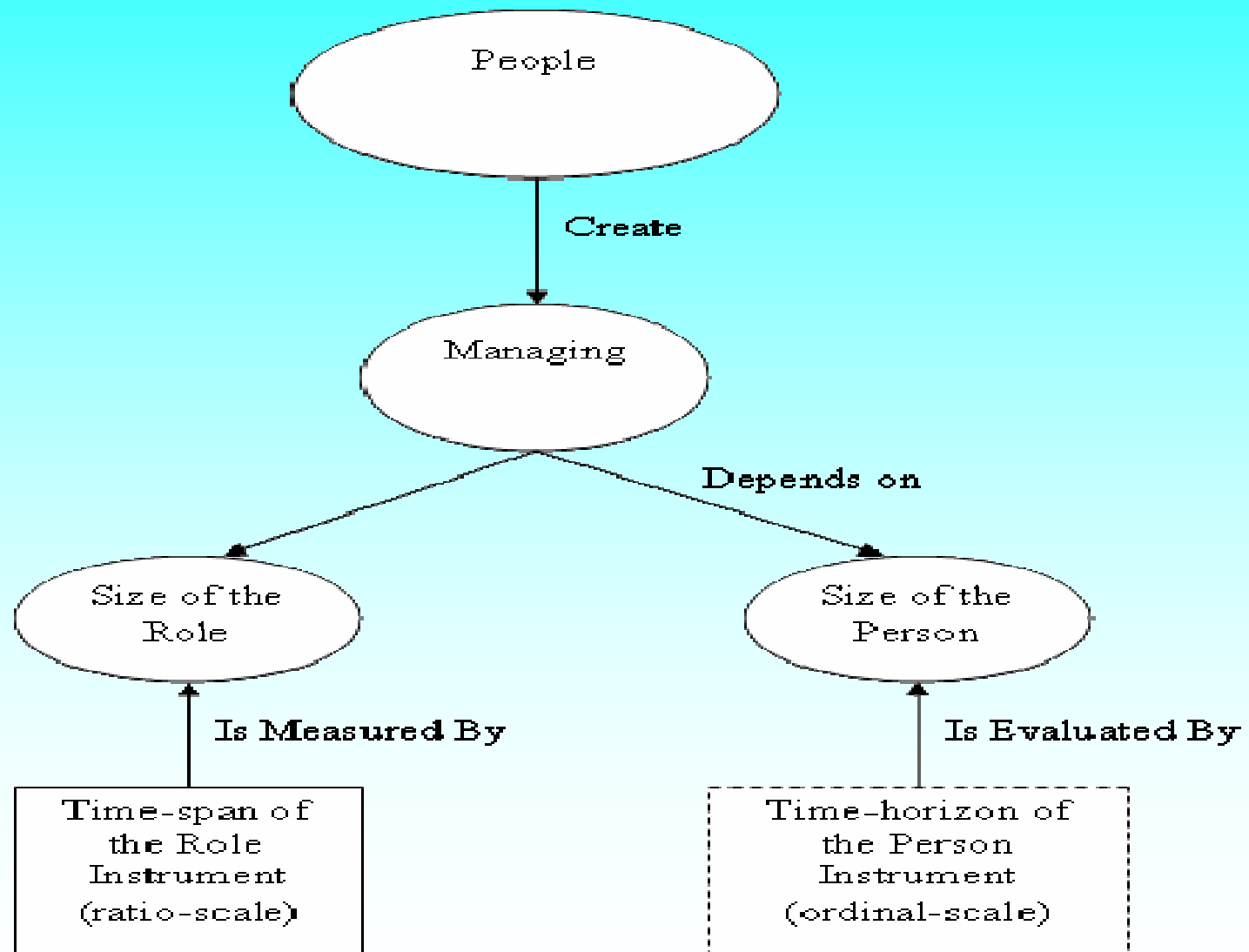
Time-span of Discretion (Role) – Jaques' Instrument

Ratio-scale Measure (converted to rank: S1,2,3 etc.)

*Objective – measuring actual that exists
independently of the observer/interviewee*



Theoretical Background



Instrumentation (Step 2)

Evaluating Capability

2 methods developed by Jaques

- ✓ Method '1' for use internally within managerial organizations – will be used in my study, validated by Jaques (Human Capability book)
- ✓ Method '2' to evaluate capability of any member of human species (and other species), more complex than method '1' – will not be used in my study

Methodology (Step 3)

Statistical Technique: Research Q 1

Spearman Correlation: X and Y are ranks:

X - Difference of Working Strata of M & S

Y - OMSR (just right)/non-OMSR (too close, too far)

Testing: strength of the relationship between X and Y

Methodology (Step 3)

Statistical Technique: Research Q 2

Spearman Correlation: the difference of strata (n) (X) and S(MSR) (Y), (and if enough data, M(MSR))

Testing: strength of the relationship between X and Y, where:

manager's current potential capability and subordinate's current potential capability correspond to the role stratum

Pilot Study

April 2001 – August 2002, 172 Interviews, 29 selected for pilot tests

15 Organizations Participated:

12 in North America & 3 in Eastern Europe

(data analyzed via SPSS)

Research Question 1:

Correlating Subordinate's OMSR/non-OMSR with Expected Results:

low correlation: correlation coefficient 0.387, correlation significant at .05

Research Question 2:

Correlating Subordinate's OMSR/non-OMSR with Expected Results:

Role Stratum = Current Potential Capability

high correlation: correlation coefficient 0.545, correlation significant at .05

Demonstrates a possibility of a significant theoretical advancement!

Literature Review

**John Isaac → Confirming Jaques' findings
independently of Jaques' work using his own
methods and discoveries**

Kurt Lewin, 1930s → Need for Dynamics

Jean Piaget

Harry Levinson: “By Far Contributed the Most”

**Ph.D. Dissertations: Nyberg (2004), Brause (2000) ,
King (1997), Boals (1985), Gould (1984),
Richardson (1971), Atchison (1965), others**

Research's Preliminary Results in Process

March 2005 – Latvia

4 Companies:

2 Global, 1 in the Baltic Region, 1 Local

Not Requisite

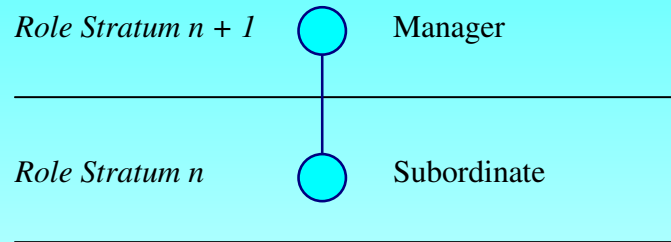
M & S within the same stratum, sometimes MoR

Various Organizational Problems

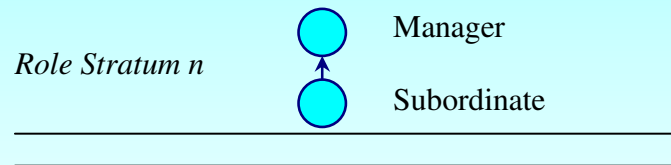
Stratum 0?

Theoretical Background

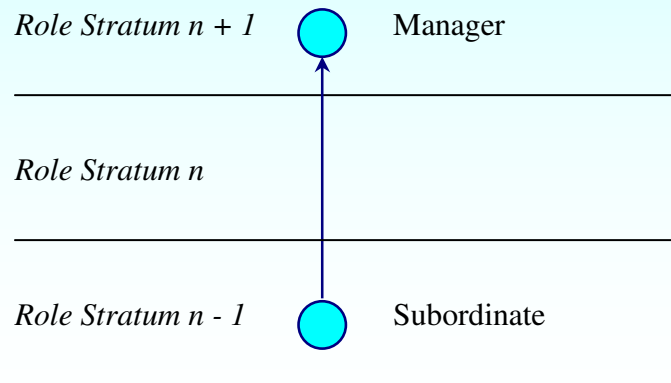
Research Question 1



Just Right?



Too Close?

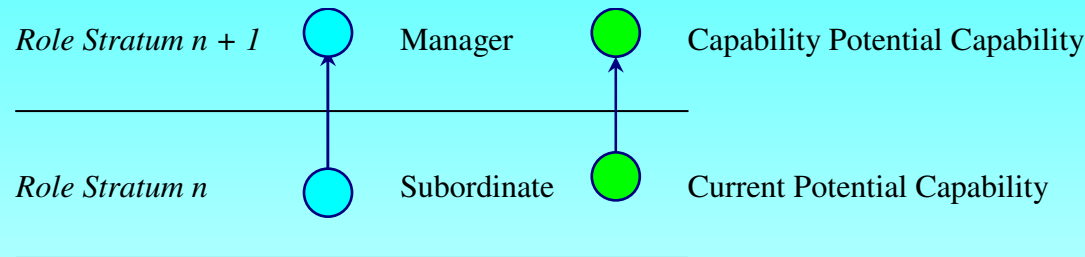


Too Far?

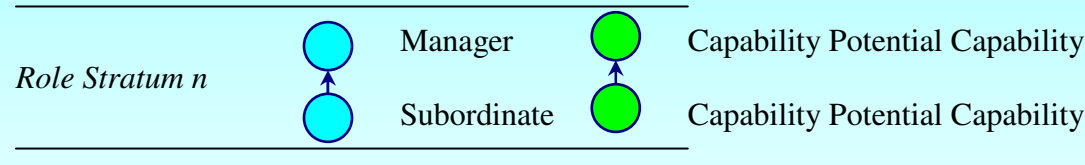
Theoretical Background

Research Question 2

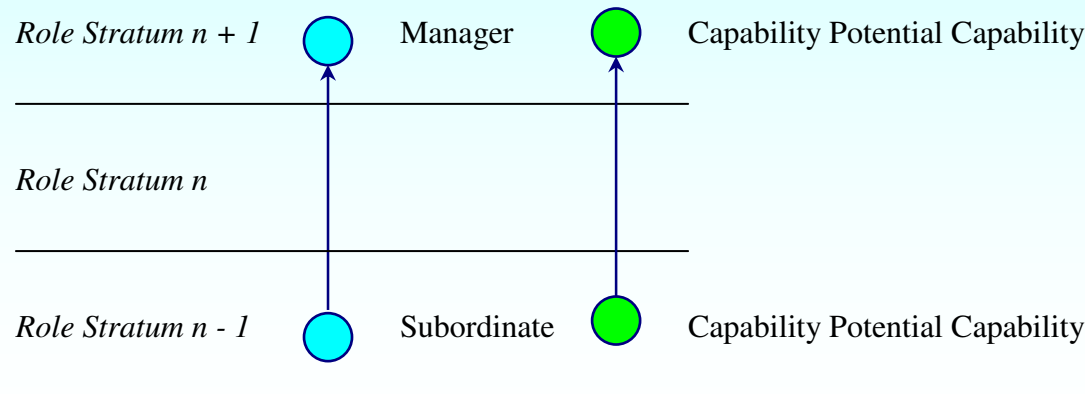
Discovery



Just Right?



Too Close?



Too Far?

Thank you

Questions & Comments

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The establishment and operation of a world-wide society of academics, business users and consultants interested in science-based management to improve organizational effectiveness for the purposes of:

Promoting among existing users increased awareness, understanding and skilled knowledge in applying concepts of Levels of Work Complexity, Levels of Human Capability, Accountability, and other concepts included in Requisite Organization and/or Stratified Systems Theory.

Promoting among potential users of the methods, appreciation of the variety of uses and benefits of science-based management, and access to resources.



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