

GJ – SS1: Trans-disciplinary Science of Society – course introduction

1. Human Accomplishment

- A. All species of life are purposeful – they all seek for survival and growth within a narrow band of behaviors governed by subconscious instinct
- B. Human beings are distinguished from other animals by their capacity for conscious self-improvement, self-development and social evolution
- C. Accomplishment refers to the process by which we seek to consciously pursue personal and social goals

2. Historical Record of Human Accomplishment

- A. Discovery of knowledge
- B. Acquisition of skills
- C. Development of tools & technologies
- D. Creation of art forms
- E. Organization and evolution of social systems and institutions
- F. Development of social aggregates
- G. Development of its individual members

3. Two Perspectives of Human Accomplishment

- A. Course 1: Process of Individual Accomplishment and its role in development of society
- B. Course 2: Process of Social Accomplishment

4. Science of Accomplishment

- A. Physical – construct cathedrals and build bridges
- B. Biological -- grow plants and raise animals
- C. Social – fight wars and form governments
- D. Technological -- build computers and spacecraft
- E. Intellectual – decode DNA and create new languages
- F. Artistic – create symphonies and make movies

5. Why is there no science of accomplishment?

- A. These fields of activity are subject to completely different laws and processes
- B. The subject may be too broad in scope to encompass in a single perspective
- C. The huge number of interacting variables may be too complex to decipher

D. Clear conception of multi-dimensional, multi-level social reality has yet to evolve

6. Process of human accomplishment remains largely subconscious

- A. We achieve first, understand much later
- B. Experience leads to knowledge
- C. Later we codify knowledge and transmit it to others

7. Three stories of human accomplishment

- A. J. P. Morgan – a one-man social institution
- B. F.D. Roosevelt – the economics of trust
- C. Steve Jobs – social and technological visionary

8. These achievements were the result of multiple factors

- Economic
- Institutional
- Legal & Political
- Technological
- Geographic
- Social
- Psychological

They do not fall within the purview of any single discipline

9. Contributing Factors

- A. Physical – Facts
 - Morgan had to ascertain the exact financial status of each of the banks
 - FDR has to interpret the constitutional limits of government authority
 - Jobs had to work within technological limitations and advances
- B. Organizational -- Institutional
 - Individual – Morgan acted by power of his individual reputation without formal authority
 - Company – Jobs acted by power of corporate organization & dynamic market
 - Nation -- FDR acted by authority of government
- C. Social – Perceptions & Attitudes
 - Market is collapsing – 1907
 - Banking system is collapsing – 1933
 - Computer is de-humanizing us – 1984
- D. Psychological – Character, Beliefs, Values, Aspirations

- Morgan's integrity
- FDR's understanding of the psychological roots of economic confidence
- Job's creative aspiration to lead an empowering revolution against authority

E. Three levels of social categories

- These three examples illustrate of three individuals who have changed the world

10. They involve interactions between three different levels of social reality

- **Individual:** Morgan acted as an individual based on his own strength of character in lieu of a social institution and shows the role of the individual during the primordial stage of institution formation, eventually giving rise to the Fed
- **Corporate:** Jobs as an individual created an embodied himself in a new organization institutionalizing his vision, talent, energy and inspiration.
- **Societal -- National:** FDR represents a mature leader in power in the most powerful of all social organizations who gives new radical direction to its development, new laws, new values, new institutions, and a new social culture. All founded on his own personal values and vision as a benevolent aristocrat and his deep perception of the psychological factors underpinning what appear as hard economic realities.

11. They involve interactions between multiple levels of reality

A. Physical circumstances, facts and actions in space and time

B. Social

- Perceptions -- Social process -- Social perceptions – social attitudes, beliefs, aspirations
 - Jobs understanding of social aspirations – fear of machine, urge for freedom, empowerment and individuality, sensitivity to design and ease of use
 - Morgan's understanding of public fear, public confidence, attitude of the banks
 - FDR's realization that panic is a question of trust
- Institutions -- Constitutive process – FDR acted at level of law, other two did not
- Power -- Power process – government institutions, authority, organizational power of a company

C. Psychological

- Morgan's founded on strong values of integrity, FDR on responsibility to address the crisis, Jobs on personal drive for to marry design, technology, art and utility

12. Accomplishment results from interactions between four levels of our existence -- – use slide 26 from Individuality lecture 1

A. Individual – microcosm

B. Organizational – family, community, tribe, village, group, firm, NGO, nation

C. Social

D. Environmental – the Space -- geography

E. Life – circumstances and events

We usually focus on one or at best two of these to understand accomplishment

13. Multi-dimensional social Evolution

- A. **Time:** The pace of social development is unprecedented and accelerating
- B. **Space:** Humanity is rapidly expanding from isolated and insulated local and national communities into a closely interconnected global community
- C. **Knowledge:** These changes are driven by strides in the expansion of our knowledge of the world around us and our self-awareness of ourselves as a species
- D. **Organization:** Growing awareness at the collective level is spurring a rapid development of social organization in all fields of activity
- E. **Integration:** Different fields and sectors of human activity are becoming more closely integrated into a densely woven social fabric, as symbolized by the unprecedented functionality of the Internet.
- F. **Individuation:** A corresponding change is taking place, which remains largely unperceived, in which human beings are also undergoing a process of becoming more individualized than in the past, in the sense that the capacity of human personality is also rapidly developing
- G. **Complexity:** All these factors combine to increase social complexity of the challenges posed to both understanding and effective action.

14. Need for Evolution of Social Science

- A. The evolution of an increasingly complex, highly integrated global society necessitates the development of a more comprehensive and integrated science of society
- B. The division into various specialized fields has been productive strategy for the development of the social sciences, leading to in-depth, precise knowledge of all dimensions of social existence which needs to be preserved and further enhanced
- C. Division of society into a separate, quasi-independent fields of study was a useful working assumption that increasingly limited in utility

Economy today is highly dependent on the political system and laws governing the distribution and enforcement of power in society, legal concepts regarding ownership of property and human rights, public institutions responsible for the creation and management of money, rules for commerce between nations, public policies influencing income and wealth distribution, processes that determine collective decision-making, public investment in education and training, and social expectations regarding economy and the future, etc.

- D. Compartmentalized knowledge has limited value in a world where borders, boundaries, barriers and distinctions between fields of activity and disciplines of knowledge are rapidly fading

Formulation and enforcement of law are rooted in the distribution of power in society, awakened public conscience, levels of education and cultural values.

Development and operation of political, legal and economic systems reflect the social aspirations of citizens, the cultural values relating to freedom and authority, the collective sense of identity that binds or divides social groupings, attitudes toward conformity and rebellion, ideas regarding the value and rights of the human being and the potential of the individual.

Public opinion reflecting social attitudes and expectations has become a crucial battleground for impacting legislation related to immigration policies, taxation, labor laws, health insurance, gun control and even codes of dress.

Fareed Zakaria in *Future of Freedom*, democracy as it evolved in the West was an expression of the prior evolution of social, cultural and intellectual liberalism which constitute its heart and foundation.

These factors are founded on and influenced by the ideas, ideals, aspirations, beliefs, attitudes, knowledge and skills of individual citizens.

- E. Significant advances in emerging fields of science – Systems Theory, Complexity, Information Theory, Ecology and Anticipatory Systems – justify a shift to a more inclusive, comprehensive approach
- F. They also point to the possibility of identifying fundamental principles and unifying processes common to all fields and aspects of society which serve as foundations for the growth, development and evolution of the complex living organism we call society.

15. Important Differences between Natural and Social Science

Distinctions between subject matter of natural and natural science warrant reconsideration of issues related to purpose of science, the concept of immutable law or principle, treatment of the individual, and the role of consciousness.

- A. The natural sciences are based on a hierarchy of fundamental principles consistently applied across disciplines whereas the social sciences are founded on different sets of concepts, premises and principles. Social science must consider both objective and subjective dimensions of reality because its subjects conscious beings.
- B. Social sciences deal with phenomena of greater complexity than the natural sciences, because they relate to events on three planes – physical, social and mental-psychological
- C. Laws governing natural phenomena are immutable or change very slowly, whereas the laws governing society are man-made and subject to conscious change
- D. Material objects can be classified according to types which are virtually indistinguishable in structure and behaviour, whereas individuality and uniqueness are prominent attributes of human beings that defy description in terms of broad generalizations

16. Paradigm Shifts

- A. Paradigm shifts are opportunities to reconcile and unify apparently independent phenomena and discover deep levels of causality

- Newton reconciled the contradictions between motion and rest by demonstrating that the same laws govern celestial motions and phenomena on Earth.
 - Maxwell unified electricity and magnetism as electromagnetism.
 - Einstein unified acceleration and gravity, space and time.
- B. Today, there is an urgent need to reconnect disparate fields of thought in the social sciences – economics, law, management, political science, psychology, sociology

17. Rationale for the Course

- A. The multi-dimensional challenges confronting humanity today reflect the inadequacy of current institutions and policies. They also defy comprehension and resolution based on the prevailing principles of social science.
- B. The specialized knowledge developed by separate disciplines is inadequate to deal with the increasingly complex interdependencies of the real world.
- C. Knowledge which is power needs to evolve to keep pace with the evolution of society.

18. Course Objectives

- A. To look beyond the boundaries fixed by present concepts, theories and disciplines at the linkages and interdependences between different fields of social activity to identify points at which current theory needs to expand to encompass factors now regarded as externalities
- B. To clarify similarities and differences between the natural and social sciences that influence our approach to social science to draw relevant insights regarding the future development of social science
- C. To explore fundamental concepts, common principles and social processes applicable to all fields and levels of society
- D. To consider the role of the Individual in a science of the social collective
- E. To re-examine assumptions about time and causality, including anticipation of the future
- F. To develop common trans-disciplinary terminology, free as possible from discipline-specific terminology
- G. To make consider the influence of epistemology on our understanding of society
- H. To examine the prospects and requirements for evolving a trans-disciplinary science of society

19. Scope of the Course

- A. Economics, Management & Ecology
- B. Governance, Law & International Security
- C. Sociology & Culture
- D. Education & Healthcare

20. Trans-disciplinarity

- A. Interdisciplinary and multidisciplinary studies have been in vogue for more than half century. Problems are now frequently examined by groups of scientists representing different fields and applying different concepts, theories, methods, data and measures to arrive at more comprehensive and effective knowledge.
- B. “Transdisciplinarity concerns that which is at once between the disciplines, across the different disciplines, and beyond each individual discipline. Its goal is the understanding of the present world, of which one of the imperatives is the overarching unity of knowledge.”¹
- C. Transdisciplinarity is based on the premise that human society and individuality cannot be adequately understood in terms of positivism, reductionism, formalism and naturalism. This implies that there are fundamental constructs, forces, processes and characteristics that underlie all social processes and that knowledge of them can generate greater understanding and more effective applications in the real world.
- D. Harold Lasswell’s model of social process, as well as recent advances in Organizational Theory, Information Theory, Systems Theory, Complexity, Ecology, and the discipline of Anticipation are illustrative of the rich potential of Transdisciplinary perspectives.

21. Fundamental Questions

- A. What are the fundamental similarities and differences between the natural and social sciences which impact on future development of the social sciences?
- B. What is the nature of the relationship between the different fields of social science that are traditionally regarded as separate subjects? How do developments in each field interact with its development in other fields?
- C. What common underlying principles govern the operation and development of apparently separate and disparate fields of society?
- D. What role is played by the individual in the development of society and each field of social activity?
- E. What is the role of ideas and values in the development and evolution of society and by what process do they act? What accounts for their remarkable power to alter society?
- F. What is the relationship between objective external social reality and subjective human perception and will?

¹ [B. Nicolescu, *Manifesto of Transdisciplinarity*, translated by K. Claire Voss \(Albany: State University of New York Press, 2002\), pp. 147-152.](#)

- G. How do social and personal constructions of knowledge, variations in individual motive and perspective, differences in social and cultural attitudes and attitudes impact on the diverse operations of society?
- H. What is the significance of the stages of growth, development and evolution with respect to the various fields of activity studied by the social sciences?
- I. What implications would an integrated science of society have on the formulation of theory, public policy and social strategies for addressing problems related to human security, governance, prosperity, welfare and well-being?

22. Lecture Schedule for September 01

Need for a New Paradigm in the Social Sciences	Ivo Šlaus	9.00 – 10.00 AM
Need & Prospects for Trans-disciplinarity in the Social Sciences	Garry Jacobs	10.00 – 11.15 AM
Social Construction of Knowledge & Reality	Alberto Zucconi	11.45 – 1.00 PM
Complex Systems in the Social Sciences	Roberto Poli	2.30 – 4.00 PM
Society & Social Power	Janani Harish	4.30 – 6.00 PM