Organizations and the System Concept (Katz + Kahn)
-To understand human organizations it is best to describe what is important in their form, aspects, and functions by looking for the cycles of growth + decline and predicting their effectiveness.
-Common sense approaches to understand organizations rely on two key assumptions which can be misleading:

1. Nature of an organization of organization are indicated by name of organization
2. Organization has inherent goals
   a. Decided by managers
   b. Given by current leadership
   c. Emerged through activities

Problems in understanding an organization/social system:

1. Location and identification
   a. How do we know if it is an organization? What the characteristics are? What they value?
   b. Popular names exist which help represent stereotypes about the organizations (i.e. psychological nature, role structure, and boundaries)
      i. Names help identifying area of behavior
2. Organization is understand as the columniation of purposes of important members
   a. It takes time to implement these purposes
3. Primary mission of an organization is to provide a set of distinct clues about mission of organization. However, the stated mission is not always true; rather it can be misleading.
   a. Equate the purpose (goals) of organizations with the purposes of individuals working there
4. Organizations are social devices for groups to efficiently accomplish a articulated purpose
   a. BUT, the design of organization is typically decided by the founder not group members
      i. It is not always easy to find out the founder or the biggest contributors to organization
      ii. Stated important features may not be in reality whereas seemingly small aspects of the organization may dominate
         1. Merton- Unanticipated consequences

Katz + Kahn suggest starting with concepts that do not look at what the designers were looking at (and then working backwards) but rather beginning with the input, output, and functioning of an organization as a system.

1. Theoretical model: energetic input-output system wherein the energetic output restarts the system
   a. Open system model (as taken from Open systems theory- von Bertalanffy)
      i. Input of energy and the conversion of output into additional output by means of a connection between the organization and environment
   b. All social systems has patterned activities which are connected with an output
      i. Activities are repeated, enduring, and bounded in space/time
ii. Can be examined in relation to energetic input, transformation of energies in system, and resulting product (output)

Organizations differ on source of energy renewal

1. Outputs are most commonly money and new energy
2. money is a product not generally the purpose of an organization
3. alternatively, some organizations do not depend on selling/buying cycle such as universities
   a. depend on gifts, legislations, and bequests instead

Large scale organizations are not self-contained and are dependent upon the social effects of energy renewal

Identifying social systems and functions:

1. following energy through outputs
2. understanding the output cycle through which energy is recycled

System Theory

1. Concerned with problems of relationships, structure, and interdependence
2. Living systems are dependent on external environment = open systems

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<tr>
<th>Common Characteristics of Open Systems:</th>
<th>Important Facts:</th>
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| 1. Importation of Energy               | • Open systems important some energy from external environment- must rely on renewed supplies of energy from other sources  
• i.e. personality is dependent upon external world for stimulation- deprivation can lead to disorganization |
| 2. The Through-Put                     | • Open systems transform the energy in the system in ways that benefit the system and allows work to be done |
| 3. The Output                          | • Open systems export products into the environment (products are created) |
| 4. Systems as Cycles of Events         | • Cyclical energy exchange – many small cycles can make up large ones  
• Energy reinforcing the cycle of activities can come from exchange of product in world or from the activity of the cycle  
• The problem of structure can be observed in the arrangement of units  
  • Structure can be found in an interrelated set of events  
  • which return upon themselves to complete/renew cycles  
• Activities promote unity in the closure of the cycle—the chain of events |
| 5. Negative Entropy                    | • Open systems must acquire negative entropy  
• All forms of organization move towards disorganization |
| 6. Information Input, Native Feedback, and the Coding Process | • The inputs into living systems consist of energetic materials which are altered in the cyclical process
  - Inputs also help create character of organization
• Negative Feedback- enables the system to correct deviations from course (simplest)
  - If there is no corrective device, too much energy will be expended and system will stop working
• Selective energetic input- only react when attuned |
| --- | --- |
| 7. The Steady State and Dynamic Homeostasis | • Adding energy to stop entropy occurs to create consistency so that organizations are stable
  - No true equilibrium; rather a continuous cycle of energy from environment/system without changing the character of the system
  - React to changes and assimilate them without creating mass system change
  - In preserving the character of system the structure will import more energy than required
• Most common type of growth is multiplication of same type of cycles- change in quantity
• Qualitative change can occur: supportive subsystems to develop and where quantitative changes cause qualitative changes |
| 8. Differentiation | • Open systems move in the direction of differentiation and elaboration (growth)
  - “Progressive mechanization- interaction of various dynamic forces which entails use of regulatory feedback” (282) |
| 9. Equifinality | • Systems can reach the same end product by multiple paths |

**Consequences of Using Open Systems Model**

1. Failure to recognize that organizations are dependent upon inputs on the environments and that human energy is not constant
   a. Organizational theory focus on principles of internal functioning—but environment has a huge effect on changes and motivation
   b. Environmental factor is not considered – failure to recognize the equifinality portion
2. Irregularities in functioning of system due to environmental differences – assumption that they can be controlled and thus are not true influences