

History of management thought revision flashcard



**ASSIGN
BUSTER**

Part Two The Scientific Management Era The purpose of Part Two is to begin with the work of Frederick W. Taylor and trace developments in management thought in Great Britain, Europe, Japan, and the U. S.

A. up to about 1929. Taylor is the focal point, but we will see his followers as well as developments in personnel management and the behavioral sciences. Henri Fayol and Max Weber will be discussed, although their main influence came later, and we will conclude with an overview of the influence of scientific management in its environment. Chapter 7 The Advent of Scientific Management Frederick W. Taylor is one of the more widely recognized names in the management literature.

Far more rare, however, is an accurate account of him and his ideas. This chapter intends to portray Taylor with his faults as well as his virtues.

Though sometimes inconsistent in what he said and what he practiced, there is little doubt that his contributions for his era were substantial. A.

Taylor's Early Years 1. His family background provided no indication of what his career would be like. His father had money and property and his mother's family history was deeply rooted in colonial times. Taylor had the advantage of a fine prep school, travels to Europe, and a membership in an exclusive social club. Yet, due to failing eyesight, he did not go to Harvard as planned but started as a factory apprentice. His early experiences as a worker would shape his view of management.

2. Taylor at Midvale Steel a. Started as a laborer, rose into management. This would lead to his "shop management" point of view.

b. Took a home study course to get his college degree in mechanical engineering. c. As a worker, then a first line supervisor, he observed numerous industrial practices that led him to his life's work. d.

Restriction of output which Taylor classified into natural soldiering and systematic soldiering. e. Taylor thought maybe a supervisor could inspire or force workers to stop natural soldiering. f. Systematic soldiering resulted from group pressures for individuals to conform to output norms set by the work group.

Taylor attributed this to a "lump of labor" theory. (Have your students define this theory and see if they can cite examples of group pressures — at work, school, or wherever). g. Taylor felt he could overcome soldiering and improve the situation if workers knew that the production standards were established by a study of the job, rather than by historical data, and if incentives could be provided.

3. Search for Science in Management (it is important to point out that management is not a science in an academic sense, but Taylor intended to use a scientific fact-finding method to determine a better way): a. Time study — this was prescriptive in that Taylor sought to identify the time a job should take (contrast this with Charles Babbage who measured only the length of a work cycle). b. Time study was analytical, breaking the job into its components and eliminating useless movements; and constructive, building a file of movements that were common to other jobs.

c. Also, Taylor tried to improve tools, material, and machines. d. In modern terms, his concept of job design was to analyze the job, discard wasted movements, and reconstruct the job as it should be done.

He also sought to find the right tools, the right way to operate the machinery and to make the job more efficient. Today we might call this ergonomics. 4.

Incentives a. Pay for performance, that is, pay largely determined by a person's productivity, is ancient. For example, in the domestic system payment was received based on the quantity and quality of work.

b. Once a standard was set through time study, rewards could be based on that. Taylor called that "rate-fixing." c. Taylor discouraged profit sharing because it did not reward the individual and because it occurred long after the performance. d.

Taylor adopted Charles Brinley's "differential piece-rate" that paid those who did not reach the performance standard on ordinary rate of pay (much like a minimum wage); a higher rate of pay was given for attaining the standard. . Taylor also recognized non-economic incentives, such as hope for advancement, better working conditions, etc. 5. Unions — Taylor felt that unions wanted to base payment on class of work, not performance; thus an individual was not paid based on effort.

6. "First-Class" worker — this was Taylor's idea that everyone was best or first class at some type of work. There should be a match between a person's abilities and their job placement. 7. "Functional Foreman" — Taylor had the idea that knowledge was authority.

Supervisors could not know everything about the planning and performance of the work; therefore functional specialists would provide assistance to the workers. In retrospect, Taylor had recognized the need for staff advice and assistance from people who had special abilities or knowledge. B. Taylor after Midvale 1. He became a consultant for various firms, such as Simonds Rolling Company and Bethlehem Steel.

Note and discuss “ Schmidt” and the pig iron workers. Did Taylor tell a “ pig-tale”? 2. What were Taylor’s views on teaching management? 3. Eastern Rate Case — in this case before the U.

S. Interstate Commerce Commission, Louis Brandeis, attorney for the shippers, used individuals to testify that the railroads did not need to increase their rates if they would adopt known management improvements. Brandeis coined the phrase “ scientific management” to describe Taylor’s ideas. This brought a great deal of attention, some unwanted, to Taylor and his colleagues. Note the author’s comments about the accuracy of Emerson’s claims and Taylor’s reaction to Emerson’s testimony. 4.

Watertown — Taylor’s ideas were to be implemented at the federal arsenals at Watertown (Mass.) and Rock Island (Ill.). Representatives of the machinists’ union told the workers to resist and a strike occurred. 5.

Congressional investigation — the strike lasted one week, but Congressional representatives from the Watertown and Rock Island districts asked for an investigation of the Taylor and “ other efficiency systems.

” a. The testimony provides a sample of how Taylor was treated. (You might have your students “ role play” the testimony, especially where Taylor was

<https://assignbuster.com/history-of-management-thought-revision-flashcard/>

trying to clarify what he meant by “ first-class” worker.) b. No evidence was found that there were abuses under scientific management and no need for remedial legislation. .

Mental Revolution — in his Congressional testimony, Taylor described his philosophy that labor and management had a “ mutuality of interests” and needed to work together. This “ revolution” emphasized the need of both labor and management to change their attitudes and work together, otherwise scientific management could not exist. Compare Taylor’s view with a union leader’s view by Nels Alifas. If all followed Alifas’ ideas, what would happen to the mental revolution? 7. Other ideas of Taylor: a. Human factor — “ systems” were not enough, but there must be a good relationship between managers and workers.

b. Resistance to change — this is to be expected, but with time and explanations, people would see the benefits. 8. Summary — Taylor had his faults, did not always follow his advice to others, and sometimes became an advocate in selling his ideas. Despite these flaws, he came into the industrial scene at a time when better management was needed; he gave credibility to the idea of managing more efficiently while paying workers higher wages; he foresaw the need for planning through setting standards; others would extend his idea of first-class workers into better personnel management; and he made advances in improving jobs, tools, and methods. Chapter 8 Spreading the Gospel of Efficiency In Chapter 7 Frederick Taylor was the major figure but it should be made clear that the scientific management movement involved other individuals.

Chapter 8 examines Carl Barth, Henry Gantt, Frank and Lillian Gilbreth, Harrington Emerson, and Morris Cooke as other important contributors to what Taylor was doing. A. Carl Barth 1. Mathematician who helped Taylor with some metal-cutting experiments. A very faithful follower of Taylor's ideas (and probably a major influence in writing the "official" biography of Taylor).

2. Consultant — assisted in installing scientific management in various companies. One was the Franklin Motor Car Company, which is interesting because it preceded Henry Ford's moving assembly line. Cars were made in batches of models, and was amenable to scientific management.

(I agree with Daniel Nelson, however, that scientific management was not important to the auto industry once the assembly line came in. Work was paced by the belt and individuals were no longer able to influence their output and therefore their reward. An interesting comparison between batch and mass production could be made, e. g. standards, time study, personnel selection, supervision, and incentives.) B.

Henry L. Gantt 1. Gantt also started his career under the guidance of Taylor. Gantt's early work paralleled Taylor's in their beliefs about worker selection, incentives to reward performance, mutuality of interests, and so on. 2. To these basic agreements with Taylor Gantt added: a.

Task work with a bonus to stimulate performance; but when he realized that provided little incentive beyond meeting the standard, he modified his payment plan. In this sense, he influenced Taylor because Taylor found that

Gantt's plan was better. b. Adopted E. P. Earle's idea of rewards to supervisors when their employees came up to standard; i.

e. , rewarded for teaching and developing your employees. c. Gantt's emphasis on the importance of morale. d.

The Gantt Chart — steadily evolved into a valuable tool for scheduling (planning) and controlling work. (1) Widely used during World War I (2) Became an international management technique. (3) A forerunner of subsequent planning and controlling techniques such as major milestones, PERT, CPM. e.

The New Machine — a group headed by Gantt to promote the idea that engineers should be industrial leaders. . Social responsibility — Gantt's concern that business should not lose sight of its service role in the economy. C.

Frank and Lillian Gilbreth 1. Frank — worked in the construction trades and called his job design “ motion study. ” Independent of, but influenced by, Taylor. 2. Lillian — our “ First Lady of Management” for her accomplishments with her husband as well as after Frank's death. 3.

As partners, they made numerous contributions: a. Frank's study of bricklaying; motion study; a “ white list” to identify top workers in an appraisal system; and a bonus to employees for suggestions. b. Motion and fatigue study — a joint effort to reduce fatigue and improve productivity. (You might suggest that one or more of your students read “ Cheaper by the Dozen” by F.

B. Gilbreth, Jr. and Ernestine G. Carey. "Cheaper by the Dozen" has appeared as a movie twice: the first had Clifton Webb play Frank and Myrna Loy portrayed Lillian; a more recent release has Steve Martin as Frank and Bonnie Hunt as Lillian.

If class members can find both of these movies, a comparison and evaluation can be made—and a lively discussion. c. Other contributions: (1) Therbligs (2) Motion pictures with special lighting to study micromotions. Note that Frank offered this technique to Taylor. (3) Process charts to study the flow of work through the shop. (4) Promotion planning.

(5) Pioneering work with handicapped employees. d. Psychology of Management — Lillian's original, but not final, Ph. D. dissertation. It was not industrial psychology, per se, but the psychological intent of scientific management.

e. Lillian's efforts to bring Gilbreth's motion study and Taylor's time study are worth mentioning. D. Harrington Emerson 1. He worked largely independent of Frederick Taylor but they corresponded and he was aware of Taylor's ideas. .

Emerson's ideas focused on: a. The lack of organization, in Emerson's view, was a major problem. He proposed the line-staff organization as a way of bringing staff knowledge to assist the line managers. b. Emerson's line-staff idea was similar to Taylor's desire to use the knowledge of functional foreman, but an improvement since it did not split the chain of command. c.

Emerson took Taylor's idea of setting performance standards and applied this to cost accounting. Standards could be established for what the costs should be, rather than estimating costs from previous records. d. Incentives — Emerson provided 120% wages for 100% performance (the standard) and that increased if the worker produced more.

e. Of Emerson's numerous "principles": clearly defined ideals (objectives), participative decision making, and the proper use of staff stand out as the more unique of his ideas. f. Emerson established a successful consulting practice and sought to improve ethical practices among consultants.

E. Morris Cooke 1. Cooke worked closely with Taylor and became one of the four individuals Taylor considered his disciples (others were Gantt, Barth, and H. King Hathaway). 2.

Cooke's early work developed when Taylor sent him on various consulting assignments: a. In education, where he felt that college administration was inefficient. b. In government, where Cooke became Director of Public Works for the City of Philadelphia and successfully implemented scientific management. 3. Collaborated with Taylor in preparing Principles of Scientific Management and received the royalties for his efforts.

4. In his later work, Cooke became interested in getting the leaders of organized labor to work within scientific management ideas. a. Suggested that management needed to "tap labor's brains."

b. Worked with labor leaders in gaining a better feeling about union-management cooperation. c. Served Presidents F. D. Roosevelt and Harry Truman in government positions.

Chapter 9 The Human Factor: Preparing the Way This chapter has one purpose but many sub-topics. The common element is the emphasis on the human factor as it appeared in personnel management, psychology/ industrial psychology, sociology/industrial sociology, and employee participation in decision making as manifested in the trade union movement and industrial relations, union-management cooperation, and employee representation plans. A. Personnel Management: A Dual Heritage 1. One part of the beginnings of personnel management may be found in the industrial betterment/welfare movement.

a. This movement found its basis in the Social Gospel and grew out of a concern for improving industrial conditions. b. A number of companies employed a welfare secretary to advise management. Their duties were many, and in some cases appeared to be paternalistic.

c. Many, though not all, of these secretaries were females, perhaps because of their experience in vocational guidance or social work, or perhaps because some of their duties resembled a role stereotype of what a woman did - i. e. menus, handling illnesses, etc. 2.

Scientific management emphasized improved personnel selection, placement, wage plans, and other matters that involved employee welfare. Taylor had described this role but it was others who advanced personnel

management. a. Mary Gilson would be one example of the scientific management viewpoint.

b. Also Jane Williams at Plimpton Press. c. The Henry Gantt/Elizabeth Briscoe clash at Bancroft Mills relates similarities and differences between the welfarists and those of scientific management. d.

Henry Ford and his \$5 per day minimum is worth mentioning, as well as his “sociological department.” (Ask the class what Ford’s “advisers” did — does this sound like a modern social worker? Also, why was the sociological department changed?) B. Psychology 1. This section begins with a “plutology” quote (1863) which resembles A.

H. Maslow’s (1943) hierarchy of needs theory. The purpose is to show that this early insight came from deduction and introspection, not empirical study. 2. The pseudosciences also reflect this introspection, yet some of these, such as graphology and astrology, are claimed today to have merit.

Students may comment, and accurately so, that at this point in history these were considered scientific and not pretenders to science. Phrenology is my favorite, especially if you pretend to be an on campus recruiter.) 3.

Industrial Psychology a.

Wilhelm Wundt pioneered scientific psychology. b. But more importantly, Hugo Munsterberg applied this scientific approach to industrial problems. c. Munsterberg sought (1)the best possible worker (2)the best possible work (3)the best possible effect d.

He advocated (1)tests for worker selection 2)research in the learning process in training (to me, this sounds like an early concept of what we would call transfer of learning theory). e. Others who were early in the field of industrial psychology are mentioned briefly in the text. (They are not emphasized, but you may find a favorite here to assign for your class.) (1)Charles S.

Myers (2)Walter Dill Scott (3)Cecil A. Mace (4)Morris S. Viteles C. The Social Person This section involves the antecedents of industrial sociology as well as sociological theory. (Again, different individuals and contributions are open to your choice. 1.

Whiting Williams — obviously a favorite of mine, and a person whose ideas have been long neglected. a. A white-collar personnel director who put on the clothes and guise of a worker to study work first hand. That is, a participant-observer. b. Emphasized the centrality of work (before the work of Bob Dubin and George W.

England). c. Job defines social status as well as a person's place in the work situation. d. The workplace is a part of a larger social system.

e. Saw earnings as a matter of social comparison — influencing how a person viewed himself relative to others. My feeling is that Williams should be seen as the originator of equity theory.) f. Workers' mainspring was to be found in their relations with others (is this or is this not a pre-Hawthorne view of human relations?) g.

The “ Eleventh Commandment” — “ Thou shalt not take thy neighbor for granted” — still good advice. h. My conclusion is that industrial sociology

began with Williams, and that the Social Gospel influenced his thought. 2.

Sociological theory a. Emile Durkheim (1)anomie — “ normlessness”

(2)mechanical societies were dominated by a collective consciousness.

3)organic societies were characterized by interdependence and the division of labor, leading to anomie. (Note that some modern writers use other

definitions for mechanical and organic.) (4)Durkheim’s thinking influenced

the human relationists’ view of the need for social solidarity. b. Vilfredo

Pareto -(Not one of my favorites as I find his ideas on social systems clouded in jargon.

I mention him, however, for... : (1)The Pareto Circle that influenced the

Harvard version of human relations. (2)Pareto’s influence on Chester Barnard and cooperative systems.

. Social behaviorism — may be worth mentioning because of the notion of the “ social person,” the beginning of social psychology, and C. H. Cooley’s “ looking glass self,” a very interesting way of looking at the formation of self-efficacy, personality development, and a host of other ideas. d.

Gestalt psychology definitely deserves a mention. A number of persons who we will encounter later, such as Mary Follett and Kurt Lewin, were gestaltists and the notion prevails in much of our modern thinking about group

dynamics and sociotechnical systems. D. Employee participation in Decision Making This section examines three paths to give employees a “ voice” in the firm or organization: 1. Through membership in a union that would represent the workers’.

a. John R. Commons is a substantial figure here. Perhaps the first to use the phrase “ human resources” and considered the “ Father of Industrial Relations.

b. Commons was not anti-scientific management because it worked in some firms, but felt workers needed a say-so in the workplace. c. Other economists were interested in “ applied economics” issues such as turnover, job analysis, etc.

. The position of Samuel Gompers and the AF of L was to achieve gains for organized labor through bargaining power, not productivity. Gompers said “ more, more, and then more” was what labor wanted. 2.

Union-management cooperation a. Morris Cooke, Ordway Tead, and Robert Valentine were examples of those who were trying to reformulate what labor felt was the unyielding, no union, position of scientific management. The revised emphasis was to be on consent: b. Union-management cooperation plans began when union membership was in decline in the early 1920s.

Unions agreed to accept scientific management if they were involved by electing representatives and could bargain about wages, hours, working conditions, and so on. 3. Employee representation plans a. These did not involve unions but the workers elected representatives and participated through shop councils and committees. Unions did not like these plans (no membership dues, perhaps). b.

Commons studied 30 of these “ industrial government” or industrial democracy plans. c. Henry Dennison’s plan is noteworthy for its progressiveness. d.

The Sage Foundation study indicated most employee representation plans were progressive and improved labor-management relations. (In Part Three we will see the demise of union-management cooperation and employee representation plans with the passage of the National Labor Relations Act.)

Chapter 10 The Emergence of Management and Organization Theory This chapter discusses the work of two major management theorists, Henri Fayol and Max Weber. Fayol provided the basis for the modern approach to general management theory through the management process. Weber conceptualized bureaucracy to provide a formal approach to organization theory. A.

Henri Fayol 1. Fayol was an engineer who rose in the management hierarchy to become the Director (CEO) of a large-scale, fully integrated enterprise formed his conception of management as the general activity of integrating the functions of the firm in order to intelligently use resources to attain the objectives of the firm. In the opening pages, note how he built his theory from his experiences. 2. While Frederick Taylor was more production oriented, Fayol’s viewpoint was that of general management. .

Fayol drew certain conclusions from his experiences: a. Managerial abilities differed from technical ones, and the success of the firm depended to a greater degree on good managers than good technicians. b. Fayol felt that

every organization required management regardless of whether it was “ commercial, industry, politics, religion, war .

.. ” etc. I feel there is much misunderstanding about what Fayol intended. This statement of his suggests the universality of management in that this activity is necessary in all organizations. It does not mean, at least to me, that managers are universal, that any manager can manage any organization.

(This point is arguable and merits class discussion.) c. Managers needed certain qualities, knowledge, and experience. d. Managerial abilities become more important as a person moves up in the hierarchy; technical abilities are less essential for upper level managers.

(I like to point out to my students that most CEOs still have a fond place in their heart for their technical specialties — engineering, chemistry, whatever — even though they must decide for the firm as a whole. e. Management could be taught in schools and universities but was not because of the absence of management theory. (“ Theory” has many meanings for individuals so you might ask your students to give their definition and compare that with Fayol’s.) 4. Fayol’s Principles of Management (This is one of those areas where controversy can thrive — some maintain that “ management principles” is an oxymoron.

My approach is to stress his disclaimer that “ there is nothing rigid or absolute” in management and that Fayol’s principles were guides, “ lighthouses,” but not absolutes nor universals. Since he has 14 principles, I do not try to cover them all but stress those below.) a. Division of labor — <https://assignbuster.com/history-of-management-thought-revision-flashcard/>

he appears rather traditional here regarding work design, but note the job enlargement he practiced in the Commentry coal mine. b. Authority — the point here is his distinction between formal authority, “ the right to give orders and the power to exact obedience”, and personal authority which was a compound of “ intelligence, experience, moral worth, ability to lead” and so forth.

Fayol was aware of the need to combine and complement the authority of position with leadership qualities. c. Unity of command — standard, but worth a reminder for the students. d. Unity of direction — good advice to a lot of organizations.

e. Centralization — note that this does not mean that all decisions are made by top level management but finding where decisions should be made depending on the factors Fayol mentions. f. The “ gangplank,” a means for providing lateral communications. Fayol’s French for this was passerelle which translates as a bridge, foot-bridge, or gangway.

“ Gangplank” was Constance Storrs’ translation for passerelle but I am often reminded that gangplank is also what the pirates made you walk if you were behaving badly!) g. Subordination of individual interests to the general interest. Put this in a contemporary context by asking students for examples of persons who use their position of authority to serve their self-interest rather than the interests of the firm’s employees, shareholders, etc. 5.

Fayol’s Elements of Management (This is another area that is plagued by terminology. Most introductory management texts use some version of Fayol’s description of what managers did, but the labels are different.) a.

<https://assignbuster.com/history-of-management-thought-revision-flashcard/>

Planning — also could be translated as “ foresight,” but very basic to Fayol’s theory: (1)Plans depended on the firm’s resources, work in process, and future trends that could not be predetermined. (Note that Fayol’s ideas resemble what would be called a strategic audit.

) (2)Plans needed to have the characteristics of unity, continuity, flexibility, and precision. 3)Long range planning — certainly a unique idea for his time but a valuable contribution in the evolution of strategic management. b.

Organizing — Fayol included both the design of the organization and the staffing job of the manager in this element (I tell my class that organizational design is like developing the plot and roles in a drama, while staffing is selecting and rehearsing individuals to fill those roles. Try it, and let me know if it works for you.

) (1)Structure of the organization had to be consistent with the objectives, resources, and requirements of the firm. 2)Functional and scalar growth (these are described, but you may wish to review these concepts so you can explain Fayol’s span of control ideas.) (3)Span of control — relatively narrow at the top, but greater at lower levels, according to Fayol. (4)Staff (advisory personnel, not to be confused, as it often is, with staffing. No wonder our students struggle with the language of management.

) On the subject of staff, Fayol disagreed with Taylor; that is, line managers needed staff advice but not through functional foremen advising workers.

5)Staffing (today we call it personnel or human resource management) involved selection, evaluation, and training of personnel. c. Command:

Fayol’s term for directing, leading, supervising, actuating, or whatever. d.

Coordination: harmonizing the activities of the organization. e. Control: checking on performance to identify and make corrections, if necessary. 6. The author concludes that Fayol was a “strategist” before that term became popular.

Discuss the pros and cons of Fayol as using strategic management skills. (Fayol spent relatively little time discussing command, coordination, and control. The point I stress is that planning, organizing [and staffing] set the stage for where we are going and when and how we intend to get there; then these plans, people, and resources are activated, led, motivated, and coordinated; and as our information system brings us performance data, the control element enables management to renew the elements by replanning, or reorganizing, or whatever has been indicated by our control system. Thus, management is a continuing process, not a neat set of discrete elements/functions that are performed without consideration of the other elements.

) B. Max Weber and Bureaucracy (To begin, ask the class what “bureaucracy” means. There is a high probability that this idea will be associated with rules, impersonality, inefficiency, and “catch-22” situations. This opens the door for what Weber intended.) 1.

Weber’s Germany was characterized by cartels which limited competition; his interest in the capitalistic spirit (from Chapter 2) led him to ask if a market oriented society could operate large organizations on some rational, systematic basis? A good discussion point might be the quote from Weber about “rational capitalism” versus “greed. Is capitalism and its market

system a “ rational” way to allocate resources? 2. Bureaucracy as theory a. It was management by the office, not by person. b. It was an “ ideal,” the “ pure form” of organization but this did not mean that it was the most desirable.

c. Weber is suggested as the “ founder of Organization Theory. ” 3. Authority — Weber had three pure types: a. Rational - legal b.

Traditional c. Charismatic (Have your students describe each type. Then, ask if organizations can operate best on the rational-legal basis, as Weber argued. Why? Or, why not?) 4. Elements of Bureaucracy — Ask the students to review these and apply them to a university, business, or other organization.

5. Weber argued that bureaucracy was, technically, “ capable of attaining the highest degree of efficiency”. If so, why do we think of bureaucracy as undesirable? Chapter 11 Scientific Management in Theory and Practice Our purpose in this chapter is to examine the impact of scientific management on management education, on international management, and on other disciplines. Second, we see the spread of management ideas beyond the factory and the emergence of general management. The chapter is replete with names so suggestions will be made below where different emphases might be placed.) A.

The Study and Practice of Scientific Management 1. Education for Industrial Management (This is one area you may wish to summarize.) The main points are: a. Early in the 20th century, the teaching of management in

colleges focused on production management and was based on Frederick Taylor's writings. b.

Daniel Nelson's observation that scientific management gave credibility to the study of business. Business schools were considered by educators of that time (and maybe today) as too vocational. . Scientific Management Internationally a.

The " management revolution" spread abroad as a product of the U. S. A. b. In France, industrialists tended to implement scientific management to increase productivity without following Taylor's advice. Taylorisme became a dirty word for French workers.

c. In Britain, note the differing opinions on scientific management. d. In Poland, Adamiecki's " harmonogram" was similar to PERT. e.

In the U. S. S. R.

(which at the time was the Soviet Union rather than as it stands now):

(1) Lenin advocated Taylorism, but little came of this in practice. 2) Gilbreth's ideas on motion study probably had more influence than Taylor's ideas.

(3) Taylor's idea of a mental revolution ran counter to the Bolshevik distrust of capitalism. (4) Walter Polakov was successful in getting the U.

S. S. R. to use Gantt Charts for their five year plans. f. In Japan, Taylor's ideas gained widespread acceptance.

The Japanese liked the idea of harmony, cooperation, and mutual interest. What modern scholars call Japanese style management had its roots in the

work of Taylor. 3. Industrial Practice (Beau coup names here so select as you see fit. Briefly: a. The Hoxie study highlighted the difference between the notions of scientific management and how well they were implemented.

Note, however, that the Hoxie report was a pro-union document and biased toward labor unions. Also, see John Frey's later doubts about Hoxie himself. Also noteworthy are John R. Commons' comments about why the Hoxie report was not included in the final report of the Industrial Relations Commission.

b. Studies by C. B. Thompson and Daniel Nelson provide more accurate assessments of scientific management.

c. It is worth emphasizing that Nelson concluded that scientific management had a "strong positive correlation" with industrial efficiency. Also, scientific management was "associated with growth not stagnation" in most industries. d.

Scientific management was associated with batch shop production and labor intensive operations. But in capital intensive industries, or automobile assembly lines, scientific management was less useful. e. Evidence from the U.

S. Bureau of Census disputes the notion that scientific management "de-skilled labor." Rather, the number of skilled and unskilled workers was increasing during this period. Scientific management has been criticized for de-skilling jobs and your author and the employment data from this period suggests this has been perpetuated as an untruth. B. Emerging General

Management 1. Scientific management and other disciplines (for your selection): a. Public administration b. Marketing c. Accounting and standard costing d. The “ crossover” chart as a forerunner of “ break-even point. ” e. Flexible budgeting. f. J. O. McKinsey is an unsung pioneer for the business policy/strategy field. His influence on Bill Newman will be discussed later. 2. Early organization theory (very useful if this is an emphasis in your class): . A brief summary of some previous notions of organization, line-staff, organization charts, etc. b. Russell Robb is the focal point of this section. His ideas involved: (1)Organizations differed as to goals sought as well as means to those goals. (2)These organizational differences suggested there was no one best way to organize. 3. DuPont and General Motors (I place more emphasis here because of the very innovative things that were happening during that period at DuPont and G. M.) a. Psychological tests for personnel selection. b. Donaldson Brown and Return on Investment (ROI) as $R = T \times P$. This became the basis of the DuPont Chart system that is still in use. c. William C. Durant is an interesting study, but briefly examined here. He was great at building a firm, but not noted as an outstanding manager. d. Alfred P. Sloan, Jr. and the creation of centralized policy, control, and review while decentralizing administration and operations. e. The use, by both G. M. and DuPont, of the multidivisional structure. Organized around product divisions, these divisions could be decentralized for operations and performance could be measured by ROI (when we speak of the “ M-form” organization, here are its origins). 4. Business Policy and Philosophy (again, numerous ideas to consider): a. Arch W. Shaw and the beginning of a business policy course. b. The “ problem” or case method of instruction borrowed from legal education. c. A. H. Church and his distinction between what we would call policy

formulation and implementation. d. Oliver Sheldon and a philosophy of management built on the efficiency values of scientific management with the ethics of service to the community. Chapter 12 Scientific Management in Retrospect This chapter examines the scientific management era in light of its economic, technological, social, and political environment. The student should see how the ideas of managing shaped and were shaped by changing environmental factors.

A. The Economic Environment

1. The U. S. A. was in transition from an agrarian to an industrial nation. In this period of growth, scientific management provided a means whereby a better utilization of resources could occur.
2. The U. S. work force was very diverse with immigrants from many lands. See the data for the Nation and the example of workers at Ford Motor.
3. Compare Taylor's " mental revolution" with the " mutual gains strategy" of today.
4. The U. S. orker prospered, both in wages, real wages (purchasing power), and reduced hours of work. (See the data for 1865-1890 and 1890-1921.)
5. More employees were in management with the addition of staff specialists. This growth in the managerial hierarchy made it more critical to plan, organize, etc.
6. Alfred Chandler's rationalization of resource utilization describes well the needs of industry during this era. The ideas of the scientific management pioneers fitted these needs.
7. Industrial efficiency was increasing, partially due to scientific management (see the data on productivity).

B. Technology and New Horizons . A substantial number of today's Fortune 500 companies started during this period.

2. New manufacturing processes in steel and metal-working.
3. Transportation advances by automobiles, aircraft, canal and bridge construction.
4. Emerging energy sources in petroleum and electricity.
5. Assembly line developments at Ford Motor.
6. Office work was reshaped

<https://assignbuster.com/history-of-management-thought-revision-flashcard/>

by the mimeograph for copying, the typewriter, carbon paper, Hollerith's punch card, and visual means of data presentation such as Gantt Charts. C. The Social Environment 1. Horatio Alger, Jr. characterized the "success" ethic of U. S. enterprise. 2. Scientific management ideas were consonant with the social values of self-directing, high need for achievement, individuals. 3. Change came as the Western frontier closed; Bill Scott called this the "collision effect," which would lead to a transition period of individualism being replaced by a social ethic (coming in Part Three). 4. The Social Gospel — described briefly here at the risk of repeating previous material. C. The Political Environment 1. The political articulation of the Social Gospel was the Populist-Progressive Movement. 2. Scientific management appealed to the Progressives, especially Morris Cooke. . An increasing regulation of business during this time overcame the inadequacies of the earlier Sherman Act. 4. Check the tax rates — they are a good way to capture a feeling for this era of relatively limited government. Part Three The Social Person Era Chapter 13 The Hawthorne Studies The purpose of this chapter is to describe the studies at the Hawthorne Plant of Western Electric, then a subsidiary of the American Telephone and Telegraph Company. The "social person" was not invented by these studies, but was elevated and brought to wider recognition by those who interpreted the results. The interesting thing about these studies is how they have been publicized, misinterpreted, praised, and criticized over these many years since the event. Each of us will bring some of our views in when teaching this chapter and it is interesting to find that the issues of Hawthorne have not been resolved but continue to generate articles and presentations. I have used the microfilm records of these studies and I am indebted to Chuck <https://assignbuster.com/history-of-management-thought-revision-flashcard/>

Wrege, Ron Greenwood, and Al Bolton for their seminal work. A. The Studies Begin 1. The original research issue was the effect of workplace illumination on worker productivity. Those who came initially to Hawthorne were electrical engineers from MIT. a. After establishing performance baselines in three departments, the researchers varied the level of illumination. Their conclusion: illumination appeared to have no influence on output. b. Another attempt was made with a control group and a variable group, placed in separate buildings. Again: in this case output went up in both groups. c. The illumination research was abandoned in 1927, but one of the researchers, Charles E. Snow, concluded there were too many variables and the “psychology of the human individual” could have been the most important one. . The Relay Assembly Test Room a. The studies could have been trashed at this point, but Homer Hibarger and George Pennock pushed for further study. Pennock had an excellent insight: supervision was a better explanation. b. The participants were volunteers, knew the objectives of the study, and were observed for a short period in their regular department prior to going to a separate room with their observer. You may wish to indicate to your students that two of the original participants were replaced about 8 months into the experiment. This became an issue which is discussed in Chapter 17. . A number of changes were introduced: (1)The incentive payment plan was changed such that the relay assembly group was rewarded on their output rather than on the output of the larger relay assembly department. Note that the participants were told that they could make more money under this arrangement — this point will come into play later when various interpretations are made of why output increased. (2)Rest periods were introduced. (3)After 8 months, two operators quit and two new

<https://assignbuster.com/history-of-management-thought-revision-flashcard/>

ones selected. (4) Work-day and work-week changes. (5) Lunch and refreshments were provided by the company. . Over a year after the studies began, all of these “ privileges,” except the small group payment plan, were removed. While output varied, the overall trend was increased output. 3. Clair Turner and an early interpretation of the rise in output: a. The small group resulting in more esprit de corps. b. The style of supervision: the participants’ remarks are worth noting. c. Increased earnings: average wages went from \$16 to \$28-50 per week while in the test room. d. The novelty of the experiment. c. The attention given to the operators by others. 4. A second relay assembly group was formed by Clair Turner in an effort to test the pay for performance effects. Average earnings per week had increased significantly. a. The second relay group was formed and taken from the large group payment plan to the small group one. Initially, output went up and then leveled off. Note that this study lasted only 9 weeks. Then, this group was returned to the original payment plan, output dropped (and that was the end of the second group). b. Mica splitters had always been on individual pay incentives and this group was studied for 14 months. In this group, average hourly output went up during this period. . Turner concluded that pay incentives were one factor, but not the only one, although it was of “ appreciable importance. ” (Chapter 17 provides a critique of the studies but my preference is to present and discuss Chapter 13 without reference to the criticisms. When we get to Chapter 17, we discuss the various interpretations of the studies and tie it all together. Other instructors may choose to tie 13 and 17 together in the discussion. The outcome should be the same.) 5. The Interviewing Program a. Snow and Hibarger started asking the workers directed questions about their feelings. b. Elton Mayo made a

<https://assignbuster.com/history-of-management-thought-revision-flashcard/>

contribution by changing the interviewing program to a nondirective approach. He felt that supervisors need to listen more. c. With the nondirective approach the length of the interviews and the information gathered increased: (1) There appeared to be a cathartic effect. After a worker complained, follow-up interviews revealed that the complaint was gone. The workers felt better even though no change in conditions had occurred. (2) "Fact" and "sentiment" had to be separated. (3) Two levels of complaints (a) Manifest, i. e. what the employee said. (b) Latent, the psychological content of the complaint. 4) Complaints were symptoms to be explored. (5) "Pessimistic reveries" (Mayo's phrase) could be reduced if supervisors were concerned and listened to their employees. Thus, according to Mayo, pessimistic reveries would be negative attitudes held by employees that could interfere with their performance. 6. The Bank Wiring Room a. Concerned observation, but not intervention, with male workers assembling switches for central office switchboards. Note the supervisors' objections before the study began. b. Restriction of output was a surprising finding even though this practice had been described by others. c. Workers had established an output norm that was lower than management's standard or the "bogey." d. In the informal organization, there were two cliques, each having norms about appropriate in-group behavior, such as the practice of "binging." e. Researchers found that the work groups: (1) Deliberately restricted output (2) Smoothed out production (3) Developed intragroup disciplinary methods. f. Some workers were isolates, not in a clique, because of various factors. g. Rules for clique membership: (1) Working too fast, a "rate buster." (2) Working too slowly, a "rate chiseler." (3) Do not "squeal" on a member of your group. 4) Do not act officious or be socially distant. h.

Factory as a social organization; work groups served to protect the workers within their group, and to protect the group from outsiders. The workers viewed: (1) Technologists and managers as following a “logic of efficiency” which interfered with group activities. (2) Workers were apprehensive of authority and followed a “logic of sentiments” which reflected their feelings and attitudes toward outsiders.

B. Human Relations, Leadership, and Motivation

1. The “Hawthorne effect”: part of the research and human relations folklore for years. Allegedly, the findings were biased because the experimenters became personally involved in the social-work situation.

a. Theresa Layman, one of the participants, rebutted this; so did Don Chipman, one of the observer experimenters; and so did Clair Turner, one of the experimenters.

b. The Hawthorne effect is widely referenced, but is a dubious explanation of the Hawthorne results.

2. Mayo felt “pessimistic reveries” were one type of blockage which arose out of personal, social, and industrial problems and became manifest in apprehension of authority, restriction of output, etc. . Anomie, borrowed by Mayo from Emile Durkheim to describe the break-up of traditional society, leaving people without norms.

4. Leadership, in the view of Mayo and Roethlisberger, needed strengthening by social and human skills for the leader (note my feeling that Mayo and F. W. Taylor sought the same goal of collaboration and cooperation but differed in means).

a. Influenced by Chester Barnard, Mayo concluded that authority had to be based on social skills in securing cooperation.

b. Management needed to focus more on building group integrity and solidarity.

c. First line supervisors were particularly important in good worker-manager relations.

5. Motivation in the human relations literature evolved and became more Mayo and Roethlisberger’s advocacy than based on what happened at the

Hawthorne plant. a. Early reports, such as Clair Turner's report and Mark Putnam's statement to Business Week, placed money as important. b. The test room participants stated they liked the fact they were able to make more money. c. Chuck Wrege cites a memo to Mayo in which he is told that economic and financial factors were of considerable importance. . As time passed, the Mayo-Roethlisberger theme shifted: (1)Example, Roethlisberger's memo that Mayo would be happy because of some evidence that physiological, not economic, factors were related to output. (2)More emphasis in later writings is placed on social belonging needs, being accepted by the group. (3)A later quote regarding discarding " economic man. " (Some of this discussion overlaps the critique in Chapter 17. You may find it to your liking to combine these differing views of what motivated the social person.) Chapter 14 The Search for Organizational IntegrationThis chapter focuses on two individuals, Mary Follett and Chester Barnard, both of whom are very important in the evolution of management thought. Follett was chronologically closer to the scientific management era, but intellectually a forerunner of understanding group processes. Barnard, on the other hand, influenced human relations thinking and continues to influence our understanding of organizations and management. A. Mary Parker Follett

1. Basis of her philosophy: a. Johann Fichte, Georg Hegel, and Gestalt psychologists. b. Early experiences led her to realize the need to rethink our ideas about authority, leadership, and conflict resolution.
2. Conflict Resolution: She saw 4 ways — a. Submission if in a conflict situation. b. Struggle, and someone wins and the other loses. c. Compromise, a solution she did not like, especially as it appeared in labor-management collective bargaining. d. Integration, finding a solution that did not involve compromise,

<https://assignbuster.com/history-of-management-thought-revision-flashcard/>

submission, or struggle. My students are much more accustomed to bargaining or battle, and less at ease with trying to find a more creative solution. Follett's illustrations do not help our understanding of integration much either. The topic of conflict resolution does engender a lively class discussion if the students are prompted to think about labor-management relations, dating or marital relationships, or even international conflict.

3. Authority and Power

- Essential to integration would be rethinking authority and power.
- She advocated power-with and co-action to replace power-over and coercion.
- Depersonalize orders and follow the law of the situation. Ask your students if there is a similarity here with management by objectives — which they may or may not yet be familiar with.
- Authority is based on knowledge and not the will of one person. I comment here that this sounds like F. W. Taylor and the functional foreman. The class may or may not agree. If not, this opens the door to a discussion of authority and influence.
- "Power-with" required "circular response," disclosure and open discussion.
- Follett believed in employee representation plans (Chapter 9) because of cooperation and shared power.

4. Leadership

- Follett's notion of the role of the leader/manager was an extension of her ideas of integration and authority.
- Control could not be achieved without integrated efforts, that is, when interests were not reconciled.
- Control was based on facts, not people; and "correlated," not imposed from above.
- Coordination facilitated control.
- Leadership, then, involved defining the purpose of the organization and skills in coordinating and evoking the law of the situation.
- These leadership tasks were not based on the power of the leader, but a reciprocating influence of leaders and followers within the context of the situation. I find Follett fun to teach — her ideas are unique and provoke

discussion. She is often dismissed as too idealistic, out of touch in a tough world where decisions have to be made without time to implement her techniques. But, in a “tough world” can we make better decisions because people are involved and co-acting to achieve a common purpose? B. Chester Barnard

1. Cooperative Systems:

- Formal organizations as the kind of cooperation that is “conscious, deliberate, and purposeful.”
- Formal organizations helped:
 - Maintain an internal equilibrium.
 - Examine external forces to see if adjustments must be made. An “open systems” viewpoint.
 - Analyze the functions of executives.
- Organizations needed to be cooperative systems because people had choices and they could choose to contribute or not to contribute.
- The executive functions could modify actions and motives through influence and control.
- Effective-Efficient: individual and organizational goals might differ and Barnard expressed this as:
 - Effective, meet the goals of the organization.
 - Efficient, meeting individual motives, and only the individual could determine whether or not this was occurring.Students may find Barnard’s terms mean something different from previous definitions of effective and efficient. Mayo used logic of efficiency where Barnard meant effective. My advice to the class is to keep these definitions in mind only for Barnard. . The only measure of efficiency according to Barnard was the organization’s capacity to survive. That is, to provide adequate inducements to satisfy individual motives to secure their cooperation. At this point, another question occurs: an organization must also be effective or it may not be able to be efficient. Rather than being dichotomous, are effective and efficient really co-acting?

2. Elements of formal organizations: Barnard defined a formal organization as “a system of consciously coordinated activities or forces of two or more

<https://assignbuster.com/history-of-management-thought-revision-flashcard/>

persons. The late Lyndall Urwick felt this definition was too broad, and quipped: "under Barnard's definition, a boy kissing a girl is also a formal organization." a. Willingness to cooperate, and this was to be facilitated by the offerings of objective and subjective incentives. Perhaps somewhat controversial is Barnard's notion that this meant "self-abnegation," "surrender of control of personal conduct," and "depersonalization of personal actions." Did this mean we lose our individuality? If so, then why did he stress the need to satisfy individual motives? b. Purpose, or objectives of the organization. Although individual and organizational motives were different, individuals could achieve their motives by working toward organizational purposes. This reminds me of Douglas McGregor's Theory Y, which will be presented in Chapter 20. c. Communication, for which Barnard developed 3 principles: (1) Channels should be definitely known. (2) Objective authority (I interpret this to mean formal authority) requires a definite channel of communication. (3) Keep the line of communication short and direct. d. Informal organization, where Barnard also saw 3 universal elements: (1) Communication. (2) Maintenance of cohesiveness. (3) Maintenance of feelings of personal integrity and self-respect. It might be worthwhile to ask the class how Barnard's notion of the informal organization compares with F. W. Taylor's "systematic soldiering" and Elton Mayo's illogical "logic of sentiments."

3. Acceptance Theory of Authority a. Barnard's definition of authority included the notion that a communication must be "accepted" by the organizational member. b. Authority did not reside in persons of authority, but in a member's acceptance of authority. c. Individuals would consent to authority if four conditions were met: (1) They understood the communicated order. (2) They believed the order was

consistent with the organization's purpose. (3)The order was " compatible with their personal interests as a whole. " (4)They were physically and mentally able to comply with the order. Depending on how much time you wish to spend on this topic, there are a number of implicit issues here regarding interpersonal communications, the clarity of the organization's purpose, and the morality/ethical possibilities regarding " personal interests. d. " Zone of indifference," Barnard's phrase for explaining how an organization could function since members could accept or reject authority on almost any occasion. Individuals could be very " indifferent," leading to a wider possibility of acceptance, or less indifferent. This depended on the individuals weighing the " inducements," burdens, and sacrifices. In class, I may say: " as your instructor, let's assume I have some authority in this class. How far can I go? Would you stand in your class seats if requested...? Would you... etc.? I find a fairly wide acceptance of reasonable requests, but for a promise of better grades the students become a lot more amenable to my suggestions. In some ways, this is scary. e. " Authority of leadership," Barnard's way of expressing the " potentiality of assent" created when people had respect for and confidence in their leaders. f. Authority still existed in the organizational hierarchy, in formal authority, but authority in the final analysis still rested with the organizational member. 4. The Functions of the Executive. Three, according to Barnard: a. Provide a system of communication. b. Promote securing personal efforts. c. Formulate and define organizational purpose. d. Decision making and " strategic factors. " Strategic factors was an idea that Barnard took from John R. Commons. e. In " logical" and " non-logical" decision making, Barnard reveals the importance of intuition, tacit knowledge, to go with logical decision making

<https://assignbuster.com/history-of-management-thought-revision-flashcard/>

processes. 5. Moral leadership for Barnard involved executives having a high moral code, demonstrating it as an example, and seeking to create this morality in others. For discussion, this can lead you into recent examples of failures as well as successes of executives, financiers, and others in displaying their moral leadership. Chapter 15 People and Organizations My students refer to Chapters 15 and 16 as telephone book chapters, lots of names and some “intellectual addresses” where contributions were made. These are accurate assessments so I suggest that you tailor your assignments to fit your course objectives. In Chapter 15, I focus on Moreno, Lewin, Maslow, Scanlon, Lincoln, McCormick, Simon, and Whyte as well as the leadership studies at Michigan and Ohio State. For my purpose, these capsule the research in group dynamics, changing behavior, job design, motivation, participation, leadership, decision making and socio-technical systems. A. People at Work: The Micro View I approach this as organizational behavior before it acquired that label. The bases of modern OB were being built during this era. 1. Eduard Lindeman a. Early study of group behavior in member interaction, participation, and attitudes. b. Origin of phrase “participant-observer.” c. Lindeman was a cohort of Mary Follett and they appear to have influenced each other. . Jacob Moreno a. Sociometry, trying to classify individuals into groups that were capable of harmonious relationships. b. Sociogram, mapping interpersonal preferences. Note the difference he found when preferences were for social vs. task mates. c. Psychodrama, a cathartic experience for an individual in a group setting. d. Sociodrama, the basis of role playing. e. Role reversal, taking the role of others and a useful technique for working with culturally diverse groups. 3. Kurt Lewin a. Group dynamics and field theory. Gestalt notions for

understanding individuals in groups. Note Moreno's influence on Lewin. b. Quasi-stationary equilibrium. Groups never achieved a steady state but were continuously in a process of mutual adaptation. (This notion has led me to have numerous doubts about the findings of small group research projects.)

c. Leadership, perhaps an inappropriate label for a study of social climate in 10-11 year old boys. Lewin asked his counselors to role play democratic or authoritarian styles and found what he expected in the boy's reactions. One counselor, however, misplayed his role and, rather than throwing the data out, Lewin called this "laissez-faire. This style has persisted in the literature despite its inaccuracy. d. Changing behavior, Lewin's finding that group participation facilitated the change process. His three step model is still a foundation for contemporary "action research" and organizational change: "unfreezing" through participation; "moving" to the new level; and freezing (reinforcing) the desired new behavior. e. Lewin's work became the basis for sensitivity training through his influence on Leland Bradford. B. Human and Industrial Relations 1. National Labor Relations Act of 1935 led to a new emphasis on collective bargaining and labor-management relations. 2. Interdisciplinary research such as the University of Chicago Committee on Human Relations. 3. Beginnings of industrial relations centers at various universities. 4. Increased interest in human relations training. C. Changing Assumptions about People at Work 1. Motivation, both Henry Murray and A. H. Maslow and the development of a need theory of motivation. a. Maslow and the hierarchy of human needs. b. Maslow's "humanistic psychology" and the Third Force in psychology. . Joseph Scanlon, union official and later a colleague of Douglas McGregor at MIT. The Scanlon Plan: (1)A union-management productivity plan whereby groups of workers got bonuses for

<https://assignbuster.com/history-of-management-thought-revision-flashcard/>

proposing savings in labor costs. (2)Group oriented. (3)Not profit sharing. d. James F. Lincoln, rewarding individual efforts based on skill ratings. (1)Wages and benefits were comparable to the Cleveland area labor market. (2)In addition, bonuses were paid for performance based on quality and quantity of output as well as self-management (or, in contemporary terms, “empowerment”). 3)Bonuses were typically substantial until recent years. Have a class member check Lincoln Electric’s web site and/or Cleveland area newspapers for the latest on employee bonuses. 2. Job Enlargement, research in the 1940’s by Walker and Guest indicated some possible improvements if jobs were designed to lengthen (broaden) the work cycle (you may want to stress that this concerned combining jobs rather than increasing job depth). 3. Participation, a power-equalization thesis of this period to play down the importance of the organizational hierarchy. 1)James Worthy, at Sears, Roebuck argued for flatter structures and decentralization. He also worked with the University of Chicago’s Committee on Human Relations to study the impact of structure on employee morale. (2)William B. Given, Jr. , a “ bottom-up” approach. (3)Charles P. McCormick, a plan for participation which is still operative in this tea, spice, and extract firm. Junior boards were created (“ multiple management”) to improve communications, manager development, and coordination through participation. 4. Leadership a. T. W. Adorno and the F (for Fascist) scale. b. Rensis Likert and the University of Michigan studies of leadership orientations: (1)An employee orientation, stressing interpersonal relations. (2)A production orientation, focus on producing. (3)An employee orientation, coupled with more general supervision, led to higher productivity, better morale, lower turnover, greater group cohesiveness, and less employee anxiety. c. The leadership studies at <https://assignbuster.com/history-of-management-thought-revision-flashcard/>

Ohio State University, largely led by Ralph Stogdill and Carroll Shartle, also found a two dimensional orientation. (1)Initiating structure, acting to further the work objectives. 2)Consideration, emphasizing followers' needs and interpersonal relations. d. Despite differing terminology, leadership was viewed by each as a two-by-two matrix of leader behaviors in which being people-oriented was not mutually exclusive of a production orientation. D.

People at Work: The Macro View 1. William Foote Whyte's study of restaurants. a. Status in the social system ran counter to the work flow and who initiated work for others in the technical system. b. Whyte's work was key to the idea of socio-technical systems. c. Whyte is noted for " participatory action research. " 2. E. Edward] Wight Bakke, the interactions of the formal and informal systems; the " bonds" of organization; and the " fusion" process involving organizational position and personal views of standing or status. 3. Tavistock Institute and the work of Elliott Jacques. 4. Pioneering study of Trist and Bamforth on the impact of technology on The social system. 5. Herbert A. Simon, greatly influenced in his early work by Chester Barnard, was interested in how choices (decisions) were made: a. Limits that " bound the area of rationality" made it difficult to achieve the best possible decision. Note Simon's later use of the term " bounded rationality. b. " Satisficing" or " good enough" decisions were a result of the decision maker's limited ration