

Organizations Machine Heritage, Excerpt from Manuscript

Leadership

Saving Your Organization From Chaos,
A Practitioner's Guide to Efficiency, Effectiveness, and Harmony
(McElroy, 2019)

History or Organizations Machine Heritage

We won't go too far afield from our main exploration of your organization; but a brief excursion into some history in organizational theory will prove at least interesting and, hopefully, beneficial as we examine why you may want to consider the alignment of resources in your organization. It is important to note, first, that an organization is a complex dynamic system. However, traditionally it has been assembled like a machine. Ever wonder how an organic system came to be viewed as a mechanical arrangement? Ever wonder where that alignment of boxes came from?

Background

Organizations had to be invented "on the fly," if you will. Let's go back in time (trust me, you won't get hurt and it will be fun!). Step into my time machine! A few twists of the knobs, a couple of levers pulled, lights flash and... *voila!* We're there! The year: 1750. Now that we come this far let's take a short walk through the hamlet. Let's glimpse into the lives of 18th Century people. Since we are interested in organizations let's pay particular attention to the businesses of the day. Walking across cobblestone roads (probably simply hard-packed dirt roads strewn with horse dung) and without the aid of sidewalks (that would not come into general use until the 19th Century) what do we see? Craftsmen... okay, *craftspeople*. Craftsmen plying their trade.

What is a craftsman? What are these business people doing in the 18th Century? How might this help us in our exploration of YOUR organization?

As the name suggests craftsman is a person that is very good at, very skilled in making something by hand. Imagine the 18th Century craftsman with few or no suppliers, no need for supply chain management, and no inventory management system; we will find no support as we know it with current organizational operations. Think about movies you've seen that were based in the 18th Century. (Not that I want you to keep dropping the book and run off to watch TV; but, AFTER reading take a look at a movie based in this period, notice the "businesses": *The Amazing Grace, A Tale of Two Cities, The Last of the Mohicans, The Patriot, or John Adams*.) The villages and towns are busy with business activity. Note that most of these "businesses" are operated by one person, perhaps a partnership, sometimes a family enterprise.

Notice what they are doing?

Let's stop our walk along that dirty hard-packed road (or for those reluctant to step into the time machine, freeze-frame in one of those old movies). What are they doing? They are making things! Look at how they are making things, a leather belt for example. Where is the craftsman's *raw* material (quite literally)? We see a cow tethered just at the edge of the rough-framed open leather shop. Who is his/her supplier? The craftsman! They owned the cow! (Larger hamlets might have a butcher from which our belt maker could secure the hide; but let's stay in the small hamlet in which our time machine took us!) Who might we imagine slaughtered the cow, skinned it, and stretched, dried, and tanned the hide? Yep! The craftsman. Whom made many of the hand tools that we see around the leather shop? Right again, the craftsman. (Well actually, if they were not lucky enough to have the blacksmith guild represented in their hamlet). You see? In earlier times craftsmen engaged in all activities from sourcing raw material (here the cow), to distribution of the finished product (the leather belt). At best, we find that there were cooperating craftsmen, each engaged in every step in producing a finished product.

As we proceed in our walk through the hamlet let's take a quick peek in the window of a local college. (Bear with me! I know that colleges could only be found in the largest cities of that period!) We will *not* see courses taught in organizational behavior, change, culture, development, leadership, management, psychology, or theory. In these early days craftsmen learned their trade by engaging in the family business (they quite literally grew up with it) or through apprenticeship with someone making leather goods. They learned how to operate their business in the same way; they learned from others and by trial-and-error (organizations as a discreet discipline did not emerge until the 1940s!).

Let's move on. Stepping back into *Dr. McElroy's Wonderful Time Machine*, a few more turns of the dials, a lever pulled and we are whisked forward to sometime between 1760 and 1840 (My time machine is not very precise!) We land right in the middle of the industrial revolution (remember from history class Eli Whitney and his cotton gin or James Watt and his patented steam engine?). What is happening here? Machines, powered by recently harnessing steam, were taking over much of the laborious tasks previously done by hand. What did the industrious man or woman do? They purchased a machine, put it in a building, brought people from the country side (remember, back then we had an agriculture-based society where most people were out there on the farm) to work with the machine, and... before you know it... we have factories!

There developed a drive for greater productivity and efficiency. Adam Smith stepped in with his 1776 book *An Inquiry into the Nature and Causes of the Wealth of Nations*. One notable concept emerging from this early book was the division of labor. Work began to be separated into the smallest subtask of the primary task (such as making a belt) for, presumably, greater specialized skills of the worker, increased productivity (how many belts could be made) and efficiency (how many belts could be made per worker hour expended). Former craftsmen, or more probably, people from across the country side were brought into the "factory," each focused on a specific activity. For example, one area in our new factory workers were set aside to cut the hide into strips. Another, perhaps somewhat more skilled, to mark and make the holes. Maybe completely disconnected from the first two sets of workers, the emerging belt moves to another area and set of workers that will dye the leather. Soon another factory worker will move to bevel and sand the edges of the now recognizable belt. After passing through a worker that finishes the edges, embellishes with any special stitching and attaches a buckle we see a finished leather belt. However, very likely the first hide stripping worker may *never* see a finished product! Making belt is not a craftsman's art; but rather a sequence of connected industrial activities.

This continued.

Back to our time machine, another jump. We discover the post-Civil War industrial expansion or the "new industrial revolution" of 1860-1897 giving rise of tremendous innovation and greater reliance on machine capabilities. We find people of this era witnessed birth to the calculating and adding machine, cash register, typewriter, and, familiar to us today, the Kodak camera! Alexander Graham Bell patented the telephone. Thomas Edison the electric light. American built the transcontinental railroad! There was another leap forward into establishing organizations.

Labor for this great expansion was supplied in large measure by huge numbers of immigrants to America. In the period 1870-1890 hundreds of thousands of immigrants came to America, nearly 800,000 in 1882 alone! Of course, many of these new immigrants came from non-English speaking

countries (e.g., Scandinavia and southern and eastern Europe. I'm Scots-Irish. I know that the brogues of that time were sometimes so heavy it didn't sound like English!). We find in these burgeoning organizations poorly educated workers speaking different languages engaged in dangerous tasks with little training and no formal procedures. How to control such a mix?

These organizational leaders engaged in machine-like alignment with military-style control. What did it practically mean to industry? It gave rise to what we see today... only with modifications! We have the genesis of the assembly line!

Application

Henry Ford is considered the father of the assembly line. His 1913 assembly line was heavily influenced by the concepts of Frederick Taylor (1911) and the notion of "scientific management" where labor was controlled much as a machine. His "time and motion" studies influence a drive for even more specialization and greater efficient utilization of labor. Setting up an organization to oversee a factory Ford would later embrace the views of Max Weber's (1922) bureaucratic theory. Heavily influenced by the military this view called for a division of labor by function with a hierarchy of authority and reporting lines. The modern factory and corporation that oversee it were born.

What does it mean for us now?

Legacy

Workers are no longer craftsmen; workers are simply cogs in a greater machine. The modern organization is typically aligned along functional skills and tasks creating. This, as I often see in my consulting engagements, creates an interesting array of problems.

Early organizational leaders, even those as so relatively recent as Ford and his peers, arranged workers by function. Their intent: Bring about some semblance of order and control. You can still see this legacy effecting modern organizations. Look at the similarities of times past with today. Kerosene lamps casting long shadows across the floor of the engineering department (a designated area in the corner of the company's office): two men with ink stained fingers slumped over drafting tables. What do we see today? Walk down the linoleum floored hallway of most businesses, e.g., a utility or manufacturing company, and you will see hallway signs pointing to the Engineering Department that has well-signed doorways. Peak inside. What do we find? Engineers! Most don't have ink stained fingers, and most are hunched over working on computers; but, those with engineering training, skills and duties are cloistered into an area segregated from the "other" work. What of the supply department of yesteryear? The supply department might have been a single burly Irishman overseeing two laborers burdened with unloading wagons. The overseer's standing desk might be outside on the loading dock, exposed to weather and in clear view of the activity. The supply department today? The Supply Department manager has an office, the only one in the department, in the corner just before a row of office cubicles. They are usually downstairs at the back of the building "where the trucks unload." The Human Resource department? None! That won't come about until about 1913! But, today? Down the hall from the VPs office, in the area behind a closed door. You can't miss it. It is right across from the water fountain and has "Human Resources" on a door-mounted brass plaque. The typical organization of today is aligned along functions. Each is functionally, and usually physically, separated from other organizational functions.

Well-recognized today, this alignment of resources and tasks creates problems. As cogs are wont to do sometimes they do not always perform to the full satisfaction and expectations of

“management.” The source of many problems is the alignment itself. The problems themselves are many, including fragmentation of “organization” into sub-cultures often assuming competitive positions, poor communication, and challenges in cooperation and collaboration.

Remember that I earlier in the book referenced culture. I told you that it is a set of beliefs by which we act and react in order to survive. This isolated functional alignment often gives birth to “sub-culture” in the organization. Engineers have a culture, Maintenance personnel have theirs, and of course the Operators do! What might strongly held beliefs about department over organization create: I often find criticizing and blaming others to be the norm when searching for the source of problems. I find this often in consulting. Asking engineers about a process problem and we might hear, “Well, we designed it correctly, it’s the operators that screwed it up,” or the same inquiry to operations and we’ll hear, “yeah, we went right down the procedure, but, you know, maintenance never takes care of this stuff.” Want to talk to maintenance? Nope, didn’t think so! It seems the sub-cultures have produced a belief system where not addressing the problem head-on, but rather finding someone else at fault is the way to professionally survive.

The need for strong communications is a perennial topic, blooming each month in a wide range of industry literature. Ever wonder why there is such frequent mention of the need for strong communication? Because typically we find in organizations weak communications! Authors of industry material are always in search of an interesting topic, but generally none will write about a “non-topic,” about a non-existent problem! They write about organizational communication because there is perpetual evidence of problems with communication. (Sorry, can’t help myself. Sometimes interviewing client personnel when the topic of communication comes up I can almost hear in their account the voice of Paul Newman in the 1967 movie *Cool Hand Luke* when he said, “What we’ve got here is failure to communicate”. Well, we know what happened to Luke!) As most of the industry literature will suggest communication is critical to the survival of your organization; however, robust and effective communication seems to be the exception in organizations today.

I’m always interested in not just the degree but the manner in which I see cooperation and collaboration evidenced in many organization. It reminds me of an old publishing term, “over the transom.” Another quick excursion back to TV!

Ever watch the 1941 movie the *Maltese Falcon*? While not intended to be a vivid illustration in a discussion of organizational dynamics, it is! Notice when Sam Spade (aka, Humphrey Bogart) approaches his office door and inserts a key. While he pauses there for just a moment notice just above his head, above the top of the door. There is an adjustable panel or window that used before the common use of air conditioning to adjust ventilation and, then, temperature in the office (But, Sam always seems hot no matter the ventilation setting!) A publisher’s office, of course, had such a ventilation system. Unsolicited manuscripts would often be delivered after business hours when the office was closed via “over the transom.” The would-be author simply tossed his/her manuscript *over the transom* to be found the next morning by the publisher laying on the floor just inside the office. The hope: That the publisher would not simply kick it aside, but would pick it up, read it, be so pleased that he/she would publish it.

So, how does this help us understand organizational dynamics? The natural seamless work through an organization is often segregated into discreet “chucks” for department (function) specific work. Often there is little appreciation for “internal” customers and the overall fluid process of the task through the organization. Much like *over the transom* I often find departments focused myopically on

“their” work that when finished is tossed over to another department for their next-in-sequence tasks. The dialogue around this usually falls along the lines of “We’re done. We handed it off to ‘them’ and washed our hands of it.” The receiving department? “I walked in this morning and there is a pile of work to do that ‘they’ gave us yesterday. I wish I had known it was coming down the pike...” Much like the craftsman of yesterday, finding employment in factories, we’ve lost sight of the finished product. We only see the functional task. Much like the old adage “can’t see the forest for the trees,” organizational output is seen by functionally aligned departments as discreet “chunks” of work to be completed.

This arrangement gave rise to another common organizational phenomenon: lack of motivation. Our craftsmen of yesteryear were self-motivated. Yes, to survive (they had to make a living), but also by a sense of accomplishment and pride (they could had made a living in different ways, but chose their craft). We can still see remnants of it today. There is a common phrase “the starving artists” which describes an artist that will miss meals so they can afford paint. But, while the phrase is common the motivation it suggests is not. Many employers wonder that their employees are not motivated (McElroy, 2003). In consulting engagements I’ve been asked, “Why don’t they just do their job?” We’ll explore this later in more depth (in our continued exploration of Gailbraith’s Star Model we’ll touch on rewards and motivation on page **Error! Bookmark not defined.**, and way ahead as we move to establish your internal reward system in **Error! Reference source not found.**), but for now it is important to note that motivation has shifted from internal, e.g., sense of pride in the finished craft, to external, e.g., how much they might get paid. Internal employee motivation has become an often allusive external employer task.

If this is the foundation with which legacy has left how might we proceed to build a solid organization? New principals! New construction guidelines! It is to those we turn next.

Reference

McElroy, R. L. (2003). *Motivation and Other Aspects of Organizational Life*. (Essay), American Institute of Organizational Effectiveness, Raleigh, NC.