How to Be an Effective Bureaucrat: A Field Guide

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Thank you to my coworkers. Our interactions taught me how to be a better bureaucrat.

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Preface

When you are in a situation you haven't been in before, a guidebook can decrease anxiety by making the unfamiliar less intimidating. A guidebook labels patterns and provides context for your observations. Recognizing a familiar challenge can be preferable to the uncertainty of facing a scenario that is novel. A situation that is unfamiliar means not knowing how to start and what the potential paths to success are. In contrast, a challenge that is understood from the start can feel less burdensome. Even a challenge that is understood requires creativity and effort.

Bureaucracy is a consistent and pervasive challenge in modern society. You probably have direct experience with bureaucracy, and you may be familiar with complaints about bureaucracy. You probably don't consider yourself a bureaucrat, and probably are not an expert on bureaucracy.

Negative impressions of bureaucracy are common. The word evokes reactions of disgust, primarily driven by how individuals have experienced bureaucracy. The results of bureaucracy can appear idiotic. Bureaucracy is even regarded as dangerous to society¹. I have bad news for you if you have a negative impression of bureaucracy: bureaucracy is vital to society. Organizations have an insatiable need for members to facilitate a variety of tasks.

The good news is that you can learn to skillfully navigate bureaucracy. The consequence is that skilled bureaucrat is more effective. That improvement enhances the organization you are part of. Modern society is an interwoven fabric of organizations, with bureaucracy being the crucial material. Rather than societal-scale concerns, the focus of this book is on the complex and typical experience of a bureaucrat.

The framing of how you think about bureaucracy shapes what action you

 $^{^1\,\}mathrm{^{\prime\prime}}$ The only thing that saves us from the bureaucracy is inefficiency. An efficient bureaucracy is the greatest threat to liberty." -Eugene McCarthy (1979)

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think is relevant for changing your environment. If your assumptions are wrong about how the system of bureaucracy works, then you will be trying to convert the system to meet your incorrect expectations and your actions are likely to be wasted effort tackling irrelevant aspects. An accurate model of bureaucracy allows you to be more effective and your changes to the system are more likely to succeed.

Having a precise definition of bureaucracy enables a clearer discussion.

Definition: Bureaucracy is the management of shared resources, whether tangible or expertise, by subjective decision making of individual people using distributed knowledge and distributed decision making.

The concepts and techniques in this book are derived from this definition. For more exploration of this definition, see the section "What is Bureaucracy?" on page 4.

As a quick example of how the above definition is distinct from conventional definitions², I view government as an instance of where bureaucracy occurs. Bureaucracy is not limited to government. I use the term "organization" to encompass governments, corporations, non-profits, or any collection of people working together. As a consequence, a vast majority of people are bureaucrats.

The negative connotation of bureaucracy may lead you to reject the label of bureaucrat. Whether you intentionally reject the label or simply do not recognize that you are bureaucrat, self-recognition of your status matters. How you behave and what you think your responsibilities are depend on how you label yourself. If you don't think of yourself as a bureaucrat, then you won't be able to distinguish what is your own fault, what is the fault of your coworkers, what is the fault of management, and what is intrinsic to bureaucracy.

Reasoning about bureaucracy is an accessible topic for everyone because we each have personal experience. A commonly held view is that the systems of bureaucracy that we work within are broken: participants are harmed and there is inequality. The counterargument is that the bureaucratic behavior observed is how the system was designed to work. There is a third argument: bureaucratic systems work in a degraded mode – being less efficient than what is possible. In this book I set aside the macro-scale questions of bureaucracy like the three

 $^{^{2}}$ Merriam-Webster's definition focuses on government; the Wikipedia entry acknowledges non-governmental bureaucracy.

arguments above and focus on the human-scale interactions that give rise to bureaucracy.

Even people who are smart (e.g., they know history, they have memorized capital cities, they can do math) can struggle when faced with complex large-scale distributed systems comprised of humans. Thinking about complex large-scale systems is not part of the conventional education curriculum. This book will help you learn about bureaucracy and lead to an increased ability to identify patterns and apply relevant techniques.

The difficulties of bureaucracy are central to large societies that depend on complex interactions of many people. The challenge of bureaucracy is widespread across a variety of governments and companies in different societies, and bureaucracy is durable – it has existed for thousands of years. Because of this pervasiveness, tackling the topic of bureaucracy is exciting and crucial. The excitement comes from the opportunities available from the many potential improvements. Being an effective bureaucrat is important because bureaucracy can be a force multiplier beyond what one person could accomplish on their own.

This book is for you if you are curious about the complex world we live in, or you are thinking about how to productively contribute to society, or you want impactful employment, or your job is not what you expected. If you're wondering why innovation is hard within a bureaucratic organization, this guidebook is intended to help you understand the challenges. Understanding the challenges means you can design ideas that are more likely to succeed.

Every person in society is a participant in bureaucracy. The purpose of this book is to decrease the surprise of that experience and better prepare you emotionally and intellectually for the toil of being a bureaucrat. With focused reflection and a good guidebook, you can improve your skills as a bureaucrat.

Understanding bureaucracy spans academic disciplines - psychology, sociology, organizational dynamics, public administration, anthropology, political science. Most bureaucrats have no formal training in any of these domains. This book is not written from the academic perspective; it is written by a practicing bureaucrat to serve as a guidebook to be read by bureaucrats.

This book is not a defense of bureaucracy, nor is it intended to disparage bureaucrats or the system of bureaucracy. Instead, the intent of this book is to serve as a guide to bureaucracy-as-it-is. There are no hacks presented for circumventing bureaucracy. Instead, advice on being an effective member of a bureaucratic organization is provided.

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This book does not focus on leadership, managing a team, being a team member, planning, time management, project management, advancing your career, promotions, or self-improvement. In the process of being a better bureaucrat some lessons may apply in those domains.

Nothing in this book is domain specific, nothing is tied to engineering of products, and nothing is applicable solely in science research or policy development. However, the skills associated with being an effective bureaucrat do translate into other domains.

This book doesn't address personal stress caused by bureaucracy, how to decrease stress, or how to balance the activities of work and life-outside-work. However, understanding bureaucracy can enable a positive sense of self based on how your efforts integrate with other people.

This book does not address work conditions, pay, benefits, or retirement plans. If you are seeking a competitive advantage that might result in improved outcomes, learning how to navigate bureaucracy helps.

This book doesn't focus on citizens, political policy makers, oversight (e.g., Congress – state or federal), competing organizations, contracts, the budget of an organization, fines and other regulatory punishments resulting from bureaucracy, policy enforcement, specific policies and regulations, formal arbitration or judicial resolution of disputes. For observations on those topics, see Wilson's Bureaucracy [60].

This book doesn't address discrimination or harassment. I neglect differences of experience based on the race, gender, or socioeconomic status. This book doesn't address bad coworkers, abusive bosses, psychological defects of individuals, or malicious intent. I assume no traitors, spies, or saboteurs³. I do not address dark patterns; issues like lying, bribery [2], and criminal behavior are not discussed. All these aspects happen whenever people interact; the challenges are not specific to bureaucracy. In this book I assume you are honest, and that other people are honest. I assume bureaucrats strive for fairness, though the particular definition of fairness may vary from bureaucrat to bureaucrat. Even with all these simplifying assumptions the complexities of bureaucracy arise. My guidance on how to be an effective bureaucrat is in the context of benign bureaucracy.

As a result of reading this book, you will be better able to recognize and navigate complex professional environments, both within your career and outside of

³See also Wikipedia's entry for the Simple Sabotage Field Manual

work. The perspectives offered in this book can benefit you directly, whether by promotion of rank or title, increase in pay, successful completion of a project, or through decreased stress derived from improved understanding of how the world works. Being a more effective bureaucrat can also positively impact the causes you care about and the people you engage with.

Everyone is a bureaucrat because there are few alternatives to bureaucracy for a society. Gaining skills in navigating bureaucracy are helpful both for your own happiness and the improved functionality of society. That may seem abstract and lofty, but the situation is inescapable: you are a member of society and you benefit from participating in society.

Hoping that modern technology will eliminate or reduce bureaucracy is not a solution. Automation and computers merely obfuscate processes and make negotiation more challenging. Even with faster decisions and fewer humans, there is still reliance on humans to make decisions and design processes.

Simplifying interactions with other people merely as human relations is an easier perspective compared to considering bureaucracy as a complex system. The simplified view misses emergent phenomena and mischaracterizes the situation. As a result your effectiveness is decreased.

kes by reflecting on my (in)actions and the consequences. This approach has been an expensive education. My mistakes delayed progress and damaged relationships. The motive drive this book is to provide generalizations from my experiences which might benefit the reader.

The morals of organizations or people is less compelling because norms (i.e., expectations for individuals and organizations) shift over time, while bureaucracy is persistent. In this book I focus on culturally invariant aspects of bureaucracy.

This material is based on personal experience, reading published materials, and anecdotes from other bureaucrats. No surveys were taken to support the claims made. No double blind experiments were conducted.

Reading this book front-to-back is the default option, but not essential. The dependencies of topics are not sequential; see figure 1.

The approach in this book is to view bureaucracy from a few perspectives. The first is a conceptual view focused on the definition of bureaucracy in terms of managing shared resources. The second view is structural (e.g., hierarchy, meetings). The essentials of bureaucracy will be familiar to experienced bureaucrats. The third view is based on experience of the practicing bureaucrat – dilemmas, unavoidable hazards, and tips on how to be effective.

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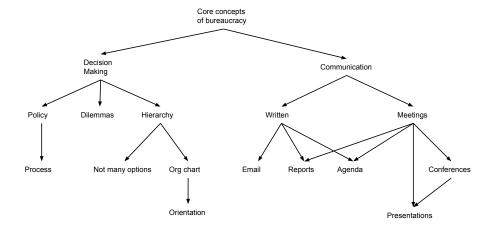


Figure 1: Relation of the concepts related to bureaucracy discussed in this book.

Chapters 4 to 8 are the field guide. Each chapter capable of being read independently.

Ben Payne October 14, 2022 United States of America Earth

Chapter 1

Introduction

The motivating logic for this book is a sequence of claims:

- 1. Society has limited shared resources and mitigates that constraint by sharing resources.
- 2. Managing access to a shared resource requires making and enforcing policies that apply to community members.
- When more than one person is responsible for making and enforcing policies, then distributed knowledge and distributed decision making are required.
- 4. Bureaucracy is defined as multiple people managing access to shared resources.
- 5. Whether you're a bureaucrat or a subject of bureaucracy, you can be more effective by applying process empathy.

Once you've familiarized yourself with the concepts in this book, using the what you've learned is a two step process. First, ask yourself whether the conditions for bureaucracy are present. If they are, then you can be more effective by applying process empathy.

The definition of bureaucracy and illustrations of it are the foundation on which process empathy is built.

1.1 Process Empathy

Empathy typically refers to understanding the emotions of another person. To detect the emotional state of another person you rely on facial expressions (smiles for happiness, frowns for frustration), body language (arms crossed, turning away), speech (yelling in anger, singing for joy), and actions (hitting something) to evaluate a person's emotional state. By observing those signals you can recall instances where you felt similar emotions. Emotional empathy helps you understand another person.

A distinct form of empathy is the ability to understand the reasoning another person uses. Intellectual empathy is helpful for enabling a common understanding of an issue faced by a team. Intellectual empathy is enacted by thinking about how another person would assess a situation and respond. Another technique is to imaging what reasoning they would use given a set of facts.

A third form of empathy is the focus of this book: the ability to perceive why individuals working together behave in recurring patterns. For example, what incentives do people in each role have, what information does each person have, and how does that manifest as actions by the team or organization? Applying the paradigm of process empathy helps you answer questions like "Why is this taking so long?" and "Why is this action so apparently inefficient?" by recognizing unavoidable hazards of bureaucracy. The question "Why are people under-trained for their role?" is answered by constant turnover. Process empathy relies on understanding bureaucracy so that you can distinguish which patterns are specific to the people involved versus specific to this organization versus generic to every organization?

Reasoning about a process is slightly different from process empathy. Reasoning assumes a holistic external view (taken by Gall in [21]), whereas process empathy is about the perspective of individual people operating within their local context. Reasoning about teams and organization invariably leads to observations of illogical and absurd outcomes, whereas a view based on process empathy reveals the causes of apparent paradoxes.

Process empathy is comprised of thinking beyond professional relationships with individuals and deeper than the abstraction of team-as-entity and organization-as-entity. Because process empathy is generic across bureaucracies, the benefit of this perspective is that you can gain insight about people you don't know doing work you don't understand. Each application will have nuances specific to the people involved and the shared resource being managed, but process empathy provides a useful framework for navigating bureaucracy.

Process empathy involves asking questions about your situation:

- What incentives do process participants face? *Answer*: feedback loops, lack thereof.
- What unaligned goals do individuals have that cause friction?
- What are the different paths individuals take to work towards their goals?

 Answer: dilemmas
- How to leverage the interplay between processes and interpersonal professional relationships? *Answer*: reputation

Rather than asking about "what benefits the team" or "what supports the organization, paradigm of process empathy focuses on people and incentives. For you this translates to specific actions. For example, to be effective you need to identify rules (written and unwritten), determine who enforces what, consider the detection mechanics, and weigh the consequences of subversion against the benefits of breaking rules.

The question of "when is process empathy applicable?" is answered by "when bureaucracy is present?" which requires a definition of bureaucracy.

1.2 What is Bureaucracy?

While you may know it when you see or experience bureaucracy¹, for this book definitions are useful. Throughout the book we'll refer back to these definitions as I explain concepts needed to understand bureaucracy.

Bureaucracy involves creation and execution of policies for managing shared resources. Creating and carrying out policies usually involves multiple people, with each person having specialized roles. Task scalability (how many widgets), complexity (number of tasks per widget), or latency (time per widget) motivate members with distinct roles to form a hierarchical organization to facilitate coordination. The organization has control over the disbursement of resources relevant to the society the organization works within, or the organization administers a policy within that society. Resources managed by the organization are either tangible (e.g., water, air, land) or expertise.

Bureaucracy is not limited to government. Non-profit organizations, volunteer groups, commercial companies, and even small teams of people can invoke bureaucratic tendencies. The existence of bureaucracy is independent of an organization's purpose, and independent of whether money is involved. Carrying out someone else's subjectively defined policy will require you to make your own subjective decisions regarding execution and enforcement.

With bureaucracy defined, distinct roles can be identified. A bureaucracy typically involves a policy creator, a policy enforcer, and the person upon whom policy is inflicted. In the context of government, the policy creator can be either a politician or a bureaucrat.

An organization comprised of bureaucrats is a bureaucracy. The main character within a bureaucracy is the bureaucrat – the person who is a member of an organization and is responsible for subjective implementation of policy for the organization. The person that a bureaucrat's decisions are inflicted on a subject. Depending on context, a subject may be a student (when the bureaucrat is a teacher) or a subject may be a citizen if the bureaucrat is a police officer or government official. Sometimes a bureaucrat's decisions are inflicted on other bureaucrats-as-subjects, such as when a Chief of Police creates guidelines for police in their district, or when a senior diplomat sets policy for embassy employees.

¹ "I know it when I see it."

A bureaucrat is a person subjectively interpreting policies on behalf of an organization and has discretionary enforcement. The bureaucrat's purpose is to facilitate coordination of stakeholders by applying specialized knowledge.

Let's break that down piece-by-piece. First, "subjective interpretation" means there is a person making a decision about how to do something. The subjectivity arises from different reasons one person might choose an option over a competing option. A policy is a set of actions in a given circumstance. An organization is the collection of people for who the policy is made. Discretionary enforcement means the person is choosing how to apply the policy in the specific circumstances. Facilitating coordination means bureaucracy is about getting multiple people (or sometimes a person at different instances in time) to work together. The stakeholders are people who care about the application of the action in each circumstance. That's still pretty dense, so the rest of the book is spent expanding the nuances and implications of this definition.

Bureaucracy is neither good nor bad. Bureaucracy is not tied to politics, nor is bureaucracy specific to an institution (corporations, governments, academia). The definition of bureaucracy used in this book is independent of government. Bureaucracy is not defined to be efficient; nor does it have to be inefficient. Bureaucracy is not restricted to paperwork, record keeping, quantification, or gathering metrics. Nothing in this definition involves paperwork or an office building. Definitions that limit the concept of bureaucracy to specific contexts result in a decreased ability to describe complex large-scale human organizations.

Bureaucracy is about delegation of control, communication, decision making, coordination, and processes. Bureaucracy relies on negotiation.

A critical aspect of bureaucracy is that everything is made up, specifically by other humans. The consequence is that everything is negotiable. You (in the role of either a subject or a bureaucrat) need to know both who to negotiate with and how to negotiate the desired changes. My claim that bureaucracy is made up is in contrast to actual rules – the mathematical physics that describe nature. Everything in your environment is either naturally occurring macroscopic emergent phenomena (e.g., chemistry, biology) or humans making up labels and norms. Distinguishing the two is critical to knowing what you can change and what you have to work within.

Bureaucracy arises when there is no common, objectively quantifiable feedback mechanism for individual participants in the organization. This aspect is why governments, schools, and prisons are characterized as bureaucratic. The

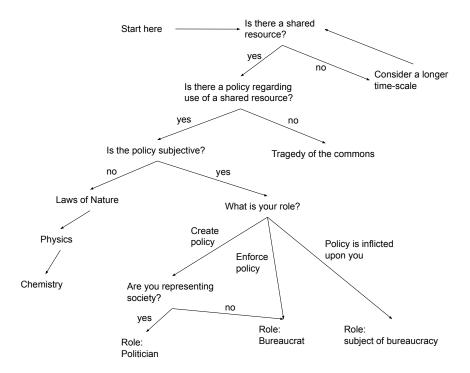


Figure 1.1: Decision tree for determining whether you qualify as a bureaucrat

military doesn't rank soldiers by "number of enemies killed" and is bureaucratic. Even profit-driven commercial organizations are bureaucratic when the impacts of individual employees are not coupled to the metrics of profit.

Profit-based feedback makes some roles in a business context slightly more predictable and understandable. Even in that situation there are trade-offs like externalization of costs and long-term profit versus short-term profit.

The concept of bureaucracy is most visible for complex recurring situations involving many people and the control of a shared resource. The apparent friction of bureaucratic processes can be lower when there are only a few people involved ("I'm just talking to my collaborator" or "I'm just buying groceries from a clerk at the store" or "I'm using a website for a government service"), but there is a continuous gradient to more obvious instances of bureaucracy. Bureaucratic tendencies are observable at the small scale; they typically get ignored or called something else.

Bureaucracy arises when management of a shared resource is necessary; that resource can be external to the organization or internal to the organization. Examples of external shared resources include mail delivery for USPS, public safety for FBI, and the environment for EPA. The focus of this book is on internal resources. Resources internal to a bureaucratic organization include intangibles like attention, skill, expertise. Metrics like time, money, and staffing are proxy measures for the central intangible resources.

Bureaucracy is a system for distributed knowledge and distributed decision making. That is in contrast to easier-to-understand concepts like centralized knowledge and centralized decision making. A government run by dictatorship is easy to conceptualize compared to democracies because there is a central character around which a narrative can be formed. Similarly, stories about the CEO of a company are much easier than capturing the thousands of interactions conducted by the many employees of that company. The vast majority of the work an organization does is coordinated and carried out by people other than the CEO. Linear story-telling with a small number of main characters does not map well to the complexities of bureaucracy.

1.3 Scope of Bureaucracy

Typically bureaucracy is considered a trait of an organization. This is consistent with the definition of bureaucracy based on managing shared resources. Examples of this include

- The Environmental Protection Agency (EPA) manages access to bureaucrats who have expertise with environmental regulations governing water, air, workplace safety.
- The United States Intelligence Community manages access to bureaucrats
 who have expertise in collecting foreign intelligence.
- The information technology department in a large organization manages staff with expertise in repairing computers.
- The Food and Drug Administration (FDA) has expertise on regulations for safety of food.
- The Federal Aviation Administration (FAA) has expertise on flight safety.
- The military manages the shared resource of bureaucrats with expertise in war-making.

That approach to bureaucracy is conceptually consistent but doesn't provide value to you, the practicing bureaucrat. Bureaucracy is not a distant faceless concept. Bureaucracy permeates your environment and is the basis for many interactions you have with other people. When you recognize bureaucracy, you will be able to respond appropriately. If you recognize the systemic incentives driving a person's behavior, you are less likely to see the person as malicious or incompetent.

Who is a Bureaucrat?

A cashier in a gas station is a bureaucrat. The shared resource is the gas and other items for sale. The "policy" might simply be "take money from customer in exchange for items sold in the store and gas from the pumps," but the subjective application of that policy leaves a lot of room for the cashier to shape the customer's experience. Does the cashier greet the customer when the customer enters the store? Does the cashier look at the customer to acknowledge the customer? Smile? How quickly does the cashier engage the customer? Minor

nuances that are left to the cashier in the execution of the store policy means there is room for subjective application of the policy.

A bank teller, a loan officer, and a bank's technical support are all bureaucrats. The shared resource includes the money managed by the bank and the expertise associated with managing money. Each employee subjectively enforces policies on behalf of the organization. Each role has a different amount of impact on the bank's finances. Of these three roles, the loan officer's interactions with bank customers provides the clearest route for feedback based on profit. The loan officer doesn't act alone though – the customer's interactions with tellers and the bank's technical systems also matter to the customer's decision.

This same discretionary application of policy applies to commercial bureaucrats like sandwich makers, car salespeople, oil well drillers, grocery clerks, retail clerks, and plumbers. Public school teachers, state and federal police, military members, tax collectors, and other state workers are government bureaucrats.

Factory line workers subjectively apply policies, with the assembly line and factory being the shared resource. Enforcement of quality standards is the most obvious area. Pacing of work is a negotiation with management that directly impacts productivity and profits.

Structured environments like sports featuring well defined rules do not eliminate bureaucracy. Teammates use subjective policies on who to work with and how to best leverage their strengths and exploit the opponent's weaknesses. The policies are set in part by the coach. Referees make subjective determinations about rules.

Sometimes bureaucrats do not work directly with customers or citizens or products. Then the bureaucratic process is inflicted on fellow bureaucrats. In this scenario, a bureaucrat is subjectively applying a policy to other bureaucrats.

Self-administered exam: Am I a Bureaucrat?

- I rely on the knowledge of others.
- I rely on other people's decision making outcomes.
- I administer subjectively determined policies for shared resource.

If all three of these are true for you then you are bureaucrat.

Identifying yourself as a bureaucrat matters, both to the employee and to the business. The risk of not self-identifying as a bureaucrat is that you won't grasp how much control you have in enacting and enforcing policy. If you think of yourself as having to blindly follow rules, you will harm the people you are applying the rules to and you will harm the business/institution you are applying the rules for. Adapting policies to circumstances is the value of having judgement capacity.

In a similar sense from the consumer or citizen perspective, if you don't think you are interacting with a bureaucracy, you won't perceive the opportunity to negotiate. If you view rules as unchanging and inflexible, you will harm your ability to make progress. If a rule was made by a human, then that rule is flexible. Who made the rule? Who enforces the rule? If you can talk to them, could they be convinced to make a modification or an exception?

If you don't think about a bureaucratic framing, you might think the store clerk is enforcing a policy because they don't like you. Assigning personality conflict as the cause might lead to a different conversation with their manager (the person who created the policy).

If you don't think of yourself as a bureaucrat, you'll behave differently in your job. The paradigm of "just tell me what to do" is the default (learned in school) and you won't know how to engage with coworkers and bosses since they are not friends. You will be less likely to understand how to leverage the organization and identify collective wisdom. Thinking from the perspective of a bureaucrat explains why evangelizing within your organization is relevant.

If you think of yourself as merely a cog in a machine, you are less likely to notice that you exert influence in the process and you are less likely to recognize the autonomy available to you. If you think "I have a real job (e.g., nurse, cashier, teacher), therefore I'm not a bureaucrat", you are less likely to recognize the subjective power you have in interactions with the public. If you think, "I'm at the bottom of my organization's hierarchy, therefore I do not have power", you are less likely to notice the autonomy when it is available.

If you don't think of yourself as part of a bureaucratic process, you'll behave differently in interactions with bureaucrats. You won't perceive opportunities to negotiate because the processes seem fixed instead of subjective. You won't recognize motives and incentives of bureaucrats, so their activities will seem incomprehensible.

Factors Influencing Bureaucracy

Although bureaucracy can be present for one person, and bureaucracy is often apparent on teams (e.g., 3 to 20 people), this book focuses on the situation of multiple teams comprising an organization. This might be a few hundred people (above Dunbar's number) up to millions of people. Examples of companies that employ more than a million people² include Walmart, Amazon, and McDonald's. Size isn't a requirement for bureaucracy. Small companies with a few people incur bureaucracy because of the need for coordination of subjective policies governing shared resources.

Money is uncorrelated with bureaucracy. Bureaucracy occurs in commercial companies, government, and non-profit organizations.

Bureaucracy emerges in small organizations, has patterns that are scale invariant, and is generic across sectors. The complexity of the tasks may be different, but the same scale-independent patterns can emerge because of a common factor: human behavior.

The size of bureaucracy scales with the complexity of the problem. For example, if participants in a society only used hand tools they could make themselves, then there is little need for bureaucracy. Mining and producing small amounts of metal is feasible for an individual, though the relevance of specialization becomes clearer. A society large enough to support the technology of writing (beyond the use of clay tablets) seems to coincide with the bureaucratic need for writing. Getting to technology like the telegraph and radio requires a society that supports complex processes and specialization – key aspects of bureaucratic systems. While decreasing bureaucracy is certainly feasible, it's not clear how to maintain the current technological sophistication.

In addition to essential task complexity, the size of bureaucracy depends on accidental factors like how old the bureaucracy is, how big the community being supported is, and how diverse the community is.

²see Wikipedia's list of largest employers

1.4 Fundamentals of Bureaucracy

Bureaucracy is a system of distributed knowledge and distributed decision making for managing shared resources. The decision making is not purely logical; it relies on particular facets of human interaction. This section outlines the critical roles of decision making, hierarchy, communication in bureaucracy, and feedback loops. My list is smaller than Max Weber's [58]³, so I see bureaucracy as more widespread.

Decision making is central to bureaucracy. Every other aspect of bureaucracy derives from decision making. The decision making is with respect to the subjective management of resources. Here resources refers to attention and expertise or tangible goods like air, water, and land.

When there are multiple people present, or even when one person is trying to be self-consistent, coordination of decision making is important to the management of shared resources. While coordination can occur without hierarchy when there are a small number of people, typically an organization of people leads to both formal and informal hierarchies. Who gets to make which decision is managed using hierarchy.

Meetings and written communication help with consensus among bureaucrats, though agreement isn't necessarily the outcome. Once a decision is made, the choice selected by a person propagates throughout the organization to achieve some level of consistency.

A less obvious feature of bureaucracy is the weak feedback loop. This distinguishes bureaucracy from a market-based system where the consequences of decisions manifest as profits and losses. If you sell shoes, you can evaluate decisions you've made by measuring how much money you make. In contrast, the decisions of a bureaucrat are barely felt by the bureaucrat. That weak feedback loop (few consequences for the decision maker) means learning from mistakes is harder and positive reinforcement for good outcomes is negligible. A weak feedback loop does not mean there are no consequences. The actions of a bureaucrat create ripples that a felt by the people. This is described in more detail in the section on feedback loops and ripples.

If you're not an academic researcher of bureaucracy, you might be thinking that you don't want to have to think about hierarchy or collaboration or coor-

 $^{^3}$ Bureaucracy: Max Weber

dination. Meetings and email are not your goal; you just want to do the tasks that you were trained for. As you progressed through the formal education process you experienced individual grading. You perceive your job as a bureaucrat as having pay, promotion, hiring/firing, and a title that seem focused on your individual abilities. The following sections explain why the individualist mentality is ineffective when you are part of a system of distributed knowledge and distributed decision making.

Decision Making in a Bureaucracy

Decisions are central to the operation of a bureaucratic organization. In this book we explore the topic, but keep in mind that decisions are not the only source of change in an organization. Occasionally events unfold without decisions being made. This might be because the decision makers are not informed, or there is an intentional neglect. This section focuses on situations where bureaucrats recognize the need for a decision and want to make the best decision.

There are multiple types of decisions. A simple decision has one correct or beneficial choice and one or more wrong or harmful choices. The work of decision making is then to gather information that identifies which is the correct or beneficial choice and select that option.

The best case scenario for any decision making is one person making a well-informed simple decision that has immediate consequence and the consequence is to the decision maker. Examples from elementary formal education include arithmetic math problems, multiple choice quizzes, spelling tests, and memorization tests. A bureaucrat's moral injury can come from decision making that involves multiple people, weak feedback loops with high latency, and complex decisions for multiple objectives.

Example Decision Method: Pareto Frontier

A complex decision may have many choices, and there are might not be a best option. Then a Pareto frontier might exist where trade-offs can be made.

As an example of a complex decision made by one person with immediate consequence and direct relevance to the decision maker, suppose you want to buy a car. You care about only two aspects: fuel efficiency and cost. See Figure 1.2 for an example of the Pareto frontier.

Visualizing a Pareto frontier for two quantitative variables is easy, but typically decisions involve more factors. For example, evaluating the trade-off of

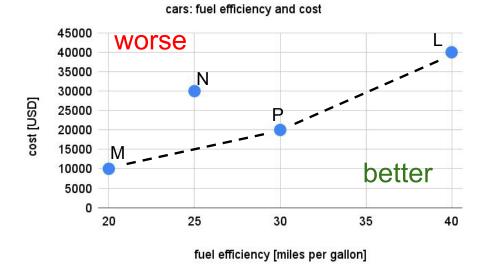


Figure 1.2: Four cars, L, M, N, and P. The goal of the buyer is to spend less money and get better fuel efficiency. Choices not on the frontier should be avoided, but that doesn't yield a single result.

three quantitative variables like speed, accuracy, and cost creates a surface. With more than three variables visualization are less useful, though the analysis technique still applies.

Another constraint on using Pareto frontier analysis is that it works well when there are many options relative to the number of variables being optimized for. The assessment does not work as well when there are few choices relative to the number of variables. For example, suppose there are 10 choices of car and you want high fuel efficiency, sufficient cargo capacity, maximum number of passengers, stylish, low cost, low maintenance, good durability, and high resale value.

For a set of quantitative variables, a Pareto frontier does not account for the relative importance of different variables. Assigning weights to each of these factors merely stretches one axis relative to the other axes.

There are many possible decision making frameworks besides Pareto frontiers, but in practice a typical bureaucratic decision is ill-informed, has diffuse consequences, delayed impact, and does not affect the decision maker. In bureaucratic processes there is rarely a formal assessment of options. Decisions are rarely recorded. Even afterwards a decision can be difficult to evaluate for correctness because there are multiple stakeholders.

If the people you want to convince are not swayed by data, then you can augment the cost-benefit analysis with stories.

Risks of Using Decision Frameworks

Decision making frameworks can be attractive to bureaucrats intending to formalize processes and encourage predictability. There are potential risks worth being aware of.

Cost-benefit analysis can decrease the apparent responsibility of the decision maker. Cost-benefit analysis can be used to deflect criticism for an action.

A decision is political when the basis is historical relationships, maintenance or creation of a relationship, or to enable future relationships. A decision is subjective when someone else faced with the same scenario would have come to a different conclusion. A decision is quantitative when based on measurements. To avoid the appearance of subjective decision making or political decision making, a decision may be framed as "data driven." A good approach for data driven quantitative analysis involves coming up with a testable hypothesis, then performing experiments and collecting data to evaluate the hypothesis. More commonly, a decision is made, then data is gathered which supports the desired outcome. Forming an opinion and then looking for evidence to back the outcome yields suboptimal results for the organization.

Even when a bureaucrat is not intentionally biased towards an outcome, there are many ways to gather evidence. Some approaches have biased sampling and produce biased results.

Even with valid and representative data measurement, decision makers can be led astray by poor modeling. A model may use inapplicable techniques, or may have implementation bugs.

For all the dangers of decision making methods, there are worse approaches that do not rely on measurement. People rely on history (if they are aware of it) and perpetuate bad ideas, or take action based on what is best for their career, or decide based on how to accumulate more power, or simply choose based on what someone else says to do.

Alternative Decision Making Approaches

Identifying the spectrum of ways bureaucrats make decisions can decrease the surprise when you encounter these in practice. Enumerating the choices of how



Figure 1.3: Magic 8 ball for decision making.

to make decision allows for conversation about the pros and cons of each. The spectrum below is ordered from least effective to most effective and is not exhaustive.

- Random selection from the options (e.g., roll of the dice, shake the Magic 8 ball figure 1.3).
- Rely on a hunch.
- Rely on past experience, whether your own or someone else's.
- Use a cost-benefit model, gather data, analyze.
- Make a hypothesis, design an experiment, carry out a test, collect data, analyze.

Why cost-benefit analysis models are not used

Applying quantitative models to decision making may seem a useful path to optimal outcomes. Improved decision making that benefits stakeholders seems attractive. There are a variety of reasons this approach is not taken. I will outline the reasoning here not driven by cynicism, but so that you can appropriately respond when confronted with arguments against cost-benefit modeling. Decreasing your surprise through the inoculation of exposure enables you to develop counter-arguments.

One reason to avoid cost-benefit modeling is that there is a lot of work to do, so coming up with a model is an opportunity cost. Modeling every decision in detail is unrealistic, so triage is needed – which decisions warrant the investment of analysis. A person inexperienced in modeling of decisions will take longer and is more likely to create a bad model. Practice is expensive. Identifying relevant parameters for inclusion is a learnable skill.

If a person has a bad experience with cost-benefit modeling, they may be less likely to try again with new decisions. Bad experiences can come from using incorrect data, missing a critical variable, picking the wrong scope for a question, implementing the right model with the wrong math, misinterpreting the result, using a model that is too in-depth or not sufficiently deep, or failing to sell the result of an analysis to stakeholders.

Quantitative cost-benefit modeling doesn't account for personalities or organizational politics. The best options may decrease the decider's power or prestige, or harm relationships.

To inform a cost-benefit analysis, measurements are needed. In addition to measurement being costly, measurements get perverted – see Campbell's law.

[Tag] Folk Wisdom

Decision Making Delay

What appears from the outside as "organizational inertia" is internal delay of decision making and the delay of dissemination. Delay comes from

- Time used by each decision maker to gather information, arrive at a decision, change processes, disseminate their choice, justify their choice.
- Processes designed to account for cheaters and people with malicious intent, whether that means a malicious bureaucrat or malicious subject.
- Analysis paralysis due to insufficient information, too much information, and lack of clarity about which framing is applicable.
- When other people who are needed to carry out the action push back, either in disagreement or seeking clarification. The fact that the organization is not profit driven is important because the justification for the action isn't quantitatively obvious. Therefore there's a higher burden for communication.

A Bureaucratic Decision involves many Decisions

A decision is actually a collection of interdependent choices. After recognizing the need for a decision, follow-on decisions include identifying the stakeholders (who to include in an impact analysis) and identifying options. Who is a stake-holder and what are the options are interrelated. Involving more people expands the number of options and the complexity. Additional choices associated with reducing uncertainty are how much time to spend on the decision, how much information to gather for the decision, whether the make the decision or push the decision to someone with more expertise, whether to push the decision to someone with more exposure to the consequences.

Most decisions you make as a bureaucrat do not have hard deadlines. Instead, there are trade-offs in allocation of your time. Sooner is preferable since the consequence of the decision benefits the organization and allows you to focus on other tasks, but delaying allows for more information gathering for a better informed decision. (See Dilemma 3.18 and other related Dilemmas in that section.)

If a bureaucrat is going to rely on consulting an expert, the decision maker needs to be confident the expert is not of straying outside their area of expertise. For example, I don't rely on a botanist with many published papers to tell me how to change the oil in my car. Besides knowing their own limitations, the expert should be clear about whether their input is a factual summary, a predictive assessment, or a value judgement. This nuance complicates what you as a bureaucrat are interested in (what's the best choice?).

Transparency of Decision Making

Your decision making process might change if made visible to stakeholders. You may provide clearer justifications, or spend more time gathering evidence to support a claim. Strengthening the arguments is beneficial but takes time and resources.

Frank conversations and exploratory brainstorming need protections to allow participants to be vulnerable. This is the motive for the Chatham House Rule. At the same time, people affected by the decisions benefit from understanding how the decisions were made – see examples like Sunshine laws and FoIA. Even the symbolism of survelince changes behavior ⁴.

Making decisions transparently can make participants more risk averse because of the potential for failure.

⁴K. J. Haley and D. Fessler (2005). "Nobody's watching? Subtle cues affect generosity in an anonymous dictator game." Evolution and Human Behavior, 26, 245–256.

T. Burnham and B. Hare (2007). "Engineering human cooperation." Human Nature, 18, 88–108.

The concept of transparency can apply before a decision is issued, while a policy is in effect, or after the consequence (as part of a review).

Hierarchy of Roles

Ideally sufficient depth and breath for decision making would be embodied in one person. That might not be possible in every situation. One way to resolve this is to identify distinct scopes of responsibility and then assign different members of an organization separate scopes for decision making. Within a decision making scope there may be more work than one person can handle, so a team is formed. That team may have some members focused on tactical work and other members focused on strategy and coordination. Hierarchy within an organization is the formalization of separate decision-making scopes and associated specialization.

Partitioning knowledge and decision making enables complex work beyond what one person can accomplish and causes friction among members. An expert reporting to a manager knows things the manager does not, and the manager may have context that the expert lacks. Both bureaucrats (the expert and the manager) need to convey their respective nuance and seek out the holistic view.

Hierarchical decision making is one option for coordination among alternatives (like consensus), so why is hierarchy so common? Members of an organization gravitate towards hierarchy because it helps define task scope, assigns responsibility, and obviates a need for building consensus. Reaching consensus for every decision would take time and be more burdensome than appointing a person as the decision maker.

A hierarchical organization with partitioned knowledge introduces a challenge: the order in which you share information with others matters. Your choices for who to first describe an idea to are your peers, your management, and your subordinates. The people subordinate to you know more about the topic and are exposed to the consequences. Giving them a chance to vet the idea results in a more robust idea and validates their value in organization. Sharing your idea with management first allows your superiors to provide context you might not be aware off. Starting the conversation with your peers first indicates you value the relationship and decrease the risk of overlapping work.

I've included hierarchy in the section on Fundamentals of Bureaucracy, but that does not imply that hierarchy is a required feature of bureaucracy. Hierar-

chies of bureaucrats are a common organizational structure and worth studying

[Tag] Trilemma

even if not essential to bureaucracy. The relevance of understanding hierarchy is to identify recurring behavior and patterns to leverage. Organizations of bureaucrats can intentionally work against hierarchy, but the amount of effort needed to enable alternatives implies that hierarchy is a natural approach.

The benefits of formal hierarchy include improved capacity for the number of policy decision made, enabling consistency of decisions, and leveraging specialization of knowledge. Hierarchical decision making has costs: higher latency, inconsistency among bureaucrats, waste due to inefficiency, and many others. As another example of harm, hierarchy enables strategic ignorance. Bureaucrats in positions of power can deny having knowledge of improper activity. ⁵

The structure of an organization is dynamic, but at each point in time an organization typically has a defined set of roles. Each role is distinguished by different scopes of decision authority. Roles are often confused with titles. What matters is the role (scope of decisions) and who reports to whom. The names of teams can be similarly not descriptive.

Roles in an organization are defined by the boundaries of responsibility. The purpose of a role is to minimize conflict and reduce redundancy, allowing control. Clear responsibility enables effective bureaucracy.

A conventional characterization of an organization's hierarchy involves two criteria: the depth and breadth of the org chart. The more people a supervisor oversees, the flatter the organization – that's the breadth of the organization. See the Valve handbook [55] and Joreen's essay [20] for contrasting views on the shape of an organization's hierarchy. Depth of the hierarchy is how many layers there are.

A more practical view of an organization's hierarchy also involves two criteria. The two choices in how a hierarchy is shaped are 1) how many people a supervisor oversees and 2) how many supervisors a person has. Though you might naively expect that an employee has one boss, but that is not a requirement. A supervisor for a given topic may have many people reporting to them, and a bureaucrat with multiple roles may report to more than one supervisor.

Acting as part of a group means ceding part of your autonomy. Hierarchy is an additional layer of ceding responsibility and adding expectations about relationships. The consequence of hierarchy in an organization means that as

⁵L. McGoey, "The Unknowers: How Strategic Ignorance Rules the World" (2019) and L. McGoey, "The logic of strategic ignorance" (2012). DOI 10.1111/j.1468-4446.2012.01424.x

a member of the bureaucracy you do not have full autonomy – otherwise you would not be a member of the hierarchy. At the same time you are not under strict control of the organization – you still have some subjective decision making authority as a bureaucrat.

The person at the top of the hierarchy does not know everything. The person at the top of the hierarchy does not have input on every decision made in the organization. Some autonomy is retained by all members of the bureaucracy.

Independent of the defined roles and titles in an organization's hierarchy, there are a set of implicit roles and a separate social hierarchy of informal influencers and decision makers. Informal influencers in a bureaucracy usually have long relationships with the decision maker or relevant credentials or both. The credentials can be formal (e.g., a PhD) or informal (demonstrated success on a project). In either case, the decision maker is relying on another person's expertise.

Another set of informal relations within an organization is mentors and mentees. These relations allow mentors to share institutional knowledge to mentees, and allows people in senior positions to access the novice perspective.

One consequence of hierarchy is a sense of fear felt by people who report to other people. This fear stems from the loss of control (less autonomy) that leaves the person feeling disempowered.

For example, consider the following relationship. A person, Sue, is perceived to have power over another person, Amy, because Amy gave up some control to Sue. Amy not having control triggers the feeling of fear in Amy, regardless of how Sue behaves.

If Sue is aware of the potential for this emotional experience, Sue can compensate for Amy's fear by being friendly and receptive towards Amy. Alternatively Sue may exploit or rely on the fear felt by subordinates.

Organizational chart as a Guide and a Lie

An organizational chart (hereafter an "org chart") identifies formal roles and the formal relations among roles. An org chart is at best a snapshot in time, and more often aspirational than descriptive. In spite of possible deficiencies, an org chart helps outsiders and newcomers understand the scope of responsibilities and interactions.⁶

Org charts are a lie in the sense that undocumented relationships can matter more than the official roles. Org charts fail to capture the informal roles and network of relations that facilitate progress in any organization.

Org charts foster a second separate lie by creating a sense of power dynamics based on visual orientation. For more on this issue see the discussion of org chart orientation.

 $^{^6\}mathrm{The}$ organization chart hasn't always existed. The first known org chart was created in the 1850s.

Meetings for Coordination

In an organization comprised of more than one person, meetings are necessary for facilitating coordination. The coordination accomplished by a meeting can be explicit (verbal or written), or it can be indirect through signaling (who attended the meeting, when the meeting was held, where the meeting was held, how much notice was provided).

Not everyone understands that meetings are a vital aspect of coordination in a bureaucracy. The following sequence of scenarios illustrate the thinking some bureaucrats apply. (If you're already convinced of the value of meetings, see tips on improvement.)

Anti-meeting view: No plan or coordination needed; I just do what you tell me. With this approach, either I will be successful because I worked hard on what my supervisor directed, or I will fail because I was directed to do the wrong thing by my supervisor.

Potential response 1 by the supervisor: I think you're smart, and I think you're capable of shaping your career. Let's work as a team to improve your effectiveness.

Potential response 2 by the supervisor: Is that how you want your career to go? Do you desire autonomy and creativity?

Anti-meeting view: No point in making a plan or coordinating because everything changes so often.

Potential response by the supervisor: But the effort has an end goal, right? Anti-meeting view: Yes, so then the plan is to get from where we are now to that end goal. Coordinate as necessary.

Potential response by the supervisor: And there are no intermediary steps? Milestones? Is it better to have no plans and just put up fires reactively, or to have a plan that is subject to change? To wait for a need for coordination?

Anti-meeting view: What is a plan anyways?

Potential response by the supervisor: There is value in creating a goal, enumerating tasks that would support the goal, identifying the dependencies among the sub-tasks, and time-binning the dependencies with defined milestones and deliverables. That is my definition of a plan. And having that is more useful than merely reacting.

Anti-meeting view: Who's plan? Who's relationships? I don't need to come up with that plan, the supervisor already has a plan. Just tell me what the plan is. Potential response by the supervisor: That's not as effective as coming up with independent plans and then resolving the differences. There's value in resolving the differences, Even though that will cost time and frustration and displace time to enact.

My intent for sharing these debates is that you will be less surprised when they are raised by coworkers.

Written Communication

Paperwork and it's older cousin red tape are closely associated with bureaucracy. Digital reports, spreadsheets, and emails are the current artifacts of an organization's bureaucracy. Regardless of format, a written record creates evidence about policies and decisions. While written records are burdensome to create and maintain and search, they are not intrinsically good or bad.

Chapter 7 on page 167 provides tips on effective verbal and written communication in the context of a bureaucratic organization.

Feedback loops and Ripples

A feedback loop exists when a decision maker experiences the harms and benefits of their decision. Decisions that lack a feedback loop still have consequences for the decision maker, in that potential future decisions are altered or limited. ⁷

Virtuous cycles and vicious cycles are rare in bureaucratic organizations because there are rarely mechanisms for feedback loops. Instead, there are ripples – propagation of consequences for other people's schedule, what is possible for other people, and dependent tasks to be carried out by people other than the decision maker.

The (weak) feedback mechanisms for a bureaucrat are reputation (subject to spin) and rarely enforced retroactive accountability – what did you know and when did you know it. Retroactive accountability depends on written records from meeting notes, emails, agendas, and reports.

Because of the lack of quantitative feedback loops, there is significant interest in justification, proactive monitoring, reporting, and retroactive assessment. That creates more bureaucracy.

When there are multiple competing objectives among different stakeholders in a zero sum use of resources, how can you determine what's best? Typically there are feedback loops to guide progress. When feedback loops are weak or not present, then the most powerful stakeholder (which is distinct from the biggest or loudest) will dominate.

Ordering the quality of a justification

- 1. I have no explanation.
- 2. This is my opinion.
- 3. We've always done it that way (a cargo cult).
- 4. Based on my experience.
- 5. I was told to do it this way.
- 6. I think this is the best way (no reasoning, but a desire to optimize; optimization criterion undefined).

 $^{^7 \}mathrm{In} \ [34]$ Lipsky discusses feedback loops in chapter 4 page 40.

- 7. This way is most effective because X (not quantified, desire to optimize, has an optimization criterion).
- 8. This way is most effective because X (quantified, desire to optimize, has an optimization criterion).
- 9. This way is most effective because X compared to other options (quantified, desire to optimize, has an optimization criterion).

The social trap is "a conflict of interest or perverse incentive where individuals or a group of people act to obtain short-term individual gains, which in the long run leads to a loss for the group as a whole." The feedback loop for the diffused value is weaker than the feedback loop for the interest group.

Special interest groups

When there is a benefit to a small group and the cost is to a larger group.

Spending taxpayer dollars

Suppose you earn \$100,000 and the tax rate is 30%. Then your tax money sent to the government is \$30,000. How does that compare to what the government collects in taxes?

For the United States, "in 2021 the government collected \$4.05 trillion in revenue." a

If you are a federal government bureaucrat and you do not maximize the effectiveness of spending \$1,000,000 of government money, of that misallocated money only \$0.0074, or about one penny, was taxes you paid. The financial feedback loop is weak.

Some federal government bureaucrat earn slightly more, so the cost of wasting \$1,000,000 is more significant. Federal pay is limited to about $$220,000^b$, so that raises the feedback to 2 pennies.

The lack of feedback allows waste to go unfelt. There's no immediate consequence for the decision maker.

[Tag] Story Time; Math

 $[^]a \mathrm{source} \colon \mathrm{Government}$ Revenue — U.S. Treasury Data Lab

^bWikipedia entry on Executive Schedule

Example feedback loop:

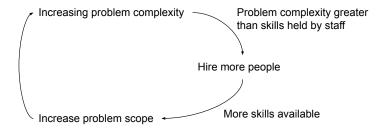


Figure 1.4: Complexity requires more staffing; having more staff means more skills are available; under-utilized staff skills make room for more scope; more scope adds to complexity.

Example feedback loop: Security agent making a fair decision

[Tag] Story Time

I was going through passport control. There was a TSA officer directing people into one of two lines. Both lines were long. The lines were not of equal length. Both lines terminate at a bunch of passport checking agents. Each passport check takes a minute. Passport checking TSA officers operate independently and concurrently.

The TSA officer's perspective is that there are two long lines. His procedure is two balance the two lines (for fairness). He does this by pointing people into one of the two lines, with his choice driven which line has room available.

Two people enter and are directed by the TSA officer. The first person is directed left, the second goes right. The TSA officer's job is completed.

The person in the left line finishes 5 minutes before the person in the line on the right. This difference in completion time is frustrating is frustrating for the person who is in the line on the right.

Because the lines are not of equal length, balancing the start of the line is an suboptimal method. The consequence is that what seems fair to the TSA officer ends up not being fair for people going through the line. The TSA officer had incomplete information – the lines are not of equal length.

Because the TSA officer isn't exposed to the consequence of is approach, he doesn't get feedback on whether it is suboptimal or not.

Lesson: if the people making decisions do not experience the consequences of those decisions, then they have no incentive to improve decision making.

The person in the longer line feels frustrated. The negative feeling is due to a sense of powerlessness, and that the situation is recurring, and a better solution is available.

The optimal solution in this situation is to have a single line feeding the multiple TSA passport checkers. This eliminates the need for the decision maker.

Parking garage

Bob parks his car in a parking garage every day. The parking garage owner charges \$20 per day for people to park their car.

Bob recently found that one of the exit gates for the parking garage is broken. If Bob uses that gate to leave the parking garage, the gate does not function and Bob cannot exit. Then Bob has to call the parking gate operator to request an exception (which is granted) and Bob can then exit that gate, avoiding the \$20/day charge.

This action (go to broken gate, request exception, avoid charge) has been repeated for a long time (months). Bob's motive is to avoid the \$20 parking charge; the cost is a mere phone call and a minor delay. This cheating behavior harms the parking garage owner's income. However, the parking gate operator, serving as intermediary, insulates the parking garage owner from the interaction with the cheater. The cheating behavior is small enough that the parking garage owner may not notice.

[Tag] Story Time

1.5 History of Bureaucracy

Bureaucracy has repeatedly arisen independently in a variety of cultures ⁸ lasting for timescales that exceed the lifespan of one person⁹. That indicates the current situation is not a fluke or coincidence. There is some utility (or pathology) that is consistently recurring.

Bureaucracy predates writing and language and even humans! Subjective policy enforcement in support of an organization arises in pre-human tribes, visible in groups of modern apes who have to manage access to share resources [51].

Though bureaucracy is not new, the pervasiveness is. Prior to the industrial revolution the scale of both employment and government were small organizations limited by the speed of communication. For the past 100+ years the size of organizations (commercial and governmental and academia) have grown beyond Dunbar's number. More people participate in more organizations that are more bureaucratic. The benefits are support for more complex products and processes.

⁸Wikipedia entry on the history of bureaucracy.

⁹YouTube video on the History of bureaucracy.

Chapter 2

Bureaucracy in General

2.1 Each Phase of Life involves Bureaucracy

In each person's life there are standard milestones: birth, education, work, death. The relationships in each phase are distinct. Each of these milestones and phases involves bureaucracy. Each phase is a different experience of bureaucracy because the bureaucratic roles change.

Bureaucracy is composed of three roles: the policy creator, the policy enforcer, and the subject (upon whom the policy is inflicted). These roles can be confounded by the label "bureaucrat" because who is the bureaucrat and who is the subject depends on the relationship in a scenario.

For example, a store manager creates a policy, a store clerk enforces the policy, and the policy is inflicted on the customer. Both the manager and the store clerk would be bureaucrats, while the customer is the subject. In a separate example, someone at corporate headquarters sets a policy, the store manager enforces it, and the policy is inflicted on the store clerk. Then the clerk was the subject.

Bureaucracy of Birth

Your birth was marked by getting a name, registering with the state, and initiating medical records. These tasks were administered by bureaucrats (doctors and nurses and other hospital staff) on your behalf. The bureaucrats included the hospital staff, and you were the subject of the bureaucracy. You had no autonomy or decision making authority.

Bureaucracy in Early Childhood

Before starting education, the bureaucracy of early childhood is inflicted primarily by family members setting and carrying out policies. The organization of bureaucrats is the family. Other community members or caretakers may also be involved to carry out the polices of taking care of you. Your decision making authority was extremely limited.

Bureaucrats at School

Once you started the education process, new bureaucrats got involved. The community of bureaucrats could be a public school, a private school, or homeschooling. In any of those cases, the frontline bureaucrat is the teacher. You don't have responsibility for making policy that other people follow; you are still the subject of bureaucracy.

The expectations of each phase of school (high school, undergraduate, graduate school) are distinct, and they are different from working in a large organization. Your autonomy increases throughout the duration of school. Your family and teachers are the bureaucrats. You start building informal organizations of friends, and you start to explore policies around social bonding.

Schooling sets a pattern that most students will fall into for the rest of their lives. You were handed a textbook and told to solve a set of problems. You have the autonomy to do more than what is required. You can find other textbooks that match your interests or are written from a different view.

You get to choose the book you want, even if you don't get to choose the topic you are going to be evaluated on. You don't even need to pick just one reference book – you can pick lots of books and figure out which author style best fits you. You can also choose the level of difficulty – basic and beginner level, or more advanced (depending on where you are, rather than where a class in school is supposed to be).

You can discover how you learn best. This extra effort requires self-reflection: How did you learn? What worked best? What didn't work, and why not? What did you learn? What do you wish you had learned?

Another pattern that schooling relies on is single choice decisions where there is only one right answer. Examples include math problems and multiple choice tests. Schooling tends to avoid setting up dilemmas or paradoxes for students. Academic problems in the education process are designed to be independent of the people involved or the history of the situation.

In my schooling I learned how to approach technical issues and develop solutions. That problem-solution paradigm neglects crucial steps of discovering the problem, isolating the challenge, identifying stakeholders, learning the history of the challenge, and negotiating with stakeholders before trying to address the challenge.

My schooling led me to emphasize academics over socializing. When I transitioned to professional work, I realized that social skills and political savvy useful when trying to change organizations and policies.

Unlike academic problems that rely on and evaluate my answers, working in a bureaucratic organization the challenges are ill-defined, there's no known solution, and the problem is sufficiently complex that I have to collaborate.

Military Service Bureaucracy

Less than 0.5% of the United States population serves in the military¹. For those who do serve, the military's rigid hierarchy and defined protocols is a distinct experience compared to school or work. The transition from military to civilian life can present a dissonance for service members used to the chain of command and clearly defined orders.

Working in a Bureaucratic Organization

Within the employment phase, there are pairs start and end events which may apply: hiring or getting hired; firing, getting fired, or quitting.

Employment: managers above you, peer employees, people you manage are all members of an organization.

You encounter shared resources at work: bathrooms, conference rooms, kitchen areas with fridges and microwaves, storage areas.

Bathroom example: the bathroom smells sometimes so I'm a nice person and I bring a scented air freshener. Unbeknownst to me, that triggers an asthma or allergic reaction for my coworkers. Now a policy gets created so this mistake doesn't happen again. Signs are posted.

Healthcare and Death

Doctors and nurses and other staff are bureaucrats; you are the subject; the hospital or clinic is the organization.

¹source: Council on Foreign Relations

[Tag] Story Time

Toilet paper at the hospital

If you go to a hospital, use the bathroom, and find there is no toilet paper, that would indicate a deficiency of the hospital.

Holistic view: Someone didn't refill the toilet paper. Since the person who normally refills toilet paper wasn't also a user, they aren't directly affected by the lack of toilet paper.

A routine is needed for checking availability of toilet paper in bathrooms.

Perspective of the purchasing manager: Money spent checking to toilet paper is money not spent on the primary mission of the hospital.

Minimizing checking is important, so a feedback mechanism is instituted – a phone number to text regarding bathroom status at the hospital.

Perspective of the janitor: My routine used to be to go to each bathroom after normal business hours and refill toilet papers. Now I have to do that and be on-call when someone alerts management that service is needed. My responsibilities increased but my pay did not.

Bureaucracy is a set of subjectively administered policies within an organization. By recognizing the role of bureaucrats you are then able identify what is negotiable.

2.2 Avoiding Bureaucracy is Nearly Impossible

The only situation where bureaucracy might not exist is if you live completely on your own, with no interaction with other people. That means completely disengaging from society. Even then, personal routines are a self-imposed form of bureaucracy, with the roles of policy maker, bureaucrat, and subject collapsed to a single person – you.

Self-sufficiency and autonomy are attractive alternatives bureaucracy. The way participants in modern society strive for self-sufficiency is by denying their dependence on modern society. That's a relabeling of selfishness which feels better.

For the rest of us who operate as members of a society, bureaucracy is necessary for our rights. We prove our name by cooperating with other people, and our name helps us claim our citizenship. That's a subjective policy that stakeholders in society agree to.

The necessity of bureaucracy, and the reason it is culturally invariant and persistent across time, is because it is a response to the collective action problem. As long as humans form communities, we will need to address the challenge of shared resources – whether tangible (water, land, air) or intangible (expertise). Therefore, learning how to be an effective bureaucrat improves your chances of success.

The specific way a society is constructed (democratic, authoritarian, dictatorship, anarchy) is irrelevant – bureaucracy is still present. Even the libertarian view of relying on contract enforcement implies some amount of bureaucracy (e.g., forums for resolving contract disputes like a court system).

Not all bureaucracy is due to the state, nor is bureaucracy confined to companies. Parenting involves coming up with situation-specific requirements for children, with the organization being the family as mentioned in section on bureaucracy in childhood. Dress codes for sports teams are arbitrary standards. Store clerks are bureaucrats, as are website forum moderators. Content moderation is the process of (inconsistently) enforcing arbitrary standards. This mindset even permeates individuals as internalized expectations of policy and enforcement when no one else is present.

Recognizing instances of bureaucracy enables more skillful interaction, whether as a bureaucrat or as a subject. The rest of this section illustrates both the view of a person interacting with bureaucracy as a subject, and the perspective of bureaucrats working within organizations.

2.3 Alternatives to Bureaucracy don't work

A common refrain for participants in an organization is "Can't we just do the work?" In this section we'll explore a few alternatives to bureaucracy. These thought experiments illustrate the naive intent and the practical deficiencies of each alternative.

The models of bureaucracy below are all imprecise because they are analogies. The solution is a precise definition of bureaucracy.

Efficient Bureaucracy

In an ideal scenario with no bureaucracy, everyone comes to the same conclusion when presented with the same information regarding management of shared resources. Efficient bureaucracy requires each person to know the skills of everyone else so that anyone can act as an expert in any field.

In this scenario the management process of building consensus becomes unnecessary. There is no need to fight over resources (money, staffing) and no need to fight over direction. A potential problem is that this model of efficient bureaucracy based on everyone having the same view may lack the diversity of views that enable robustness.

While that idealized scenario is not going to happen, it points to how to improve bureaucratic efficiency. Each person has or should have access to the same information. Each person should apply the same decision making process consistently. Every person should have the same incentives.

Reasons bureaucracy is inefficient include

- Not everyone has the same information.
- Processes are inconsistent.
- Incentives vary among bureaucrats.
- Bureaucrats and Subjects use imprecise language.
- Decision Makers use opinions and experience rather than collect data and analyze data.
- People prioritize putting out fires rather than attacking largest issues.
- People do not respond to communications (email, phone, meetings); see the section on slow deployment.

- Participants are late to meetings.
- Scope creep for projects.
- Planned scope and actual scope are mismatched (due to staffing or skills).
- Teams work in silos.
- Bureaucrats and Subjects lie and employ other dark patterns (not addressed in this book).
- People make mistakes.
- Each person's reference experiences are unique.

Consider the following thought experiment. What if everybody in a bureaucracy had a different opinion? How would consensus be arrived at? Can an organization operate without having to form consensus for every decision?

[Tag] Exercise

Perfect Bureaucracy

The definition of "perfect bureaucracy" depends on who is providing the perspective. Here I illustrate both the view of the subject and the view of the bureaucrat.

From the perspective of the subject of a bureaucratic organization, perfect bureaucracy means many things: minimizing the time the subject waits on a decision, getting perfectly correct decisions, decisions are consistent across subjects and circumstances, decisions take into account all relevant factors, and there is zero cost to the subject. Any process deviating from those expectations is a noticeable detriment to the subject, leading to a negative reference experience of bureaucracy. Never mind that the desires are unreasonable and conflicting. In a real bureaucracy, subjects have a negative or neutral experience. Positive interactions with bureaucracy are rare and are regarded as anomalous.

Perfect bureaucracy for a bureaucrat means all information is available, information is immediately available, and there is no moral ambiguity (each answer is objective). Trade-offs become trivial and the emotional toll of the work goes to zero. Then the bureaucrat is able to serve subjects (an emotionally rewarding prospect). Note that this job might feel hollow if all decisions are obvious. In a real bureaucracy, the typical experience is negative or neutral, punctuated by glimpses of satisfaction.

Everyone do their own thing – No Coordination, No Bureaucracy

The minimal scenario to start from is to imagine a single person working on a single task that does not last long (a few minutes), is relatively easy (cognitively and physically and emotionally), and does not recur. In that situation, building consensus is irrelevant and no process is required. Even then, it is often the case that this simple task involves the use of shared limited resources – basic essentials like water, air, land. If your task involves use of those things, then how is fair use determined among consumers?

Even for simplistic tasks, the concept of self-serve shared resources for each person is not trivial. independent allocation of shared resources breaks down and access is determined by violence.

Most of what you do occurs beyond the limits of simplicity and thus incurs some concept of process (breaking a task into subtasks). Staying with the one-person constraint, a complex task can benefit from being broken into subtasks. Sometimes the order of the subtasks matters, so we need to track the dependencies. A recurring multi-step process with documentation is starting to have features of bureaucracy, but lacks the need for consensus.

If one person lacks the skills relevant to a multi-step process, they may engage another person to help. The interaction may be informal (anarchy) or formalized in a contract (libertarian). If the parties working on the task fail to reach consensus, what is the recourse? Choices include physical violence, threats, or involving a third party (e.g., a court with lawyers and judges).

If a community wants to manage shared resources, how is that policy decided? Building consensus is relevant, but what is the process for establishing consensus? Nepotism and cultural norms and religious practices served this role prior to the dominance of bureaucracy.

Limit Bureaucracy to a Single Decider

Since bureaucracy is distributed knowledge and distributed decision making, it could be replaced by centralized knowledge and centralized decision making. If we are going to live in a society and coordinate shared resources, what if we had a single person deciding? How fast could that be? Good decisions can't be instantaneous – the OODA loop is necessary. "Observe" is the input, "act" is the output. These are measurable; "orient" and "decide" are not as easy to

measure. The "orient" is the process of labeling data (received in the "observe" phase) and connecting that information to what is already known.

Three minutes is not a lot of time to gather information and share it to the relevant people, but let's set that as a lower bound. If a single decision takes three minutes, then in a ten hour work day that's a max of (10*60)/3 = 200 decisions per day. If this decider works 300 days out of the year, that gets us to 60000 decisions per year. Everyone has to talk to this decider directly since there's no bureaucracy to gather or disseminate the information. The diversity of questions regarding shared resources would be challenging to answer well.

A bureaucracy of one person doesn't scale. Within this constraint we can't just automate everything because carrying out the automation requires a staff to implement. Automation isn't free – it requires creation and maintenance. Unless the same person making the decisions is also the person creating and maintaining the system, there will be multiple people in an organization.

Monarchies and dictatorships rely on a single decider. This is a simple model to understand, but addressing all the edge cases for large society can be difficult. A single decider doesn't scale for the number of decisions needed, so the decider then appoints bureaucrats to subjectively enforce policies.

If there's more than one person in an organization, then communication for coordination takes time. That's the "orient" phase of the OODA loop. Time spent orienting decreases the decision throughput of the organization.

Just use Common Sense

Claim: Everything would go smoothly if each person used common sense.

[Tag] Fallacy

Common sense relies on reference experiences, cultural norms, incentives, emotional state, psychological defects. These aspects are particular to each person in an organization.

In the same paradigm, suppose we start with an existing hierarchical bureaucracy and remove all the non-workers. That may sound like a worker's paradise, but then who would coordinates the activities with the number of people is above Dunbar's number?

"Common sense is not so common."

[Tag] Folk wisdom

Multiple interpretations of common sense:

• Cultural norms

- Personal reference experience
- A prescribed action seems obvious

Changing a burnt out light bulb at home only takes me a few minutes. I've done that many times.

[Tag] Story Time

In a large organization comprised of specialized roles, an office worker notifies their manager who notifies the building supervisor who submits a request to the maintenance team. Maintenance schedules the repair. An order of 1000 replacement bulbs was made last year and there are some still available in storage. A maintenance team is assigned to the task and deployed. Maintenance team goes to the storage facility to get a ladder and multiple bulbs of multiple models. The team has to sign out the bulbs from storage so inventory can be tracked (theft). A team is needed because solo use of the ladder is prohibited (safety). Multiple bulb models are needed because which model is required is unknown; multiple bulbs decrease the need to go back to storage. Once on site, the maintenance staff finds the bulb needs to be ordered. Maintenance team notifies the supervisor. A new maintenance request is filed by the building manager.

Completely Avoid Bureaucracy

That phrasing is more precisely worded by replacing "bureaucracy" with "coordination of stakeholders". If you avoid coordination of stakeholders, you either are constrained to only work on tasks that involve one person, or you get random (uncoordinated) interactions.

Minimize Bureaucracy

Again, try replacing "bureaucracy" in with "coordination of stakeholders". The goal of "minimizing coordination" probably isn't the real objective. To be more precise, a specific objective might be "minimize time spent executing the task" (which takes a lot of coordination prior to the task execution) or "minimize the level of distraction to stakeholders" (chunk the coordination time, e.g. a meeting). Another strategy for minimizing bureaucracy is to reduce the number of stakeholders involved. For a given task complexity, this means having smarter people who have more skills. See figure 2.1 for a quantitative trade-off.

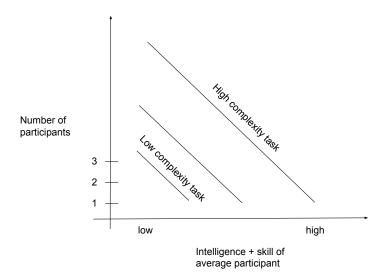


Figure 2.1: A task that one smart person can do might take two dumb people. This concept applies to any task size and any population of workers. In this diagram three levels of task complexity are shown. As task complexity increases, the size of the team needs to grow. The growth may be less if the team members are brilliant. Those brilliant people cost more and there are fewer of them available.

Automation of Processes

The role of automation is to make interactions more predictable, faster, and to handle more of them. Automation does not eliminate bureaucracy; automation obfuscates the subjective decisions and limits the ability to negotiate with decision makers.

There are benefits to automation, and automation can be enacted to minimize harm to bureaucratic subjects. Automated systems can be made more transparent by including documentation about what is happening, why, and what's next. This helps both bureaucrats and subjects identify when assumptions made in the automation are incorrect.

There are indicators of when to transition a human-based bureaucratic process to a more automated approach: ²

- The process to be automated is stable.
- The expected lifespan for the process how long the process will be needed
 is much longer than the time to enact the automation.
- The process logic relies on objective evaluation criteria.
- The process is frequent.
- The cost of automating (both the initial creation cost as well as the maintenance cost) is a savings over the manual implementation.

Market-based Approach

There is an alternative to bureaucracy that features decentralized approach to complex tasks and avoids reliance on consensus: markets.

An over-simplified definition³ is "A market is a medium that allows buyers and sellers of a specific good or service to interact to facilitate an exchange." In practice, there is market friction: "trading is always associated with certain costs or restraints." ⁴

The sources of friction in a market include

- commissions on trades
- taxes (needed to fund contract enforcement organizations)

[Tag] Actionable Advice

 $^{^2\}mathrm{https://xkcd.com/1319/}$ and $\mathrm{https://xkcd.com/1205/}$

³http://www.investopedia.com/terms/m/market.asp

⁴Frictionless market; and Adding friction to the market.

- uncertainty in hiring
- constraints on firing labor
- search cost in exploring the available opportunities
- risk uncertainty
- cost of creating contracts
- cost of insurance

Market friction and bureaucratic inefficiency are similar. ⁵

Complex tasks at a societal scale range from manufacturing advanced computer chips, to creating and distributing critical medicine, to immigration and border enforcement. If a society wants to carry out a complex task involving multiple people, then coordination of effort is required. The coordination can be explicit (in the form of a bureaucracy) or implicit (via a market). Bureaucracy is one response to the complexity of a problem being solved.

Regardless of whether a bureaucratic or market-based approach is used, distributed knowledge and distributed decision making are hindered by aspects like limited bandwidth between people participating in the coordination, non-zero latency of information between people, the cost of getting data, and the cost of analysis of data. Due to these factors, decisions that are suboptimal get made. See the discussion of dilemmas for specific examples.

The objective and quantified concept of money creates accountability that distinguishes commercial businesses from bureaucracy. Money as a metric is mutual to all participants within the business and money is in common with external stakeholders.

Commercial businesses have employees who make subjective decisions and enforce policies, but unlike bureaucracy in business there is a common metric for feedback – money. This distinction between business and bureaucracy is not sharp since the feedback mechanism is not perfectly applicable to all members of a business. Being an effective commercial bureaucrat may rely on the success of other employees rather than a direct interaction with customers.

⁵Why do firms exist? and The Nature of the Firm.

Companies generally try to create profit. Bureaucracies like prisons, schools, hospitals, governments, and militaries all consume and spend money, but money isn't the goal. When faced with a decision, decisions are not guided by which will generate more profit [59].

Adhocracy

Suppose I have a team of diverse experts assembled to tackle a complex challenge. ⁶ While this may be enough for short duration tasks, if the challenge lasts more than a day or two there will be new issues beyond the original challenge:

- Who pays the salary for this labor?
- Who calculates the payroll?
- Who pays the rent for facilities used by the team?
- Who does the maintenance on the facilities and equipment used?
- Who cleans the facility?
- Does risk incurred mean insurance is needed?

To address these questions that are out-of-scope for the complex challenge, you can either use a market-based approach or build a bureaucracy.

Consensus Algorithms

In the description of a single decider the solution was centralization of decision making and knowledge. Another approach to distributed decision making is to use consensus algorithms like Paxos and Raft⁷.

Elected Representatives

Governments are composed of politicians and bureaucrats. (Government isn't the only place bureaucrats appear, but for this section we'll focus on government.)

Political representatives are an easier to understand concept because it's just one person acting in that behalf of other people, and people get a vote in who

⁶Adhocracy

⁷For a tutorial on Raft see https://raft.github.io/

that representative is. In contrast, the emergent behavior of bureaucracy is more difficult to understand: many people are involved, and subjects of bureaucracy do not appoint the bureaucrats.

Suppose that instead of a bureaucracy all members of an organization charged with managing shared resources were elected rather than being selected for their technical skills. In this thought experiment we are eliminating one of Weber's characteristics of bureaucracy – competence for job appointments.

In the United States there are bureaucratic positions that feature a mix of election versus appointment. For example, the method of selecting judges varies widely by state ⁸. In a 2017 survey, 63% of more than 1000 judges favored appointment over being elected. ⁹

Attorney Generals in the United States similarly a selected by election and appointment. ¹⁰ Positions that benefit from expertise (e.g., Attorney Generals, Coroner) sometimes lack minimum qualifications when selected by election. Having an informed electorate capable of selecting competing candidates is challenging the more positions there are to vote on.

Small Organizations

Suppose you try to limit bureaucracy by imposing that teams or organizations be small.

Given three people in a team, options are

- split the labor among the participants; each has the same workload and same tasks. Consensus decision making; no exploitation of unique skills.
- split the labor by specialization; each becomes dependent on the other. Specialization enabled by scale can improve effectiveness but also incurs lobbying which decreases effectiveness
- make one the manager to oversee the other two hierarchy. This is a specific form of specialization where one person is not directly involved in the labor.

⁸Ballotpedia's breakdown of Judicial Selection by State in the USA.

⁹2017 survey and comments

 $^{^{10}}$ Ballotpedia's breakdown of Attorney General offices.

Defending against Malicious Participants

Suppose that you are part of an organization that doesn't have oversight processes for finances and the resources your organization is responsible for. A small percentage of the population, say 0.1%, will take advantage of the lack oversight for their own gain. Those malicious actors can be either subjects of bureaucracy or bureaucrats within the organization. Bruce Schneier calls these people defectors [47].

Similarly, suppose a small percentage of the population, say 0.1%, is stupid and makes mistakes. Without a review process, these mistakes will negatively impact your organization's finances and the resources your organization manages. Preventing, detecting, and correcting mistakes can be costly investments.

If you think bureaucracy sucks and it should be removed or replaced, then the parable of Chesterton's fence applies.

There exists ... a fence or gate erected across a road. The more modern type of reformer goes gaily up to it and says, "I don't see the use of this; let us clear it away." To which the more intelligent type of reformer will do well to answer: "If you don't see the use of it, I certainly won't let you clear it away. Go away and think. Then, when you can come back and tell me that you do see the use of it, I may allow you to destroy it. 11

You need to understand the historical progression of each process that your organization relies on so that you understand why bureaucracy exists.

¹¹ "The Thing" (1929) Chesterton, in the chapter, "The Drift from Domesticity"; https://www.chesterton.org/taking-a-fence-down/

2.4 Bureaucrat's View of their Organization

Bureaucracy as I have defined it is not the only way that bureaucrats perceive their environment. Bureaucrats typically focus on themselves, their work, their subjects, their coworkers, their superiors, and their subordinates. The motives of an individual bureaucrat for an activity varies. The variance of motivations is even more complicated when a request incurs more work and there's no deadline and there's no reward. What is your incentive? Is it emotional approval? Relationship building? Social approval?

The perspectives below are archetypal for bureaucrats who don't consider bureaucracy as defined here. In practice a person's perspective might be a mixture of these views.

As a bureaucrat, what matters is what I can do with my skills and the resources I have access to.

Assessment: This person is task oriented. Results are what matters. The intricacies of bureaucracy are a distraction to getting the work done. Communication for coordination is a distraction from work of the individual. This bureaucrat may have the perception that if they start a community, they will be blamed when things go wrong. The emotional reward for this person is doing or completing the task. This person is likely to say to their manager, "Tell me what I need to do to be successful" rather than identify collaborations.

As a bureaucrat, what matters is how I feel.

Assessment: Your feelings are real. They have consequence, in that your emotions impact motivation and enthusiasm. However, a feelings-centric perspective may not be productive for you or your team or the organization. Being effective means compromise and some people may not get everything they wanted. Balancing those competing needs is challenging.

What matters is how others feel.

Assessment: Depending on the emotional state of those around you is unhealthy and can be unproductive. Working for the happiness or satisfaction of other people is risky – they may not know what's best, or they may not have your interests in mind.

What matters are my immediate coworkers.

This perspective can be positive (I collaborate with those around me) or negative (I am in competition with those around me). In this scenario everything beyond the local scope is personified or ignored.

Assessment: Your relationships do matter. However, they are not all that matters. Missing from this view is the ability to explain what is happening outside the immediately observable realm.

Just because you are a bureaucrat doesn't mean you have a well-informed understanding of bureaucracy. Regardless of their perspective, a bureaucrat certainly experiences the difficulties of operating within an organization. A bureaucrat can rationalize to themselves why things don't work in their organization with stories like

- Other people are lazy and don't want to work.
- Other people are inexperienced.
- Other people don't care.

There certainly are lazy people, inexperienced people, and people who don't care in any given organization. Those are not unique to bureaucracy and do not explain bureaucracy.

The bureaucrat who uses the explanations like laziness, lack of experience, and lack of care applies them to people he or she hasn't directly interacted with. The person using these explanations may not realize other people could use those same stories.

2.5 Models of Bureaucracy that are Incomplete

Coming up with a holistic theory of bureaucracy is desirable but difficult. Bureaucracy exists in every society, so having an explanatory theory would help identify what is critical and what is not essential. Having a theory of bureaucracy could help identify what should be improved and what should be discarded. An expectation for the existence of a theory stems from the repeated independent creation of bureaucracy in diverse societies in different periods.

Characterizing bureaucracy is difficult because organizations comprised of unique humans are aware of attempts to be characterized and respond to stories told about bureaucracy; see the Hawthorne effect. As soon as a claim about bureaucracy-as-a-concept is made, then an individual can respond to that claim by behaving in an opposing manner. Worse still for the theory, bureaucrats can coordinate to provide counterexamples.

In the following section I outline a few ways of modeling bureaucracy to point out the shortcomings of each model. The relevance to the practicing bureaucrat of familiarity with these models is so that you know the boundaries of each model. Awareness of the limitations of each model enables you to know when the model is an applicable story and when the model is not explanatory.

Bureaucracy as a Machine

Narrative: Bureaucracy is a machine that has throughput and latency and dependencies and mechanisms. Bureaucrats are cogs in that machine.

Why this feels true: Bureaucracy can be complicated and feel mechanical with standardization, top-down dictates, and interlocking processes. There is a risk of deindividuation for bureaucrats.

What this is missing: Perceiving yourself as a cog in the wheel implies a loss of agency. This is a self-fulfilling prophecy – if you think you don't have agency, then you stop having agency.

Bureaucracy as an Economic model

Narrative 1: A Bureaucracy is a collection of individual rational actors. Individual bureaucrats cooperate or compete to promote their own self-interests. The culture of an organization is a result of individual self-interests of each bureaucrat. Individuals make decisions that promote their own self-interests.

This view is hard for me to distinguish from a marketplace.

Narrative 2: A Bureaucracy is comprised of competing special-interest groups.

The observation of Public Choice theory is that a concentrated minority that stands to gain a disproportionate benefit will act in their own self-interest. In a generic bureaucratic organization it is not clear which team would be more concentrated than any other team, and what the disproportionate benefit might be. There is a concentrated minority at the top of any hierarchy, and the top of the hierarchy does act in their own self-interest, though this is not particular to bureaucracy.

Bureaucratic organizations may have specific teams with access to disproportionate benefits, but this book focuses on generic bureaucratic features. (Effective bureaucrats are all alike; every bureaucrat is ineffective in their own way?

12)

Narrative 3: A Bureaucracy as a subcategory of a Firm.

Firms exist in a market because negotiating contracts and prices for every interaction is burdensome. A bureaucracy could be considered as a type of firm that specializes at the organizational level in policy administration or resource management.

Bureaucracy as Emergent phenomenon

Narrative: There is a universality to bureaucracy in both the diversity of scenarios and persistence across time that hints at emergence. Bureaucracy as a macroscopic phenomenon is emergent at when there are a sufficient number of people. The size of the organization is important because there is no longer dependence on individual relationships (beyond Dunbar's number). There are people in the organization that you don't know and for which there is no personal accountability. An organization is subdivided into teams recursively until there is local person-to-person accountability. The underlying behaviors that enable emergence are bilateral interactions among humans and a lack of feedback mechanisms.

At the scale of individual bureaucrats, every person is playing by different

¹²A modified version of the first sentence of Leo Tolstoy's novel "Anna Karenina."

rules and has different goals and everything is changing – both the individuals and the conditions. Above the threshold for emergence of bureaucracy there is scale-free behavior. The same patterns are observable at large organizations and extremely large organizations. A bureaucrat in one organization recognizes patterns of professional life experienced by bureaucrats at another organization. The local mechanisms bureaucrats employ to enable distributed decisions using distributed knowledge include meetings, processes, and communications.

The choices faced by an individual bureaucrat are not independent of the choices made by other bureaucrats in their environment. There is a flocking behavior of my choices are informed by the choices of those around me. Unlike flocking of birds, the adjacency metric for bureaucrats is not necessarily spatial distance.

The relevance of claiming bureaucracy is emergent is that there is behavior occurring at the macroscopic scale; knowing that individual motives and actions of every player at the microscopic level is not relevant. Treating organizations as complex and adaptive systems gives insight on how to work within the dynamic environment [16].

A colloquial interpretation of emergent behavior from complex phenomena is treating the system as an entity – personification. When an organization [Tag] Fallacy is assigned behaviors [21], it is useful to remember that the organization is comprised of individual bureaucrats.

More formally, there are distinct categories of emergence [3]. Nominal emergence names the phenomena of a thing being distinct from its constituents: a circle is emergent from a collection of points; a pile of sand emerges from grains of sand. Merely putting many bureaucrats in a room is insufficient to create bureaucracy; there are other aspects necessary to bureaucracy.

Weak emergence occurs when there are phenomena that are independent of the underlying interactions. For example, gliders in Conway's Game of Life. Weak emergence is measurable using Granger causality or, equivalently 13, transfer entropy (information theory). I don't know how to apply these measures to bureaucratic organizations.

What this model is missing: The problem with treating an organization as an entity is that apparent behavior is counter-intuitive. Breaking the organization into individual people with motives helps clarify the cause of the behavior.

In practice, bureaucracy is worse than emergent because the rules can be

¹³https://arxiv.org/abs/0910.4514

altered or ignored by the stakeholders. Bureaucracy is a wicked problem[46] which resists mathematical models.

Bureaucracy in Game Theory

Narrative: Bureaucracy can be understood as one or more games played by bureaucrats.

What this model is missing: Bureaucracy defined as distributed knowledge and distributed decision making does not fit cleanly into the game theory categories of being either cooperative or competitive – in practice there are elements of both.

Another frame for interactions within a bureaucracy is to consider a variety of games. This view is similar to market conditions. Which game is applicable depends on the specifics of the situation.

Bureaucracy is in constant flux due to external conditions, externally imposed constraints, staff turn-over, internal dilemmas, disagreements of individuals.

Bureaucracy as Evolutionary Outcome

Narrative 1: Biological, Genetic - Individual level.

Biological arguments for gene-based bureaucracy. Zebra fish and hyen as have a gene is for dominance. $^{14}\,$

 ${\it What\ this\ model\ is\ missing}$: Non-human animals make subjective decisions and

Narrative 2: Biological, Genetic – Group selection.

Hierarchy is not unique to humans. Primates form into social hierarchies based on dominance over a shared resources like mates and food.

What this model is missing: a gene for bureaucracy. A genetic model does not explain what specific behaviors an individual bureaucrat can take to be more effective.

 $[\]overline{\ ^{14}}$ "Society, demography and genetic structure in the spotted hyena" (2012); doi:10.1111/j.1365-294X.2011.05240.x

Narrative 3: Memetic – bureaucracy as method for coordination is a better idea than nepotism or religion.

What this model is missing: bureaucracy persists along with nepotism and religion, and bureaucracy occurs within religion.

Bureaucracy as Product-focused Narrative

Narrative: Ignore the bureaucrats and instead focus on how a product progresses through processes.

Example: School House Rock's I'm Just A Bill

What this model is missing: Ignoring bureaucrats involved in processes simplifies the narrative (the product is the main character).

Bureaucracy as Subject-focused Narrative

Narrative: Ignore the bureaucrats and instead focus on the person subjected to bureaucracy.

Why this feels true: The person experiencing bureaucracy as a subject is confused by "why isn't this easier?"

What this model is missing: History of the processes (legacy) and protection against malicious subjects and protection against malicious bureaucrats.

Bureaucracy as Psychological Phenomenon

Narrative: Bureaucracy as a pure power struggle. Or the interplay of individual psychosis.

Organizations are composed of individuals with personalities, and inefficiency is attributable to a mashing together of distinct individuals with conflicting desires. While this is true, it isn't complete.

What this model is missing: Personality-focused narrative neglects the history of processes (legacy) and protection against malicious subjects and protection against malicious bureaucrats. Analysis that stops at personalities misses emergent phenomena. Analysis that stops at personalities of individuals typically explains larger scale phenomena using personification of teams and organizations.

Each of the above models has shortcomings. Knowing why each model is not a complete description helps you avoid the trap of thinking only in terms of a single model.

The rest of this book ignores these partial characterizations of bureaucracy. Rather than take the external (emic) view of bureaucracy, this book takes the internal (etic) perspective of a bureaucrat operating within an organization. The description of bureaucracy in this book is to contextualize the advice for how to be an effective bureaucrat.

2.6 Not many Options for Organizations

When complaining about the ineptitude of organizations (or more specifically, leaders, managers, and coworkers), consider the variables available to be modified. As a thought exercise, what would it take to rebuild the organization you are in from scratch?

[Tag] Thought Exercise

Organizations comprised of bureaucrats have fewer options for change than individual bureaucrats. The choices an individual bureaucrat faces are described in the section on dilemmas (page 73). In comparison, the choices faced by the designers of an organization are

- Flatness of organizational hierarchy how many layers of oversight are there?
- Number of supervisors per employee. This informs the flatness and size of the organization.
- Organizations are segmented into teams, and there are not many options for segmentation: create a new team, merge existing teams, dissolve a team.
- Organizations structure recurring tasks into processes like hiring, promotion (pay or title), awards, compensation, recognition, professional training, firing. Each of those have a set of design choices that inform the organization's culture.

In a government bureaucracy, the constraints of some incentives like pay and financial awards are set outside the organization. That further constrains the ability of bureaucrats to shape their organization's culture.

The organization may have policies and processes regarding hiring, promotion, training, and firing, but the decision may not be made by the top-level management.

Enumerating the choices is only relevant in the context of a desire to change. Individual bureaucrats can enact change, and subjects of bureaucracy can request improvement, but those are weak inputs. Organizations are accountable to their source of funding, not the subjects of bureaucracy or members of the organization. For example, the IRS is accountable to Congress, not the tax payer or IRS employee.

Not many options for Teams

Team managers might decide who gets hired and who gets promoted and who goes to what training and who gets fired. Though in some environments even that control is relegated to an external team. A team manager usually has the decision making authority the tasks the team works on.

Accountability in the context of teams comes from interactions. These can be either lateral (sideways) or parent-child (top-down) or child-parent (bottom-up) [31]. Each of these three categories have associated constraints.

The child-parent bottom-up upward communication is either inadequate (too few updates, or not enough information, or insufficient context), relevant, or excessive. Finding the balance depends on the presenter knowing the individual audience members so that a tailored message is provided, and adapting to the specifics of the situation. A weekly or monthly report to multiple superiors is inadequate.

The parent-child downward communication either is inadequate (no direction), provides actionable vision, or micromanagement.

For lateral interactions among teams, the tension between cooperation and competition manifest in struggles over money, staffing, products (output), and resources (inputs). By "resources" I'm referring to access to or control of data, technology resources, hardware, floor space, and expertise.

2.7 Bureaucracy as Accidental, Legacy, or Essential

Essential bureaucracy is the minimum processes and staffing and skills necessary to address the complexity of the problem space. Achieving this is tricky since the optimization can be with respect to resilience to change, resilience to edge cases, staff turn-over, speed experienced by consumer, financial cost, organization time, organization staffing level.

Undesirable bureaucracy is either accidental or legacy. Accidental bureaucracy arises when someone misunderstands what is needed, or when skills of the people involved are insufficient for the complexity a problem. Legacy bureaucracy occurs when the situation changes but the processes do not. Resolving each of these suboptimal conditions may seem easy: have better knowledge of the problem, assign the right people to the problem, and change processes as problems evolve.

Having enough knowledge is often infeasible, especially for complex problems at large scale. Having the people with the right skills assumes a pipeline of relevant talents and that people in that pipeline won't be poached for other problem. Keeping up with evolving problems depends on having resources to change, and having a defined process for changing process.

2.8 Bureaucratic Fallacies

In discussions about bureaucracy there are common conceptions that are thought terminating. Identifying these enables you to understand both why they are attractive during a discussion with fellow bureaucrats and how the idea is incomplete.

These fallacies (which may at first feel right but are in fact misleading) are in contrast to unavoidable hazards which may feel bad but reveal underlying truths.

Bureaucratic fallacy: Bureaucracy is bad.

Why this feels true: When a person subjected to bureaucracy has a negative experience, the easiest attribution is to the least-understood aspect – the bureaucracy.

What this is missing: Bureaucracy as defined is neither good nor bad.

Bureaucratic fallacy: There is no point in planning ahead since everything (staffing, funding, purpose, scope) is always changing.

Why this feels true: Change can feel disorienting, especially when it is unexpected. A change of the assumptions for a plan may make the plan less relevant. What this is missing: Preparing for change and thinking ahead about contingencies enables effective use of resources. Have a vision and work towards it while accounting for and adapting to change.

Bureaucratic fallacy: Bureaucracy is an aberration, a mistake, due to poor planning or incompetent participants.

Why this feels true: Mistakes are made, poor or insufficient planning does happen, and some participants are incompetent.

What this is missing: Bureaucracy occurs even if no mistakes are made, effort is spent on effective planning, and participants are competent. That's because bureaucracy is the use of distributed knowledge and distributed decision making, and bureaucrats face dilemmas.

Bureaucratic fallacy: Bureaucracy is inefficient.

Why this feels true: Expressed by both subjects and bureaucrats who observe seemingly wasteful processes.

What this is missing: If bureaucracy were truly inefficient (not allocating re-

sources in the most efficient way), then it would be replaced by a more efficient approach. The key is to ask, "efficient with respect to what metric?" The metric of money, time, number of people, stability, robustness to perturbation. Second, what would motivate improved efficiency? Without incentives, change is less likely.

Bureaucratic fallacy: Bureaucracy is due to malfeasance.

The specific number of malicious bureaucrats ranges from "all of the participants" to "just enough to be problematic."

Why this feels true: There are bad actors. What this is missing: Bureaucracy is unavoidable, and most of the participants are earnestly trying to help or are not making a positive contribution. Processes within bureaucracy are used to deal with malicious bureaucrats, like isolation or promotion.

Bureaucratic fallacy: Bureaucracy is a sign of decay from within the org.

Why this feels true: Relationships within an organization have a half-life and require on-going investment in renewal. At the same time new bureaucratic processes are constantly being developed by other bureaucrats and increase as the organization ages. Bureaucracy seems to arise without effort and countering it takes effort.

What this is missing: Bureaucracy is unavoidable emergence in any/every organization, but the negative connotation of decay should be replaced with a sense of (neutral) evolution.

Bureaucratic Fallacy: If this request can't be expedited, it must not be important.

Why this feels true: Other people would demonstrate they care about what I am working on by prioritizing things I am dependent on. What this is missing: When everything gets prioritized, that's the same as nothing getting priority.

Bureaucratic Fallacy: Duration of a task is how long it would take one person to accomplish.

Why this feels true: When I imagine carrying out a task, the default is a story with one character.

What this is missing: Fails to account for the overhead of interaction and delays due to asynchronous engagement.

Bureaucratic Fallacy: Consider the average or majority (to the exclusion of outliers).

Why this simplification is misleading: For sufficiently large ensembles, the outliers alter the outcome. The larger the ensemble, the more significant the role of the outlier minority.

Bureaucratic Fallacy: People learn from their mistakes.

Why this feels true: People repeat mistakes. People do not reflect on their failings.

What this is missing: People can learn from their mistakes. Doing so requires a low latency feedback loop and incentive to change.

Bureaucratic Fallacy: Processes are serial.

Why this feels true: A conventional approach to process design is a sequence of tasks. As an example, approval chains.

What this is missing: Some tasks that are independent can be carried out concurrently; see the section on reducing overhead.

Bureaucratic Fallacy: Hard work creates results.

Why this feels true: Some results do require hard work.

What this is missing: Hard work can be invested on wasteful effort. Don't confuse being busy with being productive.

Bureaucratic Fallacy: You cannot pay a little and get a lot; see Common law of business balance.

Why this feels true: If small investments made a big difference we'd already be making the investment.

What this is missing: This doesn't account for creative solutions and ignores nudge theory from behavioral economics.

When you are reasoning about bureaucratic systems, there may be a conclusion that is concise and feels explanatory. Then you should try to come up with counter examples – logically or from experience. Fallacies are often based expecting other people to be more like what you imagine best self to be. That mindset fails to account for your own shortcomings and the diversity of other bureaucrats.

[Tag] Folk Wisdom

2.9 How to Reduce Administrative Overhead

You can read this list from a position of authority to take action, or you can read this list as an advocate for improvement.

In isolation, none of these ideas should be surprising.

- *Tip*: Automate recurring decision processes. This decreases bureaucracy by removing subjective influence of bureaucrats
- Tip: Where automation is infeasible, make customer advocates with endto-end authority available. This decreases bureaucracy by improving customer's navigation of processes.
- *Tip*: Make processes transparent to participants. This decreases bureaucracy by improving customer's understanding of processes.
- Tip: Make information discoverable (e.g., via search engine).
- *Tip*: Make information directly available, rather than mediated by a person.
- *Tip*: After an interaction is completed, summarize the steps and outcome for the participant.
- *Tip*: When a process fails the needs of a participant, investigate the failure and improve the process¹⁵.
- Tip: Make the goals and priorities of the organization clear to all.
- *Tip*: Define measurable standards of performance, both for individual people and for teams.
- *Tip*: Train bureaucrats how to engage participants effectively; these interactions determine the culture.
- *Tip*: Train bureaucrats by addressing their immediate problems (e.g., through mentorship).
- *Tip*: Make employment desirable to people who have desirable characteristics (e.g., educated candidates).
- *Tip*: Enhance accountability to peers (e.g., peer review of actions and outcomes).

¹⁵See the Wikipedia enty on Continual improvement process

- *Tip*: Make sure that incentives for organizations and individual people encourage improvement rather than maintenance of status quo.
- *Tip*: Decision making should be pushed down the hierarchy to the practitioner.
- *Tip*: When decision making requires cross-organization interaction, form a team of practitioners.
- *Tip*: Bosses should share workload with their team to gain practical exposure to current challenges.
- *Tip*: Seek feedback from process participants; then provide status updates on the implementation process.
- *Tip*: Replace sequential approval chains with a concurrent review process. Sequential approval reduces the number of ideas reaching later approvers by filtering good ideas as well as bad ideas. Approvers may perform independent (redundant) due diligence and end up disagreeing.

2.10 How to be an Effective Bureaucrat

So far I've described dilemmas and unavoidable hazards. Given this nuanced view of the complexity of bureaucracy, how can you leverage that insight?

Baseline assumptions are that you are a good person, you are technically skilled at your technical duties, and you are a good project manager.

Superpowers of a bureaucrat in a bureaucratic organization that facilitate cooperation and progress:

- You strive for and demonstrate transparency. You share information with stakeholders.
- You seek information from stakeholders.
- You apply consistent processes (rather than being reactionary and applying ad hoc responses).
- You hold others (and yourself) accountable for their actions.
- You account for varying incentives and reference experiences.
- You communicate more effectively than anyone around you.
- Your effectively multi-task, or, more accurately, switch tasks. The switch among tasks is triggered when the current task encounters an externally-generated pause. You can pipeline your activities.
- You are prepared with a backlog of ideas (in writing) if someone shows up with resources.
- If you are dependent on someone else getting something done to enable your progress, you can demonstrate priority by physically show up presence creates priority. Being physically at a person's desk motivates that person to respond better than calling them or emailing them. Showing up where someone works and talking with them conveys how much priority you place on the actions of the person you're talking with.
- You reply quickly to incoming requests. This allows other people's tasks
 to either be resolved or have a clear response about when progress can be
 expected.

- You have intellectual empathy theory of mind for thinking (whereas empathy refers to emotions). How to grow your intellectual empathy: shadow peers and bosses
- You have process empathy. Observe deviations and exceptions that cause processes to come into existence.
- You avoid unintentionally dropping tasks or requests. This requires capturing incoming requests and then providing a response about prioritization and status. This matters because other participants in the organization should regard you as reliable in a positive sense.
- You focus on value delivery in relationships that exceed the scope of your formal role.
- You have altered your job description to fit the growth you're seeking.
- You are willing to engage on a personal level and know someone outside their professional role.
- Each of your tasks have a customer, a deadline, and a deliverable.
- You occasionally ponder and discuss with other people introspective questions like
 - How can I be successful?
 - What are the ways I could fail?
 - How the organization is regarded as successful?
 - What are the ways the organization can fail?
- You find mentors and ask them questions like
 - What do you like most about your career?
 - Given the chance, what would you do differently?
 - How do you manage work/life balance?
 - What's the big challenge for our industry in the next two years?
 - How would you tackle that challenge?
 - What advice do you have for a young person starting in this industry? Mistakes to avoid? How to be successful?

- What books would you recommend reading?

Framing: A bureaucrat can accomplish more as part of an organization than by working alone. Being a member of an organization means the bureaucrat's identity is subsumed into service for the organization they are part of ¹⁶. At the same time, bureaucracy enables the bureaucrat to amplify their presence by being part of a larger organization. Sometimes the cost of being part of the organization exceeds the force multiplier of working together.

Framing: Measuring your own personal growth in a bureaucracy is difficult due to the lack of feedback loops. One approach is to measure your capabilities with respect to a specific task. If you can complete the task in less time and with fewer resources and with less effort, that's progress. If you can now complete a task that you previously wanted to but weren't able to, that's progress.

Feelings: Bureaucracy induces emotional response in participants because things don't work they way each person wants. This can lead emotionally to frustration and then apathy. Understanding how things work in a bureaucracy can help decrease the anger.

Another emotional response to bureaucracy is a sense of powerlessness.

Some third person decides your fate: this is the whole essence of bureaucracy. $^{17}\,$

That sense of powerlessness applies both to bureaucrats and to subjects of bureaucracy.

The sense of powerlessness is somewhat valid, in that you are as a bureaucrat giving up some power compared to your ability to act individually. That is the trade for working with others

Feelings: A process feels bureaucratic when the subject is exposed to more than one step to get something done that if one person were doing it would be simpler. Consolidation from the subject's perspective decreases the apparent bureaucracy. The barrier to implementation is the necessary coordination among different stakeholders who receive no benefit from the coordination. Externalizing the coordination to the subject is what causes the sense of bureaucracy.

¹⁶ Deindividuation

¹⁷ "The Workers' Opposition" by Alexandra Kollontai, 1921

Tip: Don't rely on one person or one idea for your success. On the other end of the spectrum, don't spread yourself too thin.

Tip: What to do when you get stuck? Look up stream, look downstream, look to peers.

Tip: When you are asked to take on more work, avoid responding with "that's not my job." If the request is misguided and your perception is that is really is the responsibility of another person, ask if the requester is aware of that other person's responsibilities. If you are to really take on the work, get guidance on re-prioritizing and make sure the request is documented in writing.

Tip: If there's something you want to accomplish, strive for influence without authority instead of working to gain control over resources (e.g., through promotion). Avoid the following: "In this organization X is important to me, but I can't do X right now because I don't have enough power in the org. So I'll get promoted and then do X."

DO: Learn the perspectives of those around you.

The relevance of knowing the paradoxes including dilemmas and unavoidable hazards, is that you should talk explicitly to your fellow bureaucrats about these specific topics in conversation. Not that the goal is to find consensus or agreement. But to find what the other person is thinking so that you can account for their processes

DO: Account for holistic view

The specific circumstances of the challenges you face as a bureaucrat depend on the individual people involved, what the purpose of the bureaucracy is, what technology is available for implementation of bureaucracy, and the resources (staffing, money, time).

DO: Learn the history of the problem

This goes beyond Chesterton's fence, which focuses about why the current approach is in placed. Learning the history of a problem means what has been tried before and failed? How did the previous iterations evolve into the current situation? Was the cause personalities, insufficient resources, inadequate technical statements of the contract of the current situation?

nology? What's changed that enables this approach to be better? What do you know that prior attempts didn't?

DO: Concurrently work on 3 remedies.

One solution you're working on may fail, and another may be inadequate.

DO: Minimize external costs.

A solution that externalizes costs harms the greater organization and creates bureaucratic debt.

DO: Exploit the flexibility of rules for the benefit of all parties.

change the rules of the game and the objectives of the game such that every participant wins.

DO: Align selfish interests with social interests.

See also nudges (page 66 of [47]).

DO: Find ways to rephrase negative complaints.

Negative observation: "Logging into my computer takes a long time."

Positive statement and explanation of impact: "If the latency for logging into my computer were lower, I could make more progress on X."

Negative observation: "The service team I need support from doesn't offer a ticketing queue."

Positive statement: "If the service team I need support from offered a ticketing queue, I would be able to track the work done on my behalf."

DO: Share lessons learned.

This can build your network. People value vulnerability in others; you can make the first move.

Chapter 3

Why Bureaucracy is Hard

3.1 Subject's View of Bureaucracy

When a person has a positive experience engaging with bureaucracy, positive attribution is made to the people involved. Or the ease of a solution makes bureaucracy less visible and the solution seems obvious. When a person has a negative experience with bureaucracy, complaints are about the incompetence of the people involved, or the incomprehensibleness of the system. Don't these bureaucrats know how to do their job? Why isn't the solution obvious? Why does this system not work for me? David Graeber summarized this view:

Amongst working-class Americans, government is now generally seen as being made up of two sorts of people: 'politicians,' who are blustering crooks and liars but can at least occasionally be voted out of office, and 'bureaucrats,' who are condescending elitists almost impossible to uproot.

The scale of bureaucracy (number of people in an organization) and the processes of an organization can seem disproportionate to the apparent complexity of the task. Typically when person (in the role of subject of bureaucracy) interacts with the bureaucratic organization the artifacts are simple – a check, a form, or a permit. The simplicity of the artifact does not correlate to the number of decisions made, the tracking of information, or the precautions taken. All these aspects are invisible to the subject.

As an example, consider when you go to the doctor and they mend your broken arm with a cast. That seems straightforward because all you see is the doctor putting a cast on. You don't get insight on the decisions they had to make. Why did they need 20 years of focused schooling to carry out a procedure that took 15 minutes?

Judging bureaucracy by the artifact visible to the individual subject under sells the complexity of the decision making necessary to take action. The contingencies that you were not exposed to because everything went well make the amount of investment from the bureaucrat appear wasteful.

As the subject of bureaucracy, you also lack the ability to distinguish how much work is attributable to the bureaucrat generating justifications for their actions (colloquially, covering the bureaucrat's ass).

As the subject of bureaucracy, you typically can't distinguish when work is caused by a bureaucrat's ill-informed decisions. Is the person stupid, mistaken, or is there something you are not taking into account? Sometimes the work is carried out by insufficiently trained bureaucrats, but you don't get to know whether you're working with an experienced and knowledgeable bureaucrat or a new untrained bureaucrat.

As the subject of bureaucracy, you don't have visibility on the many nuances of an organization. The internal power struggles and organizational politics that depend on personalities, resources, prioritization are not clear to outsiders. The inconsistency of an organization's policies may not be felt by bureaucrats in that organization. Each bureaucrat may have a different opinion, resulting in a lack of consistent guidance. There may be legacy policies to overcome/change/be consistent with.

Effective action by a bureaucratic organization is complicated by the need for relevant information. Gathering, analyzing, and sharing that information consistently requires bureaucratic processes. Sometimes the organization lacks the staffing with relevant skills.

For advice, listen to How to talk with customer service (transcript).

3.2 Recognize Decision Opportunities

When a decision has two viable options (neither being best), that is a dilemma. The name for a decision with three viable options is a trilemma. This section describes a bureaucrat's experience of operating within an organization in terms of dilemmas and trilemmas. Instead of focusing on moral dilemmas (see [61]) or institutional ethics, here I focus on interpersonal relationships and the logistics of allocating attention.

Dilemmas are a simple way of discussing decisions. Dilemmas are a useful framing to highlight the following concepts:

- You, an individual bureaucrat, face decisions that you may not have recognized. Failing to recognize a choice (an error by omission) can lead to suboptimal results. The dilemmas below are generic to any bureaucratic process and are intended to stimulate your ability to identify decisions.
- You face complex trade-offs in your role as a bureaucrat. Dilemmas are intended an entry point to more nuanced reflection that is specific to your situation. The dilemmas below are not exhaustive; this list is merely illustrative.
- You can use dilemmas as an entry to intellectual empathy with fellow bureaucrats when you recognize they face the same dilemmas. These dilemmas are generic to the situation and the person facing the decisions. You now have a topic to discuss with them. You can share your understanding.
- You can be curious about the choice other bureaucrats select for a given dilemma. Everyone in the organization faces these decisions, so these dilemmas give you a topic of conversation to better understand each bureaucrat's view.
- You can identify and negotiate potential sources of friction. Other bureaucrats may arrive at different selections for a given dilemma, so recognizing this and discussing it can improve the effectiveness of all involved.

Dilemmas explain the inherent complexity of bureaucracy even when bureaucrats are honest and the purpose of the organization is clear. The point isn't that one should select one of the two options. The point of recognizing a dilemma is that it is a marker that there is a decision to be made. Once the need for a decision is identified, the action for the bureaucrat is not to select

one of the two options. The effective bureaucrat identifies nuances, enumerates alternatives, and talks with fellow bureaucrats about these decisions. Rather than seeking consensus, strive for comprehension of other people's perspective. That way you can navigate decision making processes more effectively.

The choices described below in the simplified representation of dilemmas are intended as a starting point for introducing the decision space relevant to individual bureaucrats. Do not accept the dilemmas presented here as the final framing. Thinking in terms of a limited spectrum of opportunities neglects nuances that enable more creative approaches. Awareness of these dilemmas and trilemmas are intended to spark creative imagination about the nuances specific to your situation.

By recognizing the deficiencies of dilemmas, you can identify nuances specific to the situation you are in. Instead of responding to the recognition of a decision with "should I do this or that?" the better option is to assess the complexities and brainstorm multiple options. Talk with stakeholders and understand the history of the situation before making a choice.

How Dilemmas Arise in Bureaucracy

Given a task, the simplest response for an individual is to take action and be done. There wasn't a decision needed.

If the task is more challenging then first make a plan and then take action and be done. The source of the challenge may be task complexity, scale, number of people effected, diversity of stakeholders, amount of time needed, how the current task shapes future options, number of collaborators. Regardless of why the task is challenging, a dilemma has already arisen: how much time to spend planning versus doing.

If the task is even more challenging, it may be useful to gather data for the plan, then make a plan, then take action and be done. A new dilemma arises: how much time to spend gathering data versus planning. The previous dilemma still exists – how much time to invest in planning versus doing. As an alternative to the dilemma framing, how much time should be allocated to three categories of activity?

But wait, how did the person in the first scenario (just do the task) know no plan was necessary? Either it was an explicit choice or they didn't perceive the need to decide about whether to plan. Someone else faced with that same task might choose differently, e.g., to make a plan. The task complexity is relative to

the person's skills, experiences, expectations about stakeholders, and potential ramifications.

In this escalating sequence of increasingly challenging tasks, now suppose the task involves you and another person. The overhead of coordination inflicts other dilemmas. The examples of complexity arising from coordination are identified in the list of dilemmas below, e.g. 3.4, 3.3.

An independent source of friction for distributed decision making and distributed knowledge is when people involved in the task don't agree on how challenging it is. The framing of the difficulty matters because it can lead different participants to distinct conclusions about how much time should be spent planning versus for carrying out the action. The choice of "how complicated is the task?" shapes the team dynamics and informs the need for hierarchical roles.

Folk Wisdom on Decision Making

Bureaucrats, whether hired for their expertise or simply to provide labor, are rarely experts on decision making. There are multiple domains in which decision making is studied (e.g., economics, mathematics, psychology), but practicing bureaucrats are more likely familiar with colloquialisms that feel descriptive. A few are provided here to give a sense of both the conciseness and the lack of action embedded in each meme.

Hick's law: "Increasing the number of choices will increase the decision time [Tag] Folk Wisdom logarithmically."

Hanlon's razor: "Never attribute to malice that which is adequately explained [Tag] Folk Wisdom by stupidity."

Parkinson's law: "Work expands so as to fill the time available for its comple- [Tag] Folk Wisdom tion."

Murphy's law: "Anything that can go wrong will go wrong." [Tag] Folk Wisdom

Law of Triviality: "People within an organization commonly or typically give [Tag] Folk Wisdom disproportionate weight to trivial issues."

Each of these memes feel descriptive to the practicing bureaucrat. They survive because of their self-encapsulation; no more thought needed.

In comparison to the folk expressions above, dilemmas are intended to be accessible to practicing bureaucrats and trigger reflection and discussion. Effective action is enabled by improved understanding of the trade-offs faced within an organization. Rather than being reductive, the purpose of cataloging bureaucratic dilemmas is to first point out that there is a choice. Once the choice is recognized, look for ways to think beyond the dichotomy.

How Dilemmas Oversimplify

Although the following concepts are presented as dilemmas and trilemmas, these are necessarily simplifications. For example, two ways to simplify situations into a dilemma are

- Start with a single variable, e.g., "how much data gathering", and force it into a binary choice "more data gathering" versus "less data gathering."
- Start with a complex trade-off space with many opportunities and reduce it to a false dichotomy of zero-sum options: "more data gathering" vs "more planning." The actual trade-space involves optimization of multiple goals, like (maximize productivity) and (minimize unnecessary risk) and (maximize quality) and (maximize employee satisfaction) and (minimize latency).

The over-simplifications listed below neglect both the continuous nature of the trade-offs and the alternative creative approaches to a specific situation.

Ponder these dilemmas prior to the pressure of real-time decision making. Recognize dilemmas and trilemmas and then extend your analysis beyond them by adapting to the local conditions and specific people available to help. Dilemmas should not be resolved alone. Talk with subordinates, peers, mentors, supervisor.

Once a dilemma is recognized, it is easier to defer and avoid the decision making process¹. Therefore implementation takes longer necessary. This delay is then ripples down the chain of dependencies.

¹https://xkcd.com/1445/

Dilemmas are not Purely Intellectual

Decision making is not a purely intellectual task; there is emotional stress induced by the process. Dilemmas create cognitive dissonance for the decision maker. Any selection is going to have downsides, and any compromise will be suboptimal. Those burdens weigh morally on deciders because of the consequences on other people.

To counter this morale weight, talk with other people about decisions. Even [Tag] Actionable Advice if this does not alleviate the responsibility of deciding, discussion can help you arrive at new insights.

More Complications

Adding to the difficulty and stress, dilemmas presented here occur concurrently and continuously. The dilemmas are inter-dependent due to both to the common variables and the constrained resources. Selecting an option for one dilemma alters the options available in other dilemmas.

Oscillation between approaches can be caused by change of management, accumulation of experience (dissatisfaction) with one solution, the desire for promotion within the hierarchy (where change is presented as progress), or a desire for cost savings (efficiency). The rate of oscillation is an indicator of the half-life of institutional memory for an organization.

The dilemmas identified below for generic bureaucracy are just a baseline. For the culture you are in and the project you're working on and the people you're working with, there will be more dilemmas to identify.

The following two sections categorize dilemmas as personal policies and policies regarding structure of the organization. The personal policies apply to each bureaucrat in an organization, while the structural policies for an organization are faced by a subset of bureaucrats in the management role.

Personal Policy Dilemmas

In practice, the following decisions are unordered and are constantly faced by the bureaucrat. As observed by Lindblom in [33], this flurry of decisions contrasts to a regularized process that might be envisioned as optimal.

Focus on the immediate prob-	Ponder the systemic issues and
lem.	adjacent contexts.
Description: Focus on isolated prob-	
lematic aspects and do worry about	Description: Philosophical musings
the interdependencies and feedback	with a holistic view.
loops and stakeholder incentives.	
	Cons: Relies on knowledge of the
Cons: Misses systemic issues, causes	wider system that you may have less
that exist outside the immediate	awareness of. Less emphasis on get-
scope, or issues that occur due to in-	ting things done. May reveal prob-
teracting processes.	lems that you don't have authority
	to address.

Table 3.1: Dilemma of Aperture. Scope of problem solving can be narrow or broad. Rather than limit your investigations to one or the other, flipping between the two on a recurring basis (but not too often) can help.

The Dilemma of Aperture is defined in terms of scope. An adjacent dilemma is the question of duration of tasks: short-term or long-term. The right balance of how long tasks take is more project management then bureaucratic. I try to identify a small number of long-term tasks, then divide each into smaller (shorter) tasks. The dependencies of the smaller tasks then determine the order of the work.

The Dilemma of Aperture is not specific to bureaucracy, but commonly arises because isolated problems rarely exist. Challenges occur as part of larger systemic contexts. Addressing the immediate problem leaves the system issue, and tackling system issues are more difficult.

Your selection of narrow versus wide within the Dilemma of Aperture depends on what you find emotionally rewarding. Other bureaucrats may gain emotional enjoyment from approaches to problem solving that you do not. Finding ways to leverage that difference (rather than minimizing it) is useful.

Organizations typically incentivize short-term behavior. Annual performance reviews and quarterly feedback cycles might miss systemic changes that take multiple years to enact. Identifying incremental milestones is one response, though that isn't always feasible. Another approach is to only report a subset of your activities (the ones that yield short-term results).

Speak out/speak up if some-	Hold back comments and ques-
thing is wrong or offends you.	tions to minimize disruptions.
Cons: You could be missing context; you might look stupid.	Cons: You missed an opportunity to correct something; you missed an opportunity to get educated about a situation.

Table 3.2: Dilemma of Speaking. There is conflicting folk wisdom on both sides of this dilemma: "The squeaky wheel gets the grease" and "The squeaky wheel gets replaced." How you raise the issue, with whom, and in what context all matter to either correcting the situation or getting better educated.

The Dilemma of Speaking arises in bureaucracy because different people have different opinions about subjective policy. You may see someone doing something that appears wasteful, but that may be because you're not aware of what the optimization objective is. Or that person may be unaware of the waste, or they may not be aware there is a more effective way to carry out the action.

Resolving differences of opinion is not always necessary. If all members of and organization were to try to minimize policy distinctions, the members could spend all of their time doing so.

The Dilemma of Speaking is eased when you have relationships with other bureaucrats that allow you to express your curiosity or uncertainty in a way that doesn't make the person you are talking to feel threatened, or that they are wasting their time explaining what seems obvious.

Whether the culture of an organization promotes speaking up or not depends on having either top-down encouragement or relationships that exist outside formal hierarchical roles.

Intervene before the deploy- ment of a policy or process or product	Wait with feedback until deployment.
Description: You may lack relevant context. You may know something the team does not.	Description: Allow the team to learn. Allow the team to complete their vision.
Cons: Engaging prematurely betrays your awareness; future explorations by that team are made less visible.	Cons: The team wasted time and attention on something that wouldn't work or may even be harmful.

Table 3.3: Dilemma of Early Intervention. As an outsider to a team responsible for a process/policy/product, suppose you learn of something prior to official deployment (e.g., you learn the internal musings of another team). There is folk wisdom on both sides: "Stay in your own lane" and "Speak up when you see something wrong." See the related Dilemma of Micromanaging in Table 3.4.

When there is an objective measure for success, suggestions can be evaluated with respect to whether change improves the outcome. Because bureaucracy is based on subjective policy, there are always differences about how to improve. The Dilemma of Early Intervention is about knowledge your role didn't require. That knowledge may be incomplete or you may know more than the people taking action.

The Dilemma of Early Intervention can harm your relationships if you are seen as exceeding your role. Your action can benefit the organization, and the team taking the action may be grateful for the intervention.

Because organizations promote individuals, and there are a limited number of promotions available, the naive expectation is that intervention that could benefit others and risks harming your relationships would not happen. The motive for an individual to intervene is the displeasure of watching other people waste time and resources, or the possibility to learn something new.

Review the status of progress for other people early and of- ten. Many milestones, check- ins, and updates.	Review status of progress infrequently; just do the work.
Description: Micromanagement.	Description: Hands-off management style.
Pros: Early intervention when things are not going well.	Pros: Enables independence.
Cons: Takes up your time and the	Cons: Team members are unsure
people you're reviewing. Conveys	how to proceed and don't know
low trust.	what the goal is.

Table 3.4: Micromanagement from the supervisor's view. An expression of concern and control – wanting the right outcome, wanting to provide guidance and feedback. Applies to both peers and subordinates.

Micromanagement from the supervisor's view is not unique to bureaucratic organizations. The tendency to micromanage does not depend on the level of technical expertise of the manager. Micromanagement occurs when the manager feels insecure about results. If the employees are untrained or unmotivated, the sense of insecurity may be reasonable.

Limiting micromanagement from the supervisor's view means finding an acceptable level of engagement. This depends on the training and motivation of each participant.

The manager is accountable for the outcome of the people being supervised, which leads the manager to fear that underlings will fail. Contrast this with the Dilemma of micromanagement from the subordinate's view.

Bureaucrat expects manage-	Bureaucrat dislikes managers
ment to provide solutions – just	micromanaging by telling peo-
tell members what to do.	ple what to do.
Cons: Your manager may not have	
insight on what needs to be done. Or	Cons: No autonomy, unable to ex-
they may guide you in a less effective	ploit your expertise and creativity.
direction.	· · · · · · · · · · · · · · · · · · ·

Table 3.5: Micromanagement from the subordinate's view. This is the opposite perspective of 3.4. Nominally the manager helps identify the goals and provides context and the subordinate figures out how to accomplish the goal, but who is responsible for what is negotiable in each relationship.

Micromanagement from the subordinate's view is based on expectations the bureaucrat has for their supervisor. Micromanagement is common in bureaucracy due to the defining aspect of subjective decision making; delegating policy enforcement is a loss of control.

Regardless of origin, micromanagement from the subordinate's view harms each person's emotional state and sours relationships. This impedes your role as an effective bureaucrat no matter the cause.

Happily, this dilemma can be remedied by talking with the other people involved in the situation. Each person has to be willing to express their concerns and to adapt their behavior.

Write everything down to cover your ass.	Don't record sensitive conversations that could be used against you or others.
Cons: Takes a lot of time and effort to accurately capture intent. Recording can be done poorly or be misconstrued.	Cons: No written record to point to when someone changes their behavior.

Table 3.6: Dilemma of Documentation. I personally write things down and share them with other people (for example, this book), but there are costs and risks to investing in documentation. There are dark patterns for this trade-off, like intentionally misquoting another person to bias the documentation in your favor, or only writing down the aspects of conversation that favor the outcome you are interested in.

Bureaucracy is based on subjective decision making about policy enforcement. The Dilemma of Documentation is a question whether you avoid risk of accountability or enable accountability of yourself and other bureaucrats. Having a written record is useful when confronted with the question, "What did you know and when did you know it?"

If you decide to respond to the Dilemma of Documentation by taking notes and sharing them, your coworkers get value from your notes. Your investment saves them time and allows them to search through old notes. As a new member of a team, this is an easy way to provide value.

A limiting factor biasing a bureaucrat towards the "no documentation" extreme is the ability to take good notes during or after conversations. That can

[Tag] Actionable Advice

be limited by ability to multi-task (listen and write), or memory of what was said, or hand-writing. Another bottleneck is the time needed for writing notes.

Ponder what should or could be	Figure out how to carry out the
done.	goal.
Description: Which of these should	Description: How should I do the
I select?	thing I selected?
Cons: Less time for action.	Cons: Prematurely select an action
	that is suboptimal.

Table 3.7: Dilemma of Think or Do. Brainstorming is useful, as is considering the holistic situation. At some point that transitions to action, but when? Both of these options an succumb to analysis paralysis.

The Dilemma of Think or Do is pervasive in bureaucracy. Any time not spent taking action looks wasteful, while investing too little thought can result in wasteful action.

Coordinating with other bureaucrats magnifies the challenge. If different bureaucrats allocate different amounts of time to planning and acting, then each person interrupts others. This is unavoidable. Effective bureaucrats default to early coordination instead of waiting to see how others respond.

The Dilemma of Think or Do applies at the scale of individual bureaucrats and to the collective behavior of teams and organizations. The time it takes a team to respond is longer than that of an individual, and the time an organization takes is longer than that of a team. A common mistake is to apply the timescale relevant to an individual to a team or organization.

Inaction is usually a safe response to a situation. Admiring the problem, studying the options, or continuing to work on other issues are common behaviors. Only when circumstances threaten relationships or the team or organization is action taken.

Allocate time for meetings to facilitate coordination.	Allocate time for action.
<i>Pros</i> : Create awareness, build consensus, get approval.	<i>Pros</i> : Create results to iterate from.
Cons: Less time for participants to	Cons: Results in uncoordinated ac-
enact ideas.	tivity which can be wasteful.

Table 3.8: Dilemma of Coordinate or Do. Like Dilemma 3.7, but here the question is about coordination versus doing the work. The amount of coordination depends on how many stakeholders there are, how familiar the stakeholders are with the challenge, and whether the action is reversible when found to be incorrect.

When you first hear of a challenge, you may be interested in immediately tackling it. You see a path to improvement, you have the skills needed, and addressing the challenge would benefit your team. Unbeknownst to you, another person on another team saw that same challenge and had the same reaction.

Because of the distributed nature of knowledge and decision making in bureaucracy, the Dilemma of Coordinate or Do is happening all the time for many aspect of the subjective decisions being made. Advertising "I'm going to do something" and "I'm doing something" and "I did something" as you are progressing on any given task is vital to decreasing the likelihood of unintentional duplication. Even that activity of advertising and listening to the advertisements of other bureaucrats takes time away from doing your work.

The Dilemma of Coordinate or Do is a cause of conflict among bureaucrats who prioritize doing the work versus bureaucrats who see value in checking in with others first. The constraint of time allocation and variety of views leads to friction in organizations.

As with Dilemma of Think or Do, inaction is the safer default. Having a meeting is less risky than investing time in creating a prototype.

Operate at the level you are being paid for.	Operate above the level that you are being paid for to be promoted.
Description: Meet job requirements	Description: Exceed job require-
but nothing extra.	ments.
Cons: Risk not being promoted.	Cons: Experience wage loss since the organization is getting free labor.

Table 3.9: Dilemma of Working extra hard. Work above your pay grade (provide the organization extra labor and you get reduced pay) or at your pay grade (expected labor and pay)?

Just as there are two views of micromanagement (3.5 and 3.4), promotion can be seen from the supervisor's view and the subordinate's view. The Dilemma of Working extra hard is the view of the subordinate. Unlike jobs in which labor that are directly tied to financial profit, a bureaucrat has a weak feedback loop for their labor. Promotion may (but is not guaranteed to) happen in the future based on your current level of effort.

The Dilemma of Working extra hard creates competition among bureaucrats competing for a limited pool of promotions. Because organizations rely on hierarchy, and hierarchy is correlated with pay, promotion is typically not based purely on the merits of an individual bureaucrat.

Promotions exist to bias bureaucrats towards the "extra labor for reduced wages" outcome. Bureaucrats who have enough income and autonomy may not see promotions as relevant and thus be comfortable at their current workload. There are other motivations driving bureaucrats besides pay, such as working towards a vision or gaining new skills.

Send bad news up the chain of	Minimize bad news up the
command.	chain of command.
Pros: You are a reliable source of	Pros: You minimize the burden of
news.	managers.
Cons: You are viewed as a source of	Cons: Harmful events eventually
problems.	catch up with the organization.

Table 3.10: Dilemma of Bad News. The canonical example is the Challenger disaster.

The Dilemma of Bad News is a consequence of hierarchical reporting in organizations. Regardless of whether the hierarchy stems from specialization of skills or delegation of decisions, information traverses up the chain of command.

News going up the chain of command is subject to modifications – both filtering and embellishment. Filtering out bad news or making the report more grandiose can be spun as contextualization. Which outcome is preferred depends on the specific of the people reading the reports. Whether to report an update is one choice, how to spin it is another. Did the team fail to accomplish their objective, or did the team learn something that will inform the next phase of their progress?

The Dilemma of Bad News applies to peer-to-peer relations and supervisor-to-subordinate, but in those two relationships the repercussions of bad news are less. Being professionally vulnerable feels safer when there is less at risk.

Prepare for disasters and emer-	Wait for the specific problem to
gencies, invest in mitigation.	arise before responding.
Pros: Lessen the effect when bad	<i>Pros</i> : Deal with the specifics of the
things happen; decrease the number	scenario at that time and thus be
of problems from occurring in the	better informed. Look like a hero for
first place.	handling emergency.
Cons: Fewer events evolve into	
emergencies because you're pre-	
pared, or the effect of disasters is	Cons: Unexpected events result in
lessened. Both make you look overly	worse outcomes.
paranoid and wasteful. Less recogni-	
tion for planning.	

Table 3.11: Dilemma of Preparation versus Cleanup. How much to invest in contingency planning and preparedness. In practice you will do both.

Bureaucracy arises to manage a shared resource, and there are emergencies regardless of the specific resource. Emergencies can be on the supply side, like problems with air quality or not enough food inspectors. Disasters on the demand side come in the form of sudden spikes. The Dilemma of Preparation versus Cleanup cannot be avoided.

There is a bias favoring the reactionary cleanup mentality. Bureaucrats appear responsive to the needs of the situation. Planning for an emergency requires thinking about contingencies.

Even when there is consensus around the value of preparation, the followon question is to what degree. The Dilemma of Preparation versus Cleanup is an entry point to discussions that depend on the personalities of individual bureaucrats.

Only let good ideas through as determined by a detailed re- view process of clearly specified	Give resources to untested ideas.
plan.	
Pros: Less waste of resources and time. Everyone has confidence in the investment.	Pros: High-risk/high-reward ideas that are disruptive can be enacted.
Cons: Burdensome review process.	Cons: some ideas will fail.

Table 3.12: Dilemma of Idea filtering. How much vetting should novel ideas get before being enacted?

The Dilemma of Idea filtering is one element of the broader topic of innovation in bureaucracy. Related dilemmas include the Dilemma of Innovation, the Dilemma of Where to Innovate. Any one of these is sufficient to suffocate change.

Work on disruptive innovation.	Work on iterative (evolutionary) innovation.
Description: Start from scratch, aim for revolution, replace the legacy.	Description: Starts with change to existing solution, adjust the legacy path.
Pros: High reward.	Pros: Low risk, low cost.
Cons: High risk, high cost.	Cons: Low reward.

Table 3.13: Dilemma of Innovation. Incremental change may not suffice. Disruption can be costly.

Focus on fixing flaws.	Focus on innovation.
Pros: Addresses known problems. Helps people already in the system.	Pros: More externally visible.

Table 3.14: Dilemma of Flaws and Innovation. Zero-sum investment of attention in either maintenance of the status quo or making progress.

The Dilemma of Flaws and Innovation applies to bureaucracy in terms of policy, and to product development.

Innovation is more likely to result in promotion and recognition even though maintenance and innovation both require skill, creativity, hard work, and persistence.

The Dilemma of Flaws and Innovation shows up in relationships in both directions. Bureaucrats recognize the value of maintenance even though it's not rewarded.

Innovate in a novel-to-your-	Innovate in your team's stan-
team environment.	dard environment.
<i>Pros</i> : More likely to allows people to	<i>Pros</i> : Easy to operate in.
drop their expectations.	170s. Easy to operate in.
Cons: Loses access to connections	Cons: Allows conventional processes
vital to actually create success. Use	to take effect. Participants hold onto
extra space, logistics of moving.	their assumptions.

Table 3.15: Dilemma of Where to Innovate. Where (physically, spatially) innovation takes place matters because the environment sets context for assumptions.

The Dilemma of Where to Innovate is not specific to bureaucracy. Changing where work is done is disruptive. Disruption to routines can be harmful and beneficial.

The benefits of trying to innovate in a environment isolated from other people is that you can focus without typical distractions. When I participated in an off-site session I neglected to check my email; my focus improved but my lack of responsiveness harmed people who depended on me.

Bureaucracy is resistant to change, and innovation implies change. While moving to a distinct venue may make innovation easier, it incurs the cost of bringing the innovation back to the routine scenario.

Work on innovation in the open.	Work on innovation in hiding.
Pros: More likely to be criticized. Criticism can be positive (as in an incubator setting).	Pros: Less drama – the incumbent won't attack the innovation since they don't know about it.
Cons: Negative criticism intended to harm – an incumbent has reason to be defensive. The incumbent attacks the innovation before it is sufficiently developed or has time to build a user base.	Cons: Less opportunity for feedback. Project is easier to kill since the value is not advertised.

Table 3.16: Dilemma of Obfuscated Innovation. How is innovation carried out within the organization?

Seek recognition for your work.	Work in obscurity.
<i>Pros</i> : Helps with promotion.	Pros: Less distraction.
Cons: Devalues the contributions of other people.	Cons: No one knows the value of your work and you won't get feedback.

Table 3.17: *Dilemma of Recognition*. This dilemma is magnified when the task you work on is high risk or is resource intensive.

Gather lots of data.	Gather minimal data.
Description: Gather lots of data for a well-informed decision.	Description: Minimal information
	because decision maker knows what
	to do or outcome is irrelevant.
Cons: High cost of gathering data	Cons: Lack of data results in deci-
(time, resources). Opportunity	sions based on oversimplified assess-
costs.	ment.

Table 3.18: Dilemma of Data Quantity. How much data to gather for a decision. See figure 3.1. See also the description of bureaucratic debt.

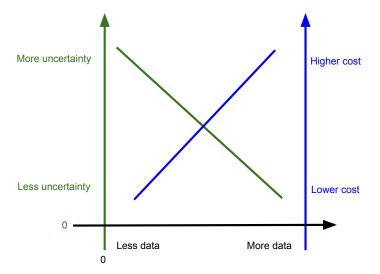


Figure 3.1: Collecting more data costs money and decrease uncertainty. See Dilemma 3.18.

The logistics of gathering data can be measured, but there are other subjective aspects to account for as well. Making a decision has an emotional toll on the decider due to the risk of failure. Also, decisions are made in a social context, with decision makers accounting for the ramifications on people they have relationships with.

The Dilemma of Gathering data is distinct from the Dilemma of Planning. It is possible to do a lot of planning with only a little information gathered, and it is feasible to have lots of data and do no planning.

Extensive planning upfront	Iterative improvement of plans
(proactive).	(reactive).
Description: Lots of time spent	
brainstorming potential scenarios	Description: Start taking action and
and contingency options prior to	use feedback to shape next actions.
taking action.	
Cons: "No plan survives contact	Cons: Less prepared.
with the enemy." -von Moltke	Come. Boss propured.

Table 3.19: Dilemma of Planning. How much time to invest in different types of planning.

Involve people who disagree.	Ignore people who disagree.
Pros: Get constructive feedback; account for factors you didn't consider; build a robust solution.	<i>Pros</i> : Save time by not interacting.
Cons: Results in a compromise or partial solution that minimizes aggregate unhappiness.	Cons: Miss a vital aspect you didn't consider.

Table 3.20: Dilemma of Disagreement. Engagement with opposition to process or change.

Making a decision imposes a bound on how much time is available for both gathering data and planning. Time is zero sum, so more time gathering data is less time planning. Similarly, the number of people available for data gathering and planning is bounded, and tasking people is a zero sum choice.

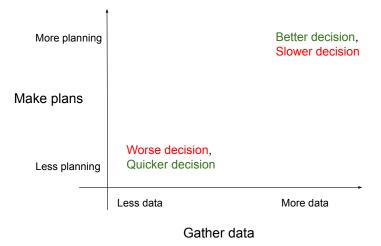


Figure 3.2: Planning (Dilemma 3.19) and data gathering (Dilemma 3.18) trade-off.

In practice, gathering data and planning rarely terminate – they evolve.

When planning (Dilemma 3.19), aspects to consider include the amount of risk seeking or tolerance (Dilemma 3.21) and the intended scope of effect (Dilemma 3.2).

Take on big risks and big re-	Take on small risks and small
wards.	rewards.
Description: High risk tolerance.	Description: Low risk tolerance.
Pros: Potential for failure and harm	Pros: If any one investment fails,
is significant.	you can continue other efforts.
Cons: Costly investment, longer feedback cycle.	Cons: Incremental can be slower.

Table 3.21: Dilemma of Risk tolerance.

Broad scope of effect.	Narrow scope of effect.
Description: The consequence of the	Description: Small number of stake-
work has many stakeholders.	holders.
Pros: Benefit more people.	Pros: Niche effect means less depen-
170s. Benefit more people.	dencies on other people.
Cons: Harder to get everyone in	Cons: Less visibility to the rest of
agreement.	the organization.

Table 3.22: Dilemma of Scope of Effect. Scope of effect of your work.

Once data is gathered (Dilemma 3.18) and a plan is made (Dilemma 3.19), the result is disseminated. The choices of how to disseminate are the Dilemma of Consistency over time and the Dilemma of Disseminating information.

Guidance updated often; incremental change.	Consistent application of policy over time. Rules persist; then sudden drastic change.
<i>Pros</i> : Adapt policy to new informa-	<i>Pros</i> : Stability is easier to predict
tion and changing conditions.	between regime changes.
Cons: More work needed for revi-	Cons: Doesn't adapt as conditions change. Accused of being inflexible
sions. Accused of lacking stability.	to evolving conditions.

Table 3.23: Dilemma of Consistency over time. Stability of rules; how change is enacted. Can also be characterized as when to tell other people: sooner or later (when firmer information is available). See the description of static versus dynamic processes.

Deployment of products and deployment of policies face similar dilemmas. Diffusion of Innovation.

Bureaucracy arises to manage shared resources. Management occurs by policies and processes. The community accessing the shared resource changes over time, so the policies and processes evolve to reflect that change. The Dilemma of Consistency over time is about the incrementalism of the change.

Bureaucrats responsible for carrying policies and processes disagree on the question of stability, creating friction within an organization. The Dilemma of Consistency over time is also disruptive to the subjects of bureaucracy.

Bureaucrats are incentivized to avoid change, so the bias in this dilemma is towards consistency and stability even if that means not adapting to current local circumstances.

Tell people one-by-one.	Tell everyone at once.
<i>Pros</i> : One-on-one allows a freer response from audience.	Pros: Save time for the speaker.
Cons: Order matters for relation-	Cons: Overwhelming feedback all at
ships.	once.

Table 3.24: Dilemma of Disseminating information.

Once a decision has been made, the decision is executed or enforced. How many rules are there (Dilemma 3.27) and how strictly are the rules enforced (Dilemma 3.25)?

Bureaucracy involves coordination to facilitate distributed knowledge and distributed decision making. Each bureaucrat has finite time and attention. When communication channels are instantaneous (e.g., phone, email, video) there is often more information to be consumed. The Dilemma of Disseminating information is a question of whether to save time by telling all stakeholders at one time or demonstrate the importance of a relationship by talking one-on-one.

One aspect of the Dilemma of Disseminating information can be addressed using personalized emails. Rather than send an email notice to 10 people, automating the process of sending 10 separate emails can make it appear to each recipient that the conversation is one-on-one. That doesn't resolve the challenge of getting all feedback at once.

Whether to apply nemawashi or not depends on how much time to allocate to sharing the information.

Enforce rules strictly.	Lax rule enforcement.
Pros: Predictable.	<i>Pros</i> : Bureaucrats feel empowered.
Cons: Insensitive to nuance.	Cons: Tolerance for changing conditions or exceptional cases.

Table 3.25: Dilemma of Strictness of rules.

Bureaucrats and subjects of bureaucracy both complain regardless of where on the spectrum each instances of Dilemma of Strictness of rules occurs.

If it's not against the rules, it	I can only do what is allowed
must be okay.	by the rules and nothing more.
Pros: Autonomy	Pros:
Cons: .	Cons:.

Table 3.26: Dilemma of Adherence to rules.

Control via rules.	Freedom/autonomy/agility.
Description: High number of rules to cover a variety of situations.	Description: Low number of rules to enable flexibility.
Cons: The more rules that exist the more likely it is that someone will find a way to exploit them to their own advantage.	Cons: The fewer rules that exist the more likely it is that someone will try to get away with something bad.

Table 3.27: Dilemma of Number of rules.

Alternative approach: guidance derived from principles that can be adapted to specific situations. That has the problem of requiring good knowledge of the situation and wise judgement.

I can only do what is mandated by the organization.	I can do anything that's not illegal.
Cons: Responding to novel situations is inhibited.	Cons:

Table 3.28: *Dilemma of Legality*. The scope of your actions bound by mandates and legality, but the way you interpret that is subjective.

_	Fault tolerant decision making through redundancy.
Cons: Might be accidentally wrong.	Cons: Extra burden of collecting and processing more data.

Table 3.29: Dilemma of Data for Decisions. Having a single checkmark on a form makes data collection easier. The person using the form might not see the checkmark box or may accidentally fill in the checkmark. The process is sensitive to this single bit of data.

Quickly complete tasks or deploy new policies or create new	Methodically complete tasks (or well-founded policies, qual-
products.	ity products).
Description: Enact a solution	Description: Methodical well-
1	planned design and execution yield
quickly to address urgent needs.	robust solutions/products/policies.
D D: 114:	Pros: More like to get the solution
Pros: Rapid solution.	right.
Cons: Risk of quick task is that	
the result is ineffective, inefficient, or	Cons: opportunity cost
wrong.	

Table 3.30: Dilemma of Speed and Accuracy. Speed versus accuracy of task completion.

If you try to resolve Dilemma 3.30 by both getting a solution deployed quickly and then iterating towards a robust outcome, you may appear unpredictable or unstable; see Dilemma 3.19. This is an example of cascading dilemmas. The interplay of a creative resolution to one dilemma can effect the solution space for other dilemmas.

Push people to work really hard.	Create a comfortable work environment.
Cons: Burn out and leave.	Cons: Lower instantaneous productivity.

Table 3.31: Dilemma of Urgency.

There is usually a large range of productivity possible for a bureaucrat. Management has input on what is expected from bureaucrat. The Dilemma of Urgency reflects the trade-off of how much to push employees of an organization.

Because of weak feedback loops in bureaucratic organizations, bureaucrats default to a relaxed work environment. Examples of exceptions to this include seasonal variations like tax collection time for the IRS and demand spikes like a natural disaster for FEMA.

Talk more to convey more in-	Listen more to learn more in-
formation.	formation.
Cons: Less time available for listen-	Cons: Less time to convey what you
ing.	know.

Table 3.32: *Dilemma of Talking*. In conversations or meetings there is a (subjective) balance for participants.

The Dilemma of Talking captures the zero-some information constraint that most bureaucrats can't concurrently talk and listen.

The Dilemma of Talking depends on the personality of each bureaucrat involved in coordination of distributed knowledge and distributed decision making. Some are patient listeners, while others feel uncomfortable with silence.

Talking constructively about work takes effort, so the default here is to not communicate.

Seek out experienced collabora-	Work with less experienced
tors.	people.
Pros: Quicker to get something	<i>Pros</i> : Less set in their ways and open
done.	to more novelty.
Cons: Experienced people who are	Cons: Slower progress; more educa-
good are probably busy.	tion needed.

Table 3.33: Dilemma of Experienced Collaborators. People with experience are useful but less accessible.

Distributed knowledge in a bureaucracy relies on collaboration among bureaucrats. The Dilemma of Experienced Collaborators is about the options of who to collaborate with.

The bias for the Dilemma of Experienced Collaborators depends on the promotion structure of your organization and the composition of the workforce. If training new member of the team is rewarded, then you might choose to work with less experienced bureaucrats. If the entire team is experienced, then this Dilemma doesn't apply.

Say yes to new opportunities.	Say no to new opportunities.
<i>Pros</i> : Positive attitude, collaborative.	Pros: Able to prioritize and focus.
Cons: Fail to complete tasks.	Cons: Not a team player.

Table 3.34: *Dilemma of opportunities*. Acceptance or rejection of more work can be explicit or implicit. Bureaucrats respond to this challenge by sending mixed signals: expressing interest but not following up with action.

The Dilemma of opportunities depends as much on the workload as on your personality.

Finding ways to avoid doing work while helping the person providing the opportunity is the central skill for the Dilemma of opportunities. This may mean referring the opportunity to another coworker or expressing support but not investing effort.

Share less data.	Share more data.
Pros: Restricting data access saves	Pros: Sharing data improves trans-
money and time for the data owner.	parency and accountability.
Cons: People other than the data owner are unable to extract value from data.	Cons: Sharing data uses resources (people, money, time).

Table 3.35: Dilemma of Sharing Data. How much data to share. Potential solution is to make data discoverable. Advertise the availability of data without providing data. This way a negotiation is feasible for people interested in the data.

In the Dilemma of Sharing Data there many of aspects of data than can be shared to improve discoverability: who to contact about access, what the data sources are, how often data is collected, how long data is stored, how much data there is.

Distributed knowledge and distributed decision making both rely on having data. Without data the policies and processes of bureaucracy are less effective.

Sharing data is typically perceived as helpful. The Dilemma of Sharing Data points out that the helpfulness has a cost.

Because sharing data consumes resources, the bias is to not provide data. That applies to sharing with other bureaucrats within the organization as well as subjects of the bureaucracy.

Compete for resources.	Cooperate for productivity.
Description: individuals compete for attention and promotion; teams compete for money and staffing re-	Description: cooperation improves productivity
sources	
Cons: Fail to synergize skills re-	Cons: Not clear who to assign re-
sources	sponsibility for success or failure

Table 3.36: Dilemma of Cooperate or Compete. Applies to teams and to individuals.

Consistent application of policy across cases.	Adapt policy to specific cases.
Description: Maximize broad appli-	Description: Demonstrate flexibility
cability; minimize exceptions.	for unique scenarios.
Cons: Less sensitive to the nuances	Cons: Takes more work. More likely
of a specific situation.	to be accused of bias.

Table 3.37: Dilemma of Consistent Policies. Case consistency vs adaptability.

When change to policies is desired, there are options on how to advocate for change - Dilemma 3.49.

One person or team owns an area of responsibility.	Anyone take on any task.
Cons: Staffing capacity may not be	Cons: Not everyone is skilled at ev-
as flexible as varying workload.	erything.

Table 3.38: *Dilemma of Swimlanes*. How are tasks assigned? This can be negotiated with coworkers and is not intrinsic to structure of the organization.

Independent of how tasks are assigned within a team or organization (Dilemma 3.38), individual bureaucrats can decide how they act in Dilemma 3.39.

Adhere strictly to the scope of	Stray outside (or outright ig-
your role.	nore) the scope of your role.
Description: Inflexible to novelty.	Description: Lack of structure. Gen-
Specialization of tasking.	eralization.
Cons: Efficiencies of cooperation and specialization would not occur.	Cons: Deadlock condition arises due to a scheduling constraint – no one can proceed because everyone is waiting on everyone else. Responsibilities are unclear when no ones scope is clear.

Table 3.39: *Dilemma of Scope*. Both strict adherence to role scope and ignoring scope can decrease an organization's productivity. What happens when a person deviates from their role? How are people who do not conform identified? Are they confronted?

Delegate; share work with	Work alone; don't rely on other
other people.	people.
Cons: Your success is dependent on	Cons: Can't do as much on your
other people.	own.

Table 3.40: *Dilemma of Delegation*. Sharing work can improve productivity and build relationships but also incurs risks to reputation and success.

Health of the organization.	Results of the organization.
Description: Maintain processes and train staff. Considered "overhead."	Description: Do the work that motivates the existence of the organization.
Cons: Unproductive for subjects.	Cons: Unsustainable for members.

Table 3.41: Dilemma of Health versus Results. Producing the results that motivated the existence of an organization often requires spending organization's health

Many small tasks or goals.	Fewer big tasks or goals.
Description: Your day is occupied with a variety of short-duration tasks.	Description: You work on only a few efforts during a typical day.
Cons: Enables a fail fast approach	Cons: Less overhead of task switch-
from quick feedback.	ing to manage.

Table 3.42: *Dilemma of Chunk size*. You may or may not have a choice of task size and number of tasks. If you have autonomy, what do you prefer? Do your coworkers and supervisors know your preference?

Task with many external de-	Task with few external depen-
pendencies.	dencies.
Cons: Risk of failing because of a failed dependency.	Cons: Have to develop everything yourself; waste of resources due to redundancy.

Table 3.43: Dilemma of Dependencies. External dependencies can enable broader scope. This Dilemma only is relevant if you have autonomy in the selection of your tasks. See also the Dilemma of Delegation, 3.40.

Focused on one role.	Have multiple roles.
Cons: If a role does not consume 40	Cons: Context switches between
hours per week, you'll be idle.	roles and delayed responses.

Table 3.44: $Dilemma\ of\ Roles.$ The right number of roles for a bureaucrat depends on personality and tasking.

Dissent is welcome and discussed freely.	Dissent is suppressed.
Cons: Can be disruptive to normal	Cons: Limits novel ideas from
operations. Distracts from the task.	spreading. Harms morale.

Table 3.45: $Dilemma\ of\ Dissent.$ Dissent is caused by dissatisfaction with people or processes.

Do share lessons learned.	Don't share lessons learned.
Pros: Honesty, accountability, self-	Pros: Look competent, even when
awareness, and self-reflection.	making mistakes.
Cons: Looks weak, unprofessional.	Cons: Limit the growth of bureau-
	crats in the organization.

Table 3.46: Dilemma of Sharing Lessons. Sharing lessons learned may seem reasonable unless you want to maintain a pristine reputation.

Share lessons learned about yourself.	Share lessons learned from observing others.
Cons: Potentially look stupid.	Cons: Potentially hurts their reputation.

Table 3.47: Dilemma of Sharing. When sharing lessons learned (option 1 in 3.46), the lessons do not have to be about you.

Learn lessons from your own	Learn lessons from others (for-
mistakes.	mal training).
Cons: Potentially look stupid; waste	Cons: Formal training may overem-
resources discovering what others al-	phasize irrelevant or impractical
ready know.	concepts.

Table 3.48: *Dilemma of Learning*. How much formal training to invest in before learning by doing?

Build a small coalition of inter-	Build a large base of support
ested parties.	and get everyone on board.
Cons: May not be representative of all stakeholders.	Cons: Takes time away from the work. Many people may disagree or be disinterested.

Table 3.49: $Dilemma\ of\ Coalitions.$ A coalition can provide morale support but takes time to build.

Process request as they arrive.	Process request in batches.
Pros: Responsive.	Pros: Improves efficiency.
Cons: Decreased efficiency.	Cons: Induces a delay in processing.

Table 3.50: *Dilemma of Batching*. For repeated actions, who is the process optimized for – the subject or the bureaucrat?

Redundant reviews of data.	Single review of data.
Description: Multiple independent confirmations that the data collected is correct.	Description: A form featuring a checkbox option.
<i>Pros</i> : Decrease mistakes.	<i>Pros</i> : Less overhead.
Cons: More people or time needed.	Cons: Single point of failure.

Table 3.51: *Dilemma of Redundancy*. If a user doesn't see a checkbox on a form, or they incorrectly mark the checkbox, is there any validation of the selection?

Dilemmas of Policy for an Organization's Structure

The constraints a decision maker faces are informed by the person's environment. Dilemmas 3.52 through 3.58 shape the experience of bureaucrats in an organization.

Flatter hierarchical organization.	More layers of hierarchy.
Description: More people managed per supervisor.	Description: Fewer people managed per supervisor.
Cons: Less feedback/attention per employee.	Cons: Fewer people doing work.

 ${\bf Table~3.52:~} {\it Dilemma~of~Shape~of~hierarchical~organization.}$

Concentrate the smartest peo-	Disperse the smartest people
ple together.	across the organization.
Description: Bring effective people	
in the organization together on a	Description: .
team.	
<i>Pros</i> : Synergy produces unexpected	<i>Pros</i> : Less disruptive since each per-
results.	son is fighting local challenges.
Cons: Less feedback/attention per	Cons: Fewer people doing work.
employee.	Cons. rewer people doing work.

Table 3.53: Dilemma of Dense Effectiveness. Effectiveness of bureaucrats is not uniform. Some bureaucrats in an organization are more effective than others.

As an organization adds more bureaucrats, the distance in terms of relationships between the most effective members increases. The larger the organization the more ineffective people there are between any two effective people.

Bringing the smartest members of the organization together on a team can result in benefits at the cost of decreasing the productivity of the abandoned teams.

Staffing: good coverage.	Staffing: minimal coverage.
Description: Enough staff.	Description: As small of staff as pos-
	sible.
Pros: Cover all edge cases; resilient	Pros: Less expensive.
to changing demands.	1703. Dess expensive.
	Cons: Fragile when requirements
Cons: Slack resources; sometimes in-	change or workload increases. If one
efficient. Increased communication	person leaves and there's no redun-
needed.	dancy, capacity and capability are
	harmed.

Table 3.54: Dilemma of Size of team or organization.

In-house services for non-	External dependencies for non-
central activities.	central activities.
Pros: More control.	Pros: Easier to replace.
Cons: Expands scope of responsibil-	Cons: Less understanding of prob-
ities.	lem.

Table 3.55: Dilemma of Services. Services that are necessary but not central.

The Dilemma of Services isn't unique to bureaucracy. It applies to businesses in a market and to governments in a global environment.

Centralized services.	Locally distributed services.
Description: A single provider of	Description: Each team has a local
services for the organization; typi-	service provider; typically bottom-
cally top-down mandate.	up organic result.
Pros: Cheaper. Enables coordination.	<i>Pros</i> : Quicker response. Enables innovation. Accounts for local deviations from the norm.
Cons: Less sensitive to local issues. Less responsive. Longer delays. Single point of failure.	Cons: Uneven quality of service. Inconsistent strategies and policies.

Table 3.56: Dilemma of Centralization of Services. Oscillation (see figure 3.3) indicates neither solution is optimal.

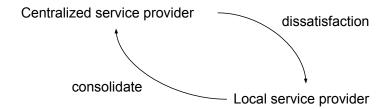


Figure 3.3: Dipole oscillation. See Dilemma 3.56. Migrating to the opposite paradigm gives people in charge a chance to show their responsiveness to the needs of participants. The rate of oscillation is a measure of institutional memory half-life.

Centralization is often carried out for the purposes of cost efficiency. The cost savings are due to de-duplication and having less slack. Both of those "savings" are a decrease of redundancy, which has a cost when there are unexpected fluctuations in need.

Centralization is an intentional monopolization, with the corresponding decrease in choices. Centralization (de-localization) can decrease the value assigned to feedback from people using the service because personal relations are de-valued.

The weaker feedback, lack of redundancy, and decreased emphasis on relationships motivates the creation of local services.

Decision making lower in a hi-	Decision making higher in a hi-
erarchy	erarchy
Description: Push decisions down to	Description: Escalate every decision
empower employees.	to management.
Pros: Better information.	Pros: Better scope.
	Cons: Decision maker has less skin
Cons: more inconsistency	in the game and may be less well
	informed. Employees are disempow-
	ered.

Table 3.57: Dilemma of Decision height. Where decisions get made in hierarchical organization.

Redundant services in a market	Monopoly service provider
Description: using a market model	Description
within the organization	Description:
<i>Pros</i> : enable customers to choose	Pros: efficiency of a single service
the best service	Fros. eniciency of a single service
Cons: redundancy	Cons: might not meet the needs of
	all customers

Table 3.58: Dilemma of Monopoly. Services within an organization. See also figure 3.4.

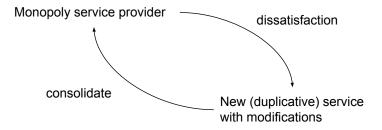


Figure 3.4: Dipole oscillation: solution A exists but doesn't meet my needs. Rather than tweak A, re-invent solution B which mostly overlaps with A but has independent development and support. See also Dilemma 3.58.

There is a Goldilocks situation for amount of processes in an organization:

- Too few processes (all social relationships).
- Just the right amount a balance process and social, and when to use which is known.
- Too much process (not enough leveraging of social relationships)

This optimization is like the Laffer curve in economics.

Trilemma: Do you support the cutting edge, most of the middle, or the laggards?

For any given aspect of bureaucracy there is a bell curve of skills and interest of bureaucrats. In your role of bureaucrat you face a choice: find and collaborate

with and enable the best and brightest, or aim your efforts at the massive mediocre middle (most bureaucrats), or try to get the dumbest bureaucrats up to speed?

Trying to escape the trilemma by claiming that you treat everyone equally means you are disregarding the needs of the tail of the distribution.

Trilemma: Do you work for your team, your manager, or yourself? Being a member of a team that operates within a hierarchy is tough. One reason is the question of who you are working for. The trilemma is whether you work for yourself, work for your supervisor, or work for your team. Ideally you can find ways to do all three, but that is not always the case.

Members of the team should work collaboratively, but there is a potential counter-force: accountability to the supervisor. Because each team member is accountable to their supervisor(s), that motivates the action of the individual. The team does not actually have autonomy – they are accountable to the boss.

In the approach "team members are directed by their supervisor," the synergy of the team is neglected and the supervisor becomes a bottleneck (for decision making and for creativity and for planning).

The third approach is for a person to ignore their team and their supervisor. This might enable quicker progress, at the risk of going in an unhelpful direction or not leveraging skills of coworkers.

Trilemma: Seek less budget, same, or larger budget. Less budget is needed if you improved efficiency, but then the proportional power within the organization is decreased. A larger budget may be due to inefficiency or growth. Keeping the same budget indicates no promotions are relevant (although a steady state could result from a combination of growth and improved efficiency).

A trilemma applicable to many situations is that options are **fast**, **inexpensive**, **good**; **choose two**. (This is the Project management triangle.)

In other words, the options are

- Good and fast is expensive (i.e., requires lots of resources).
- Good and inexpensive takes a long time (i.e., find a clever solution).

• Fast and inexpensive will be low quality.

Dilemmas Raised by Subjects of Bureaucracy

Each subject of bureaucracy views themselves as logical and self-consistent and erudite. In practice, the bureaucrat servicing subjects encounters conflicting statements.

Subject: Why do I have to fill out this form?	Subject: Why aren't you catching more cheaters and fraudsters?
Description:	Description:
Pros: .	Pros: .
Cons: .	Cons: .

Table 3.59: Dilemma of Forms.

Subjects desire consistency across situations.	Subjects seek exceptions for their specific situation.
Pros: .	Pros: .
Cons: .	Cons: .

Table 3.60: *Dilemma of Consistency*. Consistency is seen as fairness, when in fact consistency can ignore critical differences. Consistency is desirable for enabling predictability.

Subjects seek clearly defined rules	Subjects seek flexibility in application of rules (because we have a personal relationship
Description: Rules are seen as enabling fairness, when in fact rules can perpetuate inequality. Rules (assuming uniform enforcement) are also seen as enabling predictability.	Description:
Pros: .	Pros: .
Cons: .	Cons: .

Table 3.61: Dilemma of flexible rules.

Subject wants transparency.	Subject wants Low cost (free).
Description: Transparency requires collection and reporting of data.	Description:
Pros: .	Pros: .
Cons: .	Cons: .

Table 3.62: Dilemma of transparency. Transparency has a cost.

Consequences of the Dilemma-based Framing

There are many dilemmas listed above but that is not exhaustive. Even if each bureaucrat considers the same choices (which doesn't necessarily happen), not everyone makes the same selection. One response might be to defer to someone higher in the hierarchy to coordinate. While this would ensure consistency, this would be micromanagement. The people in the hierarchy above the person facing the choice don't have exposure to the problem. Choices are delegated to leverage expertise.

When you are facing these dilemmas and trilemmas there are constructive re- [Tag] Actionable Advice sponses that can improve your effectiveness. Improvement benefits your results, your reputation, and the organization.

- Collect quantitative data for each variable. Quantitative arguments can augment qualitative stories.
- Construct the Pareto frontier to identify non-optimal choices that can be eliminated.
- Instead of assessing variables in isolation, assess consequences in the context of workflows and effects on stakeholders.
- Discuss subjective decisions with stakeholders so that potential disagreements can be negotiated instead of creating friction.

3.3 Unavoidable Hazards of Bureaucracy

In a bureaucracy there are certain challenges that cannot be avoided. The value of recognizing them is to understand that what you're experiencing isn't an anomaly. The problem isn't unique to you, your circumstances, your coworkers, or the organization. The cause is the combination of all those factors.

Good ideas are not enough for adoption or continuation. Concepts critical to the success of the organization do not need to continue. Emotional fortitude is critical.

Hazard: Separation of responsibility and accountability.

Each bureaucrat in an organization has responsibilities associated with their role. The ability to complete the tasks associated the role are not wholly within the scope of the bureaucrat's control. You are dependent on other bureaucrats. Even if there is a desire for action, the action might not be immediately feasible because of a dependence on another person or process.

The consequence of separation of responsibility from authority is that other people look incompetent or lazy and unresponsive.

Hazard: Appreciation for being an effective bureaucrat is rare.

If you do your job well no one will notice. This is because of an expectation of smooth and fast interactions. Frictionless engagement is expected even if that is not the norm.

Consider teachers who catch cheating students:

"No one [thanks teachers] for policing cheating. Not the cheaters, not the honest students who feel inconvenienced and mistrusted, and certainly not the school [administrators] who have to process academic dishonesty paperwork."²

This same concept applies to any bureaucrat. The number of thank you cards sent to Food and Drug Administration meat inspectors keeping food safe, Occupational Safety and Health Administration regulators ensuring a safe work environment, Federal Communications Commission detecting disruptive electromagnetic signals, Federal Trade Commission, and Securities and Exchange

 $^{^2 {\}rm https://dynomight.net/teaching/}$

Commission is likely small.

There are counter examples in public service bureaucracy. Law enforcement is thanked when there is a victim of a crime. The military is held in high regard. Both of those bureaucracies are visible and the consequence of their work is tangible.

In large organizations there are teams of bureaucrats: Information technology department, human resources. IT support bureaucrats are occasionally thanked by their subjects, though most of the time the expectation is that computers should just work. HR produces no tangible products, so the appreciation is lower.

Hazard: Lack of accountability to fellow bureaucrats who rely on you.

You are more likely to feel accountable to your supervisor. Performing for your supervisor and explaining your value matters more than the work done to support coworkers. This also applies when you depend on other people – they aren't accountable to you.

To counter this tendency, build personal relationships with peers. This requires on-going investment, both to maintain relationships and to create bonds with new friends as your previous friends leave.

Hazard: Decision-makers are under-informed and inexperienced.

You can make a decision with insufficient information, and there is rarely an expectation of expertise or experience. Gathering information takes time and is thus burdensome. Having experience requires getting experience.

Hazard: Gathering data for decisions takes resources and expertise.

When there is a desire to gather data, and there is data available to be gathered, an investment of time is necessary. Well-informed decisions take time, experience, or both.

Hazard: Defining success is subjective and dynamic.

Who defines success and for which audience in a bureaucratic organization is

subjective because of the lack of feedback mechanisms. Consequences may not be immediately obvious. Worse, how success is defined can be changed at any time – there's no need for consistency.

Hazard: Change threatens incumbents.

Change of plans, roles, tasks, resources, flatness of org, scope, technology.

Hazard: Diffusion of responsibility in the bureaucracy

A specific task needs to be completed, and action requires involvement of multiple collaborators.

Once responsibility is assigned, the new risk is that of blame.

Hazard: Diffusion of blame in the bureaucracy.

Example: if something goes wrong, who is at fault: the creator of a policy or the person tasked with executing the policy?

Hazard: High latency feedback.

See slow deployment of processes and decision delay.

Hazard: Weak feedback.

Suppose my bureaucratic task depends on a service provided by you, a fellow bureaucrat. If your computer isn't working, your ability to provide the service is blocked by a dependency on a computer repair person. You might feel relieved – you can relax while you wait on the computer repair and you don't have to do work providing the service to me. You might feel anxious – you're unable to provide the service until the computer is fixed. Regardless of how you feel about the situation, my task is blocked. If neither you nor I have priority relative to the computer repair person's other tasks, then we wait. This question of priority could be resolved hierarchically (for which there is limited attention bandwidth) or socially (dependent on someone having a relationship with the repair person).

The delay for my task may be sufficiently small that raising the issue through the hierarchy or socially is not a good use of time. *Hazard*: The person making the rules that you follow doesn't actually know what they're doing.

Your choices then include

- Follow the rules that are not correct. This harms your productivity and morale.
- You can violate the rules and be more effective. This puts you at risk for sanctions.
- You can work the change the rules. Then you are not doing the work that's needed.

Hazard: You rarely get to pick who is on the team.

When a task requires collaboration, there is rarely a choice of who you get to work with.

Hazard: You rarely get to alter team membership. As a team member, you typically get little input on who you work with. Even as a manager your options for hiring are often limited.

Hazard: Fear of the unknown.

Current suffering is tolerable compared to the uncertainty of change, especially when the suffering isn't felt by the decision maker.

By identifying this fear in yourself or those you collaborate with, you can discuss specific concerns and work to address them.

[Tag] Actionable Advice

Hazard: Fear of change.

Change disrupts the status quo, putting accumulated power at risk and altering relationships.

An emotional basis for decision making (or avoidance of decision making) may or may not be rational. Discussing the fear with fellow bureaucrats can

ease the burden.

Hazard: **Fear of conflict**. Refers to conflict of ideas, not physical conflict. Conflict of ideas is not personal, though the consequences may have impacts on careers for stakeholders.

Professional disagreement is to be expected in a bureaucratic organization.

Feeling uncomfortable is distinct from feeling unsafe. Communicating while feeling discomfort is a useful skill, rather than avoidance. You can demonstrate courage by talking about your sense of discomfort.

Hazard: Inadequate resources: staffing, time, money.

The resources you have to address a challenge may not match the complexity of the issue.

Hazard: Outcomes for the team are ill-defined and constantly shifting.

Hazard: The reward for good work is more work.

When a coworker doesn't do their fair share, then the productive employee shoulders more burden. The deficient worker has no incentive to improve

Hazard: The organization has a lack of vision; or has vision but no plan; or has vision and a plan but no consensus; or has vision and a plan and consensus but inadequate resources.

Hazard: Progress depends on subjective decision making. Rarely is the optimal path deterministic.

Hazard: Easier to ask for big money than small money.

Processes are scale invariant. Regardless of whether you're asking for \$1000 or \$100,000, the process is the same. Accountability processes for large amounts of money are not scaled down to fit small amounts because people can be as dumb with \$100 as they are with \$10,000.

People problems are invariant of the hierarchy.

Hazard: Flux of people and processes.

Staff turn-over, changing conditions, changing timelines, change of vision, and the need to be promoted. In a bureaucracy, consistency doesn't yield promotion.

Hazard: Why are there so many rules?

To address edge cases and malicious or dumb people.

Hazard: **So much paperwork or forms.** Why is Red tape endemic to bureaucracy?

Paperwork as a form of coordination in processes to facilitate decentralized decision making.

One of the motives for paperwork is to catch people who are misrepresenting. Documentation makes prosecution more straightforward.

Hazard: Everything is slower.

What is meant is "slower than desired" or "slower than I imagined in my simplified model."

One reason progress is slower than expected is because there aren't as many hours available as imagined.

In a bureaucracy the actual time spent working is less than the number of hours you get paid for. Breaks during work, vacation from work, holidays, sick leave.

Hours per activity per employed year

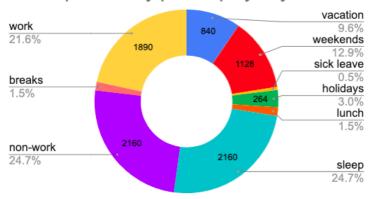


Figure 3.5: Hours of "work" per year when accounting for the rest of life. Assumes 5 weeks of vacation, 2 days of sick leave, and 11 holidays.

Fig 3.5 ³

Hazard: Bureaucracy inhibits creativity.

See notes on innovation.

Hazard: Bureaucracy grows.

The causes of growth include scope creep, an increased number of people participating in the process, an increased workload, or the ratio of workers to managers decreases.

Bureaucracy grows because some people lie. The progress is called "improved accountability" because we aren't sure who the next liar is going to be. More work is created for everyone because we don't want to confront the liars and cheats.

You can measure the growth of bureaucracy using metrics like the latency in addressing a request and the number of people involved in addressing a request.

Increasing the size of a bureaucracy is easier than cutting it down.

Hazard: The larger a hierarchy, the ratio of workers to managers

 $^{^3}$ source for calculations

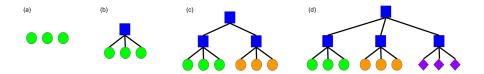


Figure 3.6: Growth of an organization as complexity and workload increase. a: three technical workers (green dots); b: administrative functions are delegated to an administrative assistant or manager (blue square); c: as complexity and scale grows, a new technical team (orange dots) is brought in which has their own manager; d: administrative work is delegated to a dedicated team of non-technical staff (purple diamonds).

gets worse.

As complexity and workload increase, the number of staff needed increase. To facilitate coordination, managers arise. The amount of work being done in a bureaucracy can be small compared to the number of participants.

In figure 3.6a, the ratio of workers to participants is 3:3=1. When a manager is added, the ratio is 3:4=0.75 (a lower value means less apparent work per employee is being done). Adding a second team with dedicated management puts the ratio at 6:9=0.66. Finally, with a dedicated administrative team (e.g., payroll, hiring, facilities), the ratio is 6:13=0.46.

Adding more people to a hierarchical organization results in diminishing returns for time spent on the central work since bureaucrats invest time maintaining the hierarchy and administrative processes.

Hazard: Each person in a bureaucracy has multiple roles.

To limit the expansion of the bureaucracy. The multiple roles come from multiple relationships necessary to span an organization larger than Dunbar's number.

Hazard: Everything is more complicated.

Bureaucracy administers access to resources, whether tangible items (water, air) or expertise. There's friction for tangible resources because the easiest solution is you get the resource (without an intermediary). There's friction for expertise because the expert understands things you do not.

Hazard: Bureaucracy is inefficient and wasteful.

The inefficiency of an organization is not just due to a breakdown of communication among its many members. Different individuals in different roles faced distinct incentives and have a different view of what problem is most relevant. There is a mixture of competition and cooperation internally for resources.

Can you explain a Pareto frontier for multiple objectives like speed, cost, accuracy?

Because decisions by bureaucrats are subjective, there is significant risk of being wrong or being called out by others as being wrong. Therefore, a motive to cover your ass for decisions made. Unnecessary work is carried out.

Different participants have different motives, and the aggregation needed for coordination is inefficient regardless of what metric efficiency is measured against.

Another example: Inefficiency of changing the requirements on a project partway through. If an objective quantitative measure were available, the return on investment could be determined.

Efficiency is typically assessed from the perspective of a serial process – a single worker could do this task faster, so why involve 10 people and get a slower, more burdensome result? The Mythical Man Month manifests Amdahl's law. Dividing a task among 10 people does not make the task 10x quicker. It's not valid to expect that a task which takes 1 person 1 hour to perfectly scale so 10 people should be able to accomplish 10 results in 1 hour.

Inefficiency of process is similar. I need to file a request to replace the lightbulb in my office. Compared to the serial "I'll just replace the lightbulb myself by running to the hardware store and purchasing one."

The excess resources characterized as waste are similarly driven by the serialbased assessment of what one person would require to carry out the task.

Hazard: Scope creep.

Scope creep can originate from three sources: the bureaucrat doing the work, the customer of the bureaucrat's work, and the bureaucrat management. In the first situation, the person doing the work might see a nearby opportunity that only requires a little be more work.

When the customer is the source of scope creep, the root cause is that customer wants more. While the exploration of what's possible can be exciting (a

positive experience), what the bureaucrat hears is more work and delayed results. This implies a few trade-off options, all of which are negative for one or both parties.

- Stick with the original terms (telling the customer "no", which is negative for both parties).
- Re-negotiation for more time (a burden to both parties).
- The bureaucrat doing more for the same pay, which means less money per effort (yielding a less happy bureaucrat).
- Decreasing existing efforts to fit the added requirements (yielding a less happy customer).
- Even if the bureaucrat is getting paid by the hour, more work means the end product will be delayed to accommodate added features (yielding a less happy customer).

The third source of scope creep is from management. Executive decision makers tried to make decisions without having the full context of the impacts of the decisions. Lower level people doing things see opportunities and extend their scope incorrectly because they don't have the full picture. In both these cases, the problem is that the person doesn't know what they don't know and trying to solve problems outside of their knowledge. How would that person know that they don't know? The easy answer to this is if you are in a position of authority, check downward before making a pronouncement. If you are in a position of execution, check upward before taking action. Commander's intent works in both directions.

Hazard: Migrating technologies.

The person enacting the transition has to be educated in both the old and new technology. The legacy code has to be migrated to the new implementation convincing stakeholders; may require synchronization difficulty scales with the number of stakeholders

Chapter 4

Getting started in a Bureaucracy

This section focuses on a bureaucrat's initial exposure to bureaucracy.

4.1 What to Read

The content of this book is independent of the specific role you as a bureaucrat will be playing. I assume you are striving to be a good person, and that you have relevant education/experience for the position in the organization.

The reading lists Leading and managing, Engineering team management, High Performance Organizations, and Managers are outside the scope of a guidebook for bureaucracy.

Reading management books is helpful regardless of whether you are a manager, want to become a manager, or if you never want to become a manager. In all three cases, gaining awareness of best practices and alternative approaches benefits you as a bureaucrat and the people you coordinate with – bosses, peer bureaucrats, subordinates, and subjects.

Voluntary membership in a long-lasting organization implies a turnover rate. organizations constantly have to onboard of new members.

An organization is distinct from the rest of society due to the differences in norms and goals. If an organization does not invest in onboarding, the norms of wider society will prevail and the organization will cease to be distinguishable from society.

I discuss hiring from both the perspective of the person hiring and the person being hired. I describe incentives for promotion from both the view of the person promoting a bureaucrat and the person seeking promotion. I explain the relevance of professional training from the perspective of the employer and the employee. My intent is to help both sides build empathy with the other person's experience.

4.2 Hiring into a Bureaucracy

Hiring shapes the culture of an organization and determines what is feasible, both by the skills of those hired and how well new hires integrate with the existing organization.

Hiring is an expensive process in terms of money, time, emotional investment of candidates, and the burden of reviewing applicants. As a candidate, recognize the risk the organization is taking. As a reviewer of candidates, this is an investment in the future of the organization. Even if your bureaucratic role does not require an exclusive focus on hiring, there is value in studying this domain.

When hiring into an organization there is a selection bias in the people who join a bureaucracy, and there is a selection bias who stays in bureaucracy.

Regardless of the specifics of the job, there are specific attributes that make a candidate more likely to be successful in a bureaucracy. In addition to role-specific skills, hire for metacognition, social skills, and intrinsic motivation.

4.3 Tips for Getting Started

You may have graduated from school with a degree in a specific subject. Then you go to work and expect the position you're in to apply the domain-specific education you have at work. That work produces an outcome and gives meaning to the struggle of educational process (time, money, effort). When you are not allowed to practice what you went to school for the disconnect may feel dissatisfying.

An alternative attitude is that you went to school to learn how to learn. A degree represents your ability to learn and persist, rather than a domain specialization. Then, when you get to work, you are presented with new opportunities to learn other domains.

Onboarding into a Bureaucratic Organization

There are two parties in hiring. Responsibility for successful integration relies on both parties actively working together.

As the new hire, make an effort to learn the names of those around you. As the hirer, make introductions. Not just the first time, but for the first week or two.

As the new hire, learn the jargon. As the hirer, explicitly expand jargon.

As the new hire, seek one-on-ones. As the hirer, offer one-on-ones.

How to Orient Yourself

As the new hire, write documentation on processes. As the hirer, provide documentation on processes.

Sometimes your role as a bureaucrat may be poorly defined. The lack of direction or objectives may be feel disappointing or frustrating. The positive perspective is that you get to define your tasks and determine what would be useful or interesting.

Two mentalities that I find useful are enabling others and working myself out of the job. My goal is to facilitate success rather than being integral to the process. Enabling other people to be successful can apply to customers, fellow bureaucrats, or management. Not everyone matters equally, so figuring out the relevance of helping specific people impacts your decision.

Another tactic I use is to look around, look backwards, and look forward. What are the challenges my team or my organization faces? Then review previous attempts to address the challenges. Why did previous efforts fail to remedy the situation? Once I have a less naive view and more context, what is my vision of the desired scenario? Without this vision there is a danger of doing work that keeps me busy but yields no progress.

The tactics of identifying challenges and learning the history of a challenge often relies on social interactions. A bureaucratic organization rarely maintains a searchable written record of decisions and failed efforts. If that content is available, it may lack the specificity available from oral narrative by people who were present. When investigating issues in a bureaucracy, I end discovery-oriented conversations with the question, "Who else should I talk to about this issue?" Independent of the content or the quality of the content, this question is the entry point to a large second-order social network of expertise that is often separate from the hierarchical chain of command. If multiple separate discussions lead to the same person, then that person is key.

Documenting your process as you proceed helps both your self-reflection and your ability to measure progress. Written documentation of your status can be used as proactive updates to your management and provides a record when someone asks retroactively why you took certain actions.

Bureaucratic challenges that do not violate the constraints of Nature (such as conservation of momentum, conservation of mass, speed of light, the Heisenberg Uncertainty principle) are solvable. There are typically political, social, personality, security, and technical aspects that need to be accounted for. Laws can be changed, regulations altered, people replaced, and norms updated. Constraints that appear to be logically inconsistent may be re-framed to be resolved. Narrowing or broadening the scope may reset the context for a challenge.

4.4 Setting Your Emotional State

As a member of a bureaucratic organization, you may feel the frustration of bureaucracy, the happiness of success, the excitement of possibilities, or the fear of uncertainty of operating in a complicated environment. Your emotional state, whether set by your work or set by events outside the bureaucracy, impacts your productivity and the well-being of your coworkers.

You may see emotions as getting in the way of productivity and creating problems, or emotions as unprofessional. This view is not shared by everyone, and there are real benefits to feelings like passion, enthusiasm, excitement, and joy. Yes, joy can be felt by bureaucrats.

Expecting bureaucrats to be apply cold rational logic to decisions and interactions is unrealistic. Openness to engaging emotional is more constructive than avoiding or suppressing emotional aspects of the job.

One source of emotions inspired by bureaucracy is when your roles, responsibilities, and resources do not align. You want to be effective and feel frustrated. This frustration can infect your interactions with coworkers.

Another source of emotions in a bureaucratic organization is when you see someone else making what appears to be a poor decision or policy. If you lack the ability to alter the decision or influence the policy, this can feel disheartening or demoralizing. Worse, these policies outside your control may impact you.

A third set of emotions in bureaucratic interactions occurs when a group of bureaucrats with distinct perspectives, strong opinions, and diverse experiences faced with complex challenges have insufficient time to create consensus and select the optimal choice. Stress felt by each participant impacts the interaction.

The relevance of these emotional states is that frustration and stress can decrease your capacity for effective communication. Happier bureaucrats can be more productive and collaborative.

By identifying these emotional patterns, the situation can seem less personal. Your feelings are legitimate, but they are not unique to you. Anyone in that situation is likely to feel similarly. Realizing this helps build empathy instead of ignoring the feeling.

4.5 Learning from Failure

This section on individual failure is separate from how an organization characterizes failure.)

Making progress in a bureaucracy is not a linear sequence of steps. Ideally there is an on-going cycle of trying something, not succeeding, and then applying what you learn towards the next try. This idealized "fail fast" cycle does not occur naturally – the participants have to either have intrinsic motivation or external incentives to make progress. Failing as a path for learning is justified after having exhausted less expensive alternative education opportunities like reading books, going to school, and talking with experts.

The recognition of failure depends on a clear measurement. Do the participants know the measure, and are they able to make the measurement? Having a defined measure of failure and regularly making the measurement relies on having an understanding of the expectations for the situation. Expectations are assumptions about the future.

Assumptions about the future can be categorized as

- Opinions. For example, interpretation of policy. Policy interpretation can be bent or exceptions can be made.
- Guesses; more formally interpolation given multiple options, this seems most likely.
- Experience; more formally extrapolation last time this happened, so next time ...

Failure with respect to expectations imply thinking about the future so that you can measure your progress (or failure). That is a subset of planning. You can fail if you don't plan, and you can fail if you do plan. This does not indicate that planning is irrelevant. Plans can be overly detailed and prescriptive, or plans can be inadequately specified; both are unhelpful.

If your measurements indicate failure, this could be due to an invalid assumption (with a valid objective) or you may have selected a bad objective. Declaring failure means re-evaluating assumptions, resetting objectives, or giving up on the concept and doing something else.

There are ways to avoid failing: by not setting an objective, or setting an objective that isn't measurable. You can avoid the appearance of failure by not telling anyone the objective. Extrinsic accountability for failure requires other people to have awareness. If these tactics are being employed, it may be because the person (or the organization) doesn't want to share how they've failed until they have a success.

Understanding rationales like the failure avoidance mentality is critical if you want to avoid feeling baffled the first time you encounter it. By learning these bureaucratic anti-patterns, you can inoculate yourself emotionally and cognitively. You now have a chance to think ahead before encountering the explanation.

A counterargument when you hear that someone is avoiding failure is to explain that noticing failure is essential to improving. Detecting indicators of failure, addressing the cause, and then changing is the process of improvement. When someone wants to avoid failure, I don't understand how they expect to improve.

4.6 Success (and failure) in Your Organization

This section on how a team or organization conceptualizes failure is separate from learning from failure as an individual bureaucrat.

Understanding the ways your organization succeeds or fails matters to you because it affects how you are evaluated and how you feel about your work. Success and failure are measured with respect to a quantitative objective.

Bureaucratic organizations have varying definitions of success and failure because organizations are made up of individual bureaucrats with a multitude of motives and weak feedback mechanisms. There are a few macro-level patterns for organizations. Each pattern has affect on the individual bureaucrats operating within the organization.

A bureaucratic organization that provides infrastructure service (such as public water utility, electrical power company, or an organization's internal computer support) has a specific failure mode. When infrastructure is unavailable or degraded, that's a failure. Success means satisfactory operation at minimal cost. An organization operating in this context is motivated to avoid failure. Success is merely a lack of failure. An effort to improve processes or otherwise innovate will face the inertia of a culture organized around avoiding failure.

A bureaucratic organization that claims "wins" but no failures (because either more or different work needed) is difficult to be productive in when the successful outcome has ill-defined value. The success can be counted (number of wins), but the relative importance of the success is unclear.

Examples of a win-focused organization include law enforcement, research teams, and teams with a responsibility for innovation.

The funding for an organization focused on "wins" depends on how well these successes can be sold as a narrative. This biases the organization to focus on investments most likely to get more funding. Have the funding organization is separate from the consumer of the "wins" yields outcomes not helpful to the consumer.

4.7Promotion

Bureaucrats get promoted for multiple reasons: due to their technical competence (a bad reason) or their managerial ability (a good reason).

The Dilbert principle says organizations "Systematically promote incompetent employees to management to get them out of the workflow." That observation is a post-hoc rationalization for managers with no apparent management skills and a lack of technical skills.

[Tag] Folk Wisdom

similar-in-spirit observation is Putt's Law which says [Tag] Folk Wisdom "Technology Bureaucracy is dominated by two types of people, those who understand what they do not manage and those who manage what they do not understand."

Peter principle: "People in a hierarchy tend to rise to 'a level of respective [Tag] Folk Wisdom incompetence': employees are promoted based on their success in previous jobs until they reach a level at which they are no longer competent, as skills in one job do not necessarily translate to another."

This might manifest as recurring failure. More likely, your incompetence will blind you to your own failures.

To avoid falling victim to the Peter principal, do not promote unless the employee has a track record of performing at the next promotion level. The downside is that the employee is working at a discounted rate since they are providing value beyond what is expected of their grade.

The Peter principal [44] has an element of truth, especially when a person starts a new role. However, a person can learn their role and become competent. Also, the Peter principles relies on the simplification of a single dimension of intelligence. See Gardner's theory of multiple intelligences.

Promotion Selects Values

Promotion is a critical aspect of designing incentives for behavior. Promotion is central because there are a variety of motives – for money, for status, for authority.

Promotion of Individuals

Promotion typically focuses on the successes of a person. This deemphasizes teamwork and lessons learned from failures. Promotion of a person (rather than the team) results in hero culture.

Promotion and Risk

Lowering the value of learning from failures increases risk aversion. The risk tolerance of a bureaucratic organization is driven in part by tensions in the promotion processes: an interest in success (more success is better) and avoidance of failure. This imbalance can lead seeking ownership of efforts that are likely to succeed, seeking easier successes, and afterwards stealing credit for outcomes created by other people.

What is preventing innovation is lack of risk taking. Actual risk means potential for failure. fear of failure because culture avoids failure due to concerns of waste. Also, anyone who fails can use this argument, but that isn't the same as "fail fast" because what's critical is learning from failure and sharing that insight gained so other's don't need to repeat.

There are two options for learning: your own mistakes, or the mistakes of others. Formal education is about the latter.

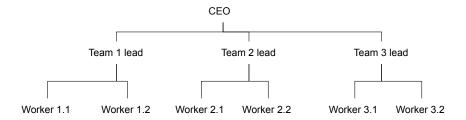


Figure 4.1: Standard orientation. Role with most responsibility and authority is at top. Left-right ordering is intended to be irrelevant in this view, though left-to-right reading order emphasizes importance.

Organization chart orientation

A common method of describing relations within the bureaucracy is the organization chart (colloquially, the "org chart"). Normally the CEO is at the top of the chart, middle management is in the middle, and managed employees are at the bottom. See figure 4.1

An organization's culture is subtly conveyed by artifacts like org charts. There are emotional connotations to alternative layouts. You can alter expected relations (culture and norms) by playing with orientation of the org chart. Org chart orientation can be overanalyzed, so this exploration is limited.

The point of thinking about org chart orientation is to frame how you perceive your supervisors, peers, subordinates. Notice that the framing is embedded in the words – prefixes super (over) and sub (under). These concepts inform what you expect from relations. Do I seek support or direction and guidance from my boss? What do I expect from my boss, peers subordinates? What do I expect to provide them?

The relative orientation of the CEO to workers sets expectations for relations. Options for orientation are the conventional CEO at top (figure 4.1), CEO at the bottom (figure 4.2), CEO on the right (figure 4.3), CEO on the left (figure 4.4), CEO as the center of a star (Example: League of Nations diagram)

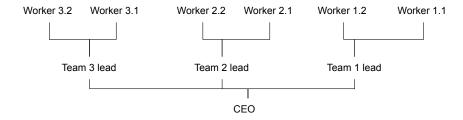


Figure 4.2: Flipping the orientation presents a more realistic view of the CEO's responsibility. The crushing burden of servant leadership is clear. Left-right ordering is intended to be irrelevant in this view.

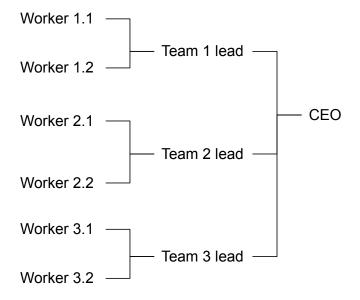


Figure 4.3: Conventionally time flows from left (old) to right (new), so in this graph the CEO leads the charge into the unknown. Is the CEO dragging workers forward, or are the workers pushing the CEO? The top-to-bottom ordering can be read as importance.

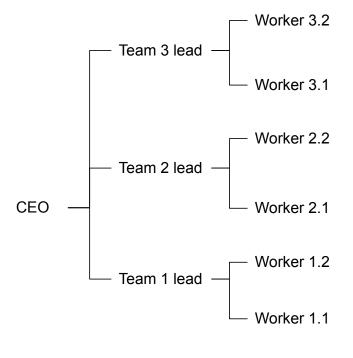


Figure 4.4: The "chariot view" with the CEO in the chariot and the workers out front. Workers are in the future, the CEO is in the past operating on old information. As with figure 4.3, top-to-bottom ordering can be read as importance.

4.8 Professional Training, aka Continuing Education

There is often a disconnect between the results formal education and the specific needs of the organization. Professional training is intended to fill that gap.

Some attendees are comfortable not progressing. An attendee may have other priorities (separate from the organization), may want to just feel safe, or may just desire to feel part of the group (even though they may not actually feel they are part of the group). There are roles associated with maintenance available for these non-climbers.

Chapter 5

You are an Individual in an Organization

This section focuses on an individual bureaucrat operating within an organization. What actions can you take? This is a prelude to working with others.

Understanding your options as a bureaucrat for action matters because trying to withdraw from bureaucracy isn't harmless. There is no neutral member of a bureaucracy. Either you are contributing to the organization, or you are sapping resources from the organization. This is because the organization operates in a zero-sum game for resource allocation.

5.1 Ideas for Innovation within a Bureaucracy

As a bureaucrat in an organization, you will see deficiencies and challenges. You could ignore the issues, complain but not take action, work around (avoid) the issues, or try to improve your organization. This section focuses on the last option.

Sometimes the issue and the apparent fix seem straightforward. If the situation has persisted for a long time, consider why the conditions have remained as is. Instead of framing your idea with, "Isn't it obvious that things would be better if ..." learn why what seems obvious doesn't happen. Learn the history. Talk to participants. If there is agreement that the situation is harmful, why has no one else tackled it? If previous attempts to innovate were tried and failed, why did they fail? What is novel about your innovation?

If you understand the conditions creating a challenge, and the history of why other approaches failed, and you have an innovative response, consider the stakeholders. Innovation is necessarily disruptive to incumbent processes and teams and social power. Do the incumbents benefit from the proposed innovation? Have they said they will benefit, or are you projecting their response? Innovation that benefits the organization but harms incumbents is less likely to succeed.

In addition to the social hurdles, innovation requires taking risks (otherwise the effort is merely incremental improvement). Risk in an organization means losing time or resources, potential harm to reputation, legal consequences.

Once you decide to innovate, and after you've learned the history and talked to participants, you have choices about how to innovate:

- Innovate while ignoring the bureaucracy. Your scope is limited to what you can accomplish alone. Integration is tough and causes frustration.
- Fight to create a space free from bureaucracy to enable innovation. You've
 intentionally isolated innovators from resources present in the organization, and integration back into the org is now more challenging.
- Leverage existing hierarchy and processes. Can be frustrating to work with bureaucrats who are not as focused as you are.

A recap of the innovation lifecycle in a bureaucracy:

- You see problems and challenges in your environment. This manifests as complaints from both the people directly harmed and observers who see inefficiency.
- 2. You share ideas for innovation and gets feedback. Build a coalition of people willing to fight for the idea on your behalf so that when you're not present, the idea is still proceeding towards implementation. That puts the threshold at "so important other people are willing to pause whatever they were working on and take up your cause."
- 3. Enacting these suggestions require either a change to existing processes or new processes or an investment of work. These changes may not succeed there's risk. Your idea could fail because it's not a good idea. It could also fail because someone doesn't like you, or the idea doesn't account for some dependency you weren't aware of, or it might conflict with other changes in progress.

[Tag] Actionable Advice

- 4. If you do decide to invest effort, the activity takes you away from your current work. Enacting the change might involve skills you don't have; learning those skills takes time. Carrying out the activity with new skills increases the likelihood of novice mistakes.
- 5. If someone else enacts the idea they get the credit for having done the work.
- If the idea saves money or time, there's typically no monetary reward.
 Recognition and benefit to your reputation isn't required as part of the change process.

There are many barriers in that lifecycle. The problem has to be observable to someone willing to invest effort in change. That person has to build a coalition of stakeholders. If the person isn't negatively harmed, that person may also lack clear benefit from resolving inefficiency.

In addition to the work of enacting the change, there is an administrative overhead of documenting the reason for the change. Subjective decisions mean choices have to be defensible. The need for defensible justifications result in conservative decisions and risk aversion and a decrease of motive for innovation.

Don't bother buying new technology because there's a lot of risk and we already know how to use the existing technology. (Same applies to innovation with policies.)

The people in decision making positions in the hierarchy have more experience with existing technology and are therefore biased against novel technology. Also, getting burned a few times on innovation makes people more conservative.

With limited time and staff available within the organization, experienced decision makers are typically not on the bleeding edge of the hype cycle.

These barriers lead to external observers to conclude something like the following simplification:

Bureaucracy destroys initiative. There is little that bureaucrats hate more than innovation, especially innovation that produces better results than the old routines. Improvements always make those at

[Tag] Folk Wisdom

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the top of the heap look in ept. Who enjoys appearing inept? 1

 $^{^1\}mathrm{Frank}$ Herbert's 1987 "Heretics of Dune", page 201

Changing your Environment

Changing the bureaucratic organization you are a member of is difficult. That applies regardless of your motive for change and the thing to be changed. Regardless of motive, there are tactics applicable to any change. The two major categories of change are processes (e.g., technical solutions, changing policy) and changing the culture of the members of an organization.

Culture is the set of norms that determine acceptable behavior for members of the organization. Norms come from the expectations of your fellow bureaucrats. Your coworkers can model desired behavior and inflict punishments for deviations from norms. The culture of the organization is practiced by members.

The expectations of culture should be stated explicitly. If the explicitly stated norms are in conflict with what is experienced by the organization's members the hypocrisy decimates trust.

Besides modeling desired norms in the organization, there are a few more tactics you can take. Reinforce positive examples of desired behavior with public [Tag] Actionable Advice praise and meaningful rewards. Punish examples of undesirable norms.

Altering cultural norms of a bureaucratic organization means altering member behavior, adjusting incentives to re-enforce the desired behavior, punish undesirable behavior, and provide resources to make the intended outcomes easier.

Although aspects of culture may be problematic, thinking of cultural change as problem solving is not a useful framing. Bureaucrats don't solve problems, they address challenges. The word "problem" implies solution. The problemsolution framing is inaccurate in a bureaucracy since altering the situation merely introduces novel challenges. Even though you don't solve a challenge, you can still get a sense of emotional reward from having improved the situation.

Prior to investing effort in change, reflect on the emotional and career impact of your effort. Will the work bring you joy, or is your emotional reward tied to the outcome? If the outcome is the only source of reward, you'll either be disappointed in failure or you will be more conservative (intending to increase the likelihood of success). The work of creating positive change can be joyful: [Tag] Actionable Advice

you can form relationships and focus on learning.

One of the challenges of change in a bureaucratic organization is figuring out what is worth changing. There are many opportunities for improvement. Talk to stakeholders and enumerate their challenges. From the myriad stories, identify recurring themes and root causes. Typically bureaucratic challenges intertwine technical, budget, staffing, historical context, personalities of participants, and organizational politics.

Select an aspect that you have some competence in and allows for growth. If the challenge is big (many people involved, takes a long time, cost a lot) can it be broken down into incremental challenges? Distinguish wide-scale changes from local changes over which you have more influence.

Having surveyed challenges worth addressing and picked something, Chesterton's fence says

Reforms should not be made until the reasoning behind the existing state of affairs is understood.

Talking to stakeholders in the survey phase may yield tidbits of history. Why have previous efforts been rejected or not taken effect? Written documentation of the history should be augmented by oral folklore.

If your idea has a novel justification for success, identify all possible methods of progress and then rank the tasks. If you can't do all the work, who can you collaborate with? Can you delegate to people with skills you lack, or will you have to gain new skills? If no one has the relevant skills, becoming the widely-acknowledged expert gains power.

[Tag] Folk Wisdom

Creating Change in the Organization

If the organization you are in has no problems or challenges, this section can be skipped. For bureaucrats in organizations that do have issues, this part of the guidebook provides points to ponder independent of the specific problem.

As a bureaucrat, you have unique insight on the challenges the organization faces, and you have unique leverage to alter the situation. While you could proceed haphazardly, an effective bureaucrat has vision. The vision is a story of what-could-be. This vision can be broken out as goals: specific measurable outcomes. Each goal requires contingency plans for achieving the goal. Plans are marked milestones which indicate whether the plan is proceeding successfully.

Perspectives to consider when assessing change include what the situation is, what the situation could be, and what the situation looks like for different stakeholders. Each person has different information, a different way of responding to issues, and shifting intents.

People who you depend on who have conflicting visions or no vision, confounding your ability to improve the organization. There are different views on whether something is actually a problem, distinct characterizations of an issue, and competing priorities.

A trade-off to consider is that having niche impact is easier than broad change (the Dilemma of Scope of Effect). There's also a trade-off of the quick fix versus more robust solutions (the Dilemma of Speed and Accuracy).

Tip: Understand and empathize with the fear of change.

When faced with a challenge, the options are to take action or to not take action. If you take action, the options are failure, success, or iteration. The choice of no action is attractive if you are not suffering. Delay minimizes work, enables beneficial moves since the player can wait out other players, and there are other things to focus on.

Action incurs risk due to uncertainty and costs work to create change.

Fear of failure is justified if and only if the cost of the failure is greater than the value of lessons learned.

Fear of iteration is a fear that the process might be stopped prematurely – before perfection.

Tip: Before starting a new effort, check to see whether this has been tackled before. Learn the history of the problem. Why hasn't this been solved?

[Tag] Actionable Advice

[Tag] Actionable Advice

Tip: Query your first and second order social network.

[Tag] Actionable Advice

Tip: Get feedback early before polishing.

Tip: Advertise the result.

Tip: Hear criticism and respond.

Tip: Leverage both social networks and bureaucratic processes.

Tip: Identify sources of power (hierarchical positions and titles, social influence, reputation and credibility, buzzphrases or popular paradigms) and leverage them.

Tip: Professional respect (for what the other person knows) and professional curiosity (for what you don't know)

Example: Getting approval from multiple overseers in different hierarchies is hard. Often different objectives and incentives.

Tip: Use social recommendations to name relevant individuals.

Leverage the trust already in an existing social network by starting with "Person A recommended I talk to you about X."

Tip: Sit in on meetings, listen to topics, see who is talking, who is attending. After the meeting talk to individuals about the meeting. Set up one-on-one informal discussions. Keep the first conversation brief - 10 or 15 minutes. Your body language should indicate engagement and interest. "Who else would you recommend talking to?" is the last question in the first conversation.

Tip: Consensus doesn't mean everyone agrees on the problem, the remedy, or the approach, or who's taking the action. Consensus in a bureaucracy means people aren't going to resist the change.

5.2 Measuring Bureaucratic Maturity

Bureaucratic maturity of bureaucrats in an organization can be broken into three behaviors: complaining, seeing opportunity, and finding nudges.

The first and most wide spread behavior is to see a problem and then complain about the situation. This indicates awareness of the environment but no creativity regarding what to do about the problems.

The second, less common behavior, is to see a problem and recognize the situation as an opportunity. This requires creativity and reframing.

The third behavior is to see a problem and then <u>nudge</u> the situation towards a vision. The nudges could be through either direct action or by influencing others.

An individual bureaucrat can show one or more of these behaviors. That is, being capable of the third behavior does not mean the person lacks the ability to complain on other topics.

There is not a specific amount of experience within the organization needed to arrive at any of these three paradigms. A holistic understanding of the system certainly helps.

The "vision" of the third behavior could be in the form of a long-term (temporally distant) outcome, or the vision could be of immediate multi-party cooperation.

Chapter 6

Working with other Bureaucrats

You were hired to do a job. That job relies on technical skills you've accumulated through education and experience. Now you're a member of team. You'll need to interact with other bureaucrats for a variety of reasons:

- Delegation of tasks.
- Asking for help.
- Seeking input.
- Offering help.
- Offering input.

While that generic observation sounds reasonable, in practice you encounter significant friction in getting things done. If everyone participating in a process thinks they are doing the right thing, then why are there suboptimal outcomes? Potential reasons include

- Each participant in the process may have limited view of other parts of the process. Each person talks to only to adjacent participants.
- Each participant typically has limited scope of responsibility. They don't need to know everything.

- Each participant typically has limited scope of authority. Even if the person knows more than just their role, they lack control over other aspects of the process.
- Participants typically have insufficient time, resources, and expertise to enact improvements.
- Participants in the process may have a common goal, but different methods for addressing the challenges.

Those are all potential constraints; they don't exclude being effective or improving the process. You can learn what someone else's priorities are and why those are priorities.

Solo work may be more emotionally rewarding due to fewer external constraints, but the cost is complexity and scope being limited to the skills of the individual.

When you can't do everything yourself, you rely on your team and members of the wider organization. You can treat this loss of independence within the organization (deindividuation) as either sublimation (and feel suffocated) or an extension of your capacity and abilities (and feel empowered).

Working with others allows you to occasionally accomplish complex results beyond your own skills or your own bandwidth in spite of collaborators not being under your control. How? Through persuasion.

The challenge of collaboration is to multiply productivity rather than merely sum the output of a set of individuals.

Inside an organization, cooperation/coordination is not held together by internal contracts or even service level agreements. What holds the organization together? Force of will of participants.

The Value You provide fellow Bureaucrats

When you engage fellow bureaucrats as part of a process, you are providing your time, attention, and alertness. To illustrate the relevance of those aspects, consider the following. I can talk to you for 15 minutes of time, but if your attention is directed towards your phone, then you're not fully engaged with me. If you are paying attention during the time we have together but you haven't slept for 36 hours, then your alertness may not be 100%.

6.1 Motivation of Bureaucrats

Appreciating the diverse motives of the bureaucrats you work with is instructive. If you expect everyone to have the same motives as you then you will be surprised by the friction created by diverse motives.

Motivations of participants are rarely "how can I make the organization more successful" or even "how can I sell or produce more product"? Usually motivation is based on personal success in various manifestations, which leads to emergent phenomena which appears confounding to observers outside the bureaucracy.

Each bureaucrat has a motive, even the bureaucrats who do nothing. In an organization where you are a paid bureaucrat, you are either actively working for improvement of the organization, or your existence is parasitic to the organization. There is no "idle" status for paid employees in an organization with limited resources.

As an example motive for a bureaucrat, I want to avoid being too efficient such that I eliminate the need for my job, and not so inefficient that the organization fails and I lose my job. Increasing the efficiency of bureaucracy is good for the organization and the outcomes, but can be harmful to the bureaucrat's career.

Career stability within an organization is a benefit, and it can be leveraged to take more risk. However, it typically manifests as inaction by an employee. There's no harm to the employee in not taking action. If an employee doesn't do anything, nothing bad will happen to that employee. Career stability decreases extrinsic motivation.

Example motivations for bureaucrats: stability (aka job security, the comfort of a routine), money (current pay or future earnings), travel, problem solving, status, exerting power or control, credibility of being associated with the organization (if the organization has a positive reputation), logistical convenience ("the office is near where I lived"), service to people the organization serves.

The consequence of diverse motives is that expecting bureaucratic organizations to be logical, fair, consistent, and efficient is unreasonable even when every participant wants those features. Each bureaucrat thinks, "I am logical, fair, consistent, and efficient." Therefore each bureaucrat expects other bureaucrats to meet those same (unrealistic) standards. Next, anthropomorphize the team or organization and expect the group to meet those standards.

Even if each bureaucrat were logical, fair, consistent, and efficient (they

are not, and neither are you), each person has a different motivation. Each person wants to accomplish something different using their unique skills and referencing their own experiences. Compounding the confusion, each bureaucrat has to coordinate using communication that has latency and limited bandwidth and isn't precise.

An expectation that bureaucracy feels illogical, unfair, inconsistent, and inefficient is a useful baseline. Working against bureaucratic entropy yields improvements even though perfection is inaccessible.

6.2 Bureaucratic Tropes

Any sufficiently large organization will have a diverse group of bureaucrats. From that diversity certain tropes emerge. The value of recognizing these recurring patterns is to leverage their strengths so that you and that person can be more effective.

• Excited intern or new employee.

What you can do: Their enthusiasm can be channeled to take on challenges other bureaucrats are scared of taking on for political reasons. Their naivete should be remedied by pairing with a mentor who can explain the history of the organization and specific challenges.

• Retired in place.

What you can do: Recognizing this attitude allows you to temper your own expectations about their productivity.

- Font of institutional memory. Likes to explain how the current situation relates to his experience 10 years ago.
 - What you can do: You can benefit from talking to this person about historical processes and what has been tried before.
- "Let them eat cake" managers who are removed from challenges and deny the problem is a problem.
 - What you can do: It is worth figuring out whether these managers actually don't care, or if they are busy fighting battles you are not exposed to.
- "Don't rock the boat" people who tried changing the system, didn't succeed, and are emotionally beaten down such that they no longer try.

 What you can do: These people are often creative and can be consulted before you tackle a challenge they have experience with.
- The Patriot who is willing to sacrifice for the organization.

 What you can do: Educate them that there are alternative ways to be effective in a bureaucracy.
- Mismatched person's skills and interests don't match their role, so they are despondent and frustrated.
 - What you can do: You can provide value to this person by networking with them and finding better opportunities.

• Friendly grouch: friendly and helpful but unhappy in their job due to bureaucracy and other hurdles.

What you can do: Provide a copy of this book to increase their effectiveness and improve their spirits. They will be grateful to you and the organization will benefit.

• Detail-oriented: ask them what time it is and they'll tell you how to build a clock.

What you can do: You can serve as their ambassador to other members of the team or organization.

The above personality tropes apply to individuals. If your team works on multiple projects, you may identify project tropes:

• We've always done it this way.

Assessment: The team is scared of change. This change may be known (and be undesirable) or unknown. Change disrupts power.

What you can do: You can brainstorm with the team ways to incrementally improve.

• Individual solutions to systemic challenges. Assessment: Demonstrating small wins helps build credibility.

What you can do: Plan to ramp up in complexity (towards the systemic challenges) and spend the earned reputation.

Not every bureaucrat response to challenges the same way. Understanding the diversity of potential reactions (or inaction) before you encounter them decreases the surprise.

- Solve the problem. This is the engineering approach.
- Solve a simpler problem. This is the Physics approach.
- Solve a more abstract problem. This is the Mathematical approach.
- Solve a different problem.
- Recognize and ignore the problem.
- What problem?
- Assign someone else the problem.
- Redefine the problem so that it is already solved. "That's not a problem, that's how it's supposed to work."
- Apply for resources (staff, training, money) to solve the problem.
- Point to the problem as a justification for more resources.
- Give a talk about the problem.
- Write a paper about the problem.
- Teach a course on the problem.
- Talk to your therapist about the problem.
- Your manager declares the problem solved and gets a bonus.
- Reframe the problem as an opportunity.
- Study the problem in the context of the broader system.
- Study the problem from other people's perspective.
- Explore the impact of the problem on the broader system.
- Develop a set of activities for role playing parts of the problem.
- Solve part of the problem. Then another part.

- Research whether anyone else worked on the problem.
- Find other instances of the problem that were already solved.
- Find similar problems and identify the differences.
- Contract out the solution and select a bid.
- Explain why the problem does not need to be solved.
- Explain why the problem is beneficial.
- Form a team and set a mission statement addressing the problem.
- Slow-roll the problem until you don't need to worry about the problem.

Did you recognize any of those responses from your own past experiences? Were any unexpected?

[Tag] Reflect and Discuss

6.3 Not my Job: Task Scope

If I ask someone for help on a task that benefits our team, that person might respond that the task is "not my job" and time spent on tasks like that "gets in the way" of their progress. The interesting (emotionally rewarding) work is not that task.

'Scut' is medical slang for the non-clinical yet essential tasks that do not require a doctor's degree or expertise. This is different from administrivia (administrative tasks).

"Once I realized someone else has the same problem, I stopped worrying about it." Same as "not my job."

The potential reasons for this reluctance to help include

- Working on the task will not get them promoted.
- Their understanding of the scope of their job and their expertise does not include the task.
- The person don't know how to do the task and they don't want to learn.

In any case, progress for the individual is not aligned with the success of the team.

6.4 Building, Managing, and Spending Reputation

This section is about actions you can take to create a reputation. Even if you don't intentionally build a reputation you still get one. Also in this section: how to spend political capital – both your own and that of your team.

Relevance of Reputation in a Bureaucracy

As a bureaucrat you may want to be all things to all people. Since that is not feasible, you have to limit your scope and therefore disappoint some people. This same dynamic of a limited scope applies to the team you are on, and again to the organization the team is part of. The purpose of a bureaucratic team or bureaucratic organization is to manage a shared resource for a constituency. The constituency will invariably be disappointed.

The good news is that you have influence over how others perceive your limitations. Investing in relationships and conducting creative negotiation with other bureaucrats, other teams, and other organizations shape their perception of your value.

Definition of Reputation

[Tag] Definition

Your reputation as a bureaucrat is what other people expect from you. Reputation is perception. What does that person think of you? Your team? Your organization? Reputation is set whenever and where ever you are observed, or artifacts are associated with you. What you wear matters to how you are perceived. When you show up impacts your reputation. How your written communication is read alters perceptions. People are informed by your body posture in meetings.

Reputation, Brand, Image

There are multiple phrases that all refer to the same concept of being perceived and the associated expectations. Individuals create (or get) a reputation; organizations have brands. A team of bureaucrats can have a reputation.

Your Reputation matters

Your personal reputation within the organization dramatically impacts your effectiveness. People will let you do things (or prevent you from doing things) based on their expectations about you.

Your reputation matters impacts your influence. Whether other people turn to you for input depends on what they expect from you. How other people perceive you impacts what you can accomplish and when people seek out your help or input.

You can Manage your Reputation

Managing reputation means acknowledging that your interaction with others is partially performative. This may feel disappointing if you want to be judged solely on your productivity or knowledge.

Your success is limited if you focus exclusively on doing the work, and your success is limited if you focus exclusively on the performative aspects. Neglecting to manage your reputation means you lose input to the stories others tell about you. Active management of your reputation requires engaging people and generating evidence.

Your reputation is dynamically changing based on your activities and communication. Your communication matters, and the stories other people tell about you matter.

Techniques for Building Reputational Capital

Ideally your reputation would be based on your technical skills, your ability to collaborate with other people, the strength of your network, and your creativity. None of those matters if the person you're engaging with doesn't know those things. You build reputation by doing things that are useful and visible to other people. This positive association is what you are creating.

Because the definition of reputation is about expectations other people have about you, what you choose to work on matters. How you work on your tasks (creativity, enthusiasm, dedication), the artifacts produced, and your ability to communicate all shape your reputation.

When building reputation, you can work on multiple small wins or take larger risk on bigger bets. The bigger bets provide faster leverage of reputational capital as you have demonstrated your worthiness and skill. 156

The same concepts apply to teams of bureaucrats and bureaucratic organizations. Just as individuals compete for resources, teams compete for budget, staffing, and glory. How the team's budget and staffing are spent impact reputation.

A specific technique for building a good reputation is to give credit to others. This may seem counter-intuitive if you are focused on the apparent assignment of credit. What actually matters is that other people observe you (whether directly or indirectly) giving credit.

Similarly, another technique for building good reputation is offering to take blame. Again, this can seem counter-intuitive since being blamed doesn't sound good. The value is in proclaiming your willingness to be blamed such that other people observe your offer.

Using Good News (or Early News) to build Influence

Rather than tell good news directly to a top-level decision maker, first inform the person who influences the decision maker. I tell the influencer the information does not need to be credited to me.

The benefits of this approach include

- Improves the influencer's reputation with the decision maker.
- The influencer has the chance to contextualize the information for the decision maker.
- The influencer has the option to leverage the information in ways I would not have.
- My reputation with the influencer is enhanced.
- I reaffirmed the influencer's role and status.
- Influencers are easier to access.

How to Spend Reputation

Based on your reputation (what the other person expects), what trust does that person have? You can then use that trust to do things that might not otherwise be feasible. You can spend reputation to bend the rules.

Reputation is not the only thing you as a bureaucrat can spend. Other examples include your time (up to you entire career), your ability to be a member

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in the team or organization, your self-respect, and your ability to be promoted or receive bonuses. At the level of the team and the organization, additional aspects to spend are the budget and the staff. Each of these (reputation, time, membership, budget, staffing) are potential investments.

Things I'm not willing to spend: my integrity and my health (physical, mental, emotional).

Whenever you are engaging within your team, you are either actively spending or building your reputation within the team. Whenever you are engaging with people from outside your team, you are either actively spending or building your team's reputation. Because of that, spending reputation means taking risk that involve other people.

Examples of spending reputation and not getting a return on the investment:

- Ask for a favors and provide no value.
- Explorer options that other people don't see as worthwhile and then there's no payoff.
- Produce nothing of value to the organization or other people.
- Talk with people outside your team and misrepresent the efforts of your team.
- Speaking honestly about the faults of your own team to people outside your team.

6.5 Teams are Subdivisions of an Organization

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In the context of altering teams, there are a few major levers available: create new team, merge teams, dissolve a team.

For a given set of teams, the lateral interactions are competitive or cooperative. Coordination is required (or conflict will occur) for money, staffing, and resources. Examples of resources include access to or control of data, computer equipment, hardware, floor space, prestige, products (output).

Roles of Management versus Leadership

Teams include managers and leaders. Those roles are not necessarily the same person.

A manager's role involves time management, task tracking, employee evaluations, promotion, pay, requesting resources for team members, and hiring.

A leader's role focuses on coordinating vision and principles. The vision and principles do not have to originate from the leader – other team members can contribute ideas. The leader's responsibility is primarily social consensus.

6.6 Intellectual Empathy

As a bureaucrat, you will work with people who are smarter on a specific topic than you are. That superior knowledge might come from experience or from formal education.

The person with superior knowledge may be able to convey their knowledge to you, or they may struggle to. That struggle could be due to an inability to break down complex insights, or they don't recognize the mismatch between what they know and what you understand. This same scenario can be reversed – you might be more knowledgeable on a given topic than some other bureaucrat you work with. In either situation, both parties have responsibilities of intellectual empathy. The more knowledgeable person needs to understand what they can build on when talking with the less knowledgeable person, and the less knowledgeable person has to be clear about what is making sense and what does not.

I often start conversations with people who are new to me by asking about their professional background – their education, past work experience, and other aspects that would allow me to build on their existing knowledge. This allows me to tailor the conversation to the gap of knowledge that exists when we are discussing a challenge.

During a conversation you can monitor body language for reactions like a squint, a head tilt, an eyebrow raise or an eyebrow furrowed. Those are common reactions when information doesn't conform to what the listener was expecting.

A more direct method is to ask about the other person's knowledge about the topic. The phrasing "Do you know about (name of topic)?" is less effective than "What do you know about (name of topic)?" Respondents might claim experience or knowledge of a topic, but probing for the difference between "I've heard those words before" versus "I was part of a team that implemented (topic)" versus "I came up with the original idea for (topic)" is helpful.

Sometimes the person with less knowledge on a topic feels uncomfortable with indicating their confusion, or sometimes the person doesn't realize they are missing the main point. The more knowledgeable person can check in with the listener to confirm. "What did you get from what I just talked about?" is a better confirmation than "You understood what I meant, right?" The person with less knowledge can proactively check their knowledge by providing a readback: "Here's what I understood you to mean: ..." These check-ins, regardless of who initiates, should be relatively frequent when exploring complex topics.

Admitting ignorance can be intimidating and may feel like you risk losing the other person's respect. A more gentle way of saying "I'm lost" is "I was following up until the point where you described ..." Intellectual empathy is the responsibility of both parties in a conversation.

Leveraging Expertise 6.7

The definition of bureaucracy is the management of shared resources. Besides tangible items like land and water and air, expertise is another shared resource. Finding people with expertise, vetting expertise, and deploying expertise are all critical skills for bureaucrats.

Experts who accumulate knowledge and experience look for ways to apply their expertise. Finding the right decision makers and providing relevant context for decisions can feel satisfying when positive impacts are made.

In the following two sections I describe both viewpoints: that of a bureaucrat seeking expert help, and that of an expert providing help. Bridging the cultural and knowledge gap in both directions is necessary for the success of a society.

Non-experts seeking Experts

Before you seek expert help, your first instinct may be to try and proceed on your own. Or with help from a peer, or a trusted consultant. How hard could this be? Looks straightforward...

A typical starting point for a challenging decision would be to collect data and then form a narrative based on that. Surprisingly, there are bureaucrats who take the opposite view: Don't measure things; if you do you'll be held accountable for them.

Setting aside the avoidance of accountability for a moment, there is reasoning behind the intent to not measure. Goodhart's law says that "when a measure [Tag] Folk Wisdom becomes a target, it ceases to be a good measure." While there are ways to minimize this (e.g., not telling people what you're measuring), what you invest in measuring should be proxies for what the organization values.

If you decide a challenge requires skills you don't have, anyone with those skills has more expertise than you. Expertise is relative.

Finding Experts

One reason you as a bureaucrat seek an expert is you don't have expertise yourself. (If your motivation is merely to seek an external scapegoat that can be blamed, then getting any expert that appears convincing will suffice.)

To find a relevantly qualified expert, you can triangulate. Seek guidance from your existing social network. Multiple referrals from independent parties are a positive indicator.

Do people defer to the candidate because of the candidate's title or position in the hierarchy, the candidate's experience, or the candidate's knowledge of technical details?

Within an area of expertise there may be sub-disciplines that you are not familiar with. Don't be embarrassed to ask the expert you find what subfield they have experience in, and their evaluation of how well that aligns with the effort you're recruiting them for.

If you're tackling a complex challenge, you may need experts from different disciplines. This introduces added challenges of cross-discipline communication.

Communicating with Experts

Once you find a candidate expert, you'll need to evaluate their expertise and the ability to collaborate. This is inherently difficult since you lack expertise you are seeking.

When signaled solely by credentials, expertise is independent of experience. The expert may lack ability to communicate their knowledge with people outside their domain. A common barrier is use of jargon by experts.

Jargon can serve two purposes: to signal group membership (harmful to people outside the group); and to be more precise about a concept (desirable). An pseudo-expert may use jargon relevant to a topic but not be able to explain Levels of expertise:

- 1. Self-designated expert is unfamiliar with domain-specific jargon.
- 2. Pseudo-expert can use jargon in discussion but cannot expand the definition or provide analogs.
- 3. Pseudo-expert has memorized definitions and has analogies but doesn't grasp underlying relations and principles.
- 4. Expert can map situation-of-interest to underlying relations and principles, then use that mapping to remedy the issue (or explain why a fix is infeasible). The result works and the solution wasn't obvious to non-experts.

Experts are cautious to include caveats and limitations.

Does the candidate use the relevant jargon for the topic?

Does the candidate use the jargon for the topic in the right way?

Can the candidate explain the topic with minimal use of jargon?

What to use an Expert For

Translation process is necessary from "here's what's known in general" + "situation specific facts" to "plan of (in)action" and what's realistic with what confidence.

Experts straying outside their expertise are dangerous because the boundary may not be clear to the audience.

For Experts looking to help non-expert decision makers

Finding the relevant person to provide advice to

How to talk with non-experts

Coherence of data can lead to increased confidence about the results. Having less data may be more coherent.

More data is likely to be less consistent and therefore lowers confidence.

Non-experts think and speak less precisely.

You will need to simplify in the sense of applying to the relevant decisions - funding, staffing, planning.

You, the expert, may not win any debates based on number of years of experience. Some audiences may have many years in the field. However, expertise (rather than experience) is what they can benefit from.

Identify which party (you, the expert, or the non-expert audience) has broader diversity of situations.

Respect and account for the expertise of the audience (especially when they work in a different field). Acknowledge your own limits.

Don't rely completely on expertise as a single dimensional relation. Find ways to relate personally to audience members. They will need to build trust in you personally.

Facilitate the audience setting the goals. They should be able to identify how success is defined.

Identify strengths your audience has and build on those.

You don't have to teach a group all-at-once. One-on-one teaching is more customizable, and the audience may feel less worried about asking dumb questions.

Once you've taught more than one person, they can help each other translate the skill.

Advice for Experts

Being the sole subject matter expert in an organization can feel isolating. You are constantly educating others but the stakeholders are not expected to become your peers. Typically stakeholders want to know just enough to make a decision.

You are unable to ask someone smarter than you. Membership in professional organizations.

Cultivate your replacement.

6.8 Does Anyone Want to Volunteer?

The facilitator of a meeting asking, "Does anyone want to volunteer for this task?" to a group will most often be met by silence. The lack of engagement can be addressed by not asking for volunteers. The outcome can be higher engagement with the following tactics:

- 1. Ask each person whether they are attending to observe or to volunteer.
- 2. Ask each person how much time they are willing to volunteer. Responses could be 0, or 1 hour (non-recurring), or 1 hour per month, or something else.
- 3. Ask each person what their goals in the interaction are. It is usually generic ("I want the group to succeed.") but it can be narrow, in which case that gives you something to focus on.
- 4. Ask each person what they are good at and what skills they have. Are they good with personal interaction? Writing? Computers? Coordinating? Logistics? Fund raising? Making phone calls?
- 5. From the inventory of tasks, are there any that fit both the skills and time? Can the task be scoped to fit the time? If there are multiple candidate tasks for a volunteer, let them pick the task. (If there is no existing task that aligns with their skills, do not create work to be assigned.)
- 6. If there are other volunteer working the same tasks, put them in contact with the other participants
- 7. Give the volunteer a deadline for the task. The deadline should not be arbitrary the deadline should be based on the dependent follow-on tasks.
- 8. Confirm that the volunteer is willing to commit the time to complete the tasks by the deadline
- Schedule a check-in with the volunteer before the task deadline to review progress
- 10. To create accountability among multiple volunteers, hold a group review to explain how each participant's work contributes to the goals and how work done by one person enables the next task done by someone else. (Enumerate the dependency graph; include deadlines.)

Chapter 7

Communication within a Bureaucracy

7.1 Communication is Critical for Bureaucracy

Bureaucracy is a system of distributed knowledge and distributed decision making. In that context, the importance of effective communication cannot be overstated. At the same time, writing and speaking are incomplete and imprecise. This is why iteration is critical when establishing a shared model.

Relationships matter for communication. Metcalfe's law says the value of an [Tag] Folk Wisdom organization is proportional to the square of the number of people interacting in the organization. Broadening your network of collaborations enables your effectiveness and that of your fellow bureaucrats.

If you don't know what is happening in your organization, or you don't understand why certain decisions were made, your confusion could leave you focused on your own self interests since that is what you have some control over and insight on. This same analysis applies to each person in the bureaucratic organization. There is a way out of this harmful cycle: broadcast your intent to other people, be transparent with decisions, and share the results of your activities. That decreases the confusion other people may have about you, and if reciprocated can improve effectiveness.

Feeling saturated with meetings, emails, phone calls, and other coordination may stem from ineffective communication. Communication that is incorrect, imprecise, redundant, and insufficient can be improved. Poor communication

yields poor negotiation. Then the interaction defaults to an emotional struggle of will power.

When a challenge that spans multiple bureaucrats (and may span teams) is recognized in a bureaucracy, a typical response is to hold more meetings (ok for decision making) and send more emails (ok for sharing information). Both these channels are ephemeral. Share information using channels that are discoverable and durable.

In this book I don't address paper memos versus email versus phone calls versus video chat versus Skype versus Slack. The relevant attributes are agnostic to specific technologies and implementations: synchronous versus asynchronous; discoverable or not discoverable; searchable or not searchable.

Communication within a bureaucratic organization occurs on a gradient of how official the information is. Examples of the gradient ordered from unofficial to official:

- I just made this up and I have no authority
- Based on my experience, ...
- Based on my training, ...
- I heard from someone else (folklore from a peer)
- I heard from someone in a position of authority
- Referencing a written document
- Referencing a written document that looks official
- Referencing a written document that looks official with the signature of a position of authority

These indicators convey the relative importance of information for the bureaucrat.

Information within a bureaucracy shapes the relationships of bureaucrats. That spans from not sharing information (which can harm or protect relationships) to being transparent to being vulnerable. Being transparent conveys "here's what is happening." Being vulnerable expands that to "here's why that's happening or what might happen."

7.2 Why of Communication within a Bureaucracy Matters

Taking action informed by locally-available information can produce suboptimal results for participants, as illustrated by the Prisoner's dilemma. Communication among bureaucrats facilitates delegation of work, allocation of resources, relationship creation/maintenance, and carrying out processes. Communication has a cost for participants: time spent building and verifying consensus delays action. There is an opportunity cost when time is spent talking with people.

Communication Reflects and Shapes Your Thinking

Can you turn complaints into impact statements?

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Negative observation: "Logging into my computer takes a long time." Positive statement with explanation of impact: "If I were able to log into my computer more quickly, then I could accomplish more tasks."

 $Negative\ observation$: "The team I need support from doesn't offer a ticket tracking system."

Positive statement with explanation of impact: "If the service team I need support from offered a ticket tracking system, then I would be able to know the status of my request."

Negative observation: "When I submit a ticket for a support request to the team, I don't have visibility on the status of the request."

Positive statement with explanation of impact: "If the service team I need support from offered visibility in the ticket tracking, then I could proceed with other tasks without worrying about the status of my request."

Here's a technique to transform generalizations to action:

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- 1. This organization does not like blueberry pie.
- 2. No one in this organization likes blueberry pie.
- 3. I don't know of anyone in the organization who likes blueberry pie.
- 4. I like blueberry pie, how would I find someone else in the org who likes blueberry pie.

In the first statement we personify an organization. Organizations cannot like or dislike tangible items, so this is a meaningless statement. The second statement is slightly more precise (individual people can have likes and dislikes) though still a generalization and therefore likely inaccurate. The source of the generalization might be your lack of relationships with every member of the organization. That leads to the fourth statement which is correct, precise, and curious.

7.3 Failure to Communicate

Communication is critical in bureaucracy because bureaucracy is a system of distributed knowledge and distributed decision making. When less effective communication occurs, individual bureaucrats are less able to rely on the knowledge of other experts, and they have to make decisions with less consensus.

Decreased Effectiveness in Communication and Some Remedies

Challenge: Allen curve: An "exponential drop in frequency of communication [Tag] Folk Wisdom between engineers as the distance between them increases."

Presence creates priority - go to their desk. I once needed some data from a coworker. After trying email and phone calls, I ended up flying across the country. Once I arrived the person was able to provide the data in a few hours.

Merely sitting next to a coworker, even with no official purpose of interaction, results in spontaneous informal discussions. See the discussion of Prisoner exchange on page 238.

Take advantage of the Allen curve by implementing the Inverse Conway Maneuver. If you know what structure is needed for a product, then design the placement of your team to reflect that.

Challenge: Wiio's law: "Communication usually fails, except by accident." [Tag] Folk Wisdom This pessimistic take is similar to Murphy's law and is indicative of the level of ongoing investment needed for effective communication.

Challenge: Periodic status reports sent up the chain of command get sanitized so that only good news is shared. This impedes risk analysis.

If your reports are getting sanitized, as for a copy of the sanitized version. If you are the person consolidating and aggregating reports, aim for conciseness rather than good news.

Challenge: Decisions by bureaucrats high in the chain of command are not pushed down the chain.

You can request management provide a summary of their activities.

Challenge: To assume makes an ass out of you and me, yet assumptions are [Tag] Folk Wisdom

necessary to making progress in communication.

This dissonance can be addressed by looking for sources of difference and then talking about them. For example, when I talk with someone for the first time I ask what their educational background it. If they have a different degree than mine, I can tune my language to their academic training. I can make my story more relatable.

Another technique for detecting differences is to ask about the person's previous experience. What did they work on previously in this organization? What were their jobs before joining this organization? This backstory can provide context for decisions that need to be made in the current context.

Leveling up Your Communication

There are levels of enlightenment for bureaucrats. If you know the progression, you can step up to the next level more easily.

- 1. I feel bad.
- 2. (complaint) I can't do what I want.
- 3. (complaint) I can't do what I want in the way I want.
- 4. (complaint) There is a problem.
- 5. I have a solution.
- 6. I have an implementation.
- 7. I tried but my solution didn't work.
- 8. (burnout) Life sucks but I get a pay check.
- 9. I quit (in hopes of being more successful somewhere else).

Theory of What Could be Done and Why the Theories are Impractical

To break the Prisoner's dilemma, options are

• Expose all participants to the consequence of outcomes. In practice this feels unfair to each participant because the outcome is partially attributable to other people involved in the process. Dividing responsibility limits exposure to consequences.

- Have all participants communicate. In practice communication takes time
 and skill. Not everyone is willing to invest since communication is not
 seen as "doing the work." Accounting for the Allen curve takes effort. The
 time needed to arrive through consensus at an optimal approach for a
 given situation may exceed time available for solving the problem.
- Limit everything to what can be accomplished by one person. This herobased approach is limited to the attention-bandwidth of the person and their skills. As the complexity increases the necessary skills increase and the number of candidate heros decreases. Large organizations accomplish complicated tasks by leveraging diverse skillsets of teams of bureaucrats.

7.4 Communication Preferences

There are typically multiple communication channels available between bureaucrats in an organization. Rather than focus on specific implementations using specific technologies, consider two variables. The first variable is asynchronous versus synchronous. Examples of asynchronous communication channels include voice mail, email, web forums, web sites, calendars. Synchronous options include phone calls, video calls, in-person, text-based chat like IRC or Slack. The distinction between these can be blurry, like if someone immediately replies to your (asynchronous) email. The second variable is a set of categories: voice (e.g., phone), text (e.g., website, web forums, calendars), video (e.g., calls), and in-person.

The lack of equivalence can be seen in comparing text with audio which has been converted to text. In addition to the text transcription, voice audio also has inflection, volume, volume variation, rate, rate variance.

The relevance to a bureaucrat of identifying these channels is to know which channel is preferred for what purpose. To be an effective bureaucrat there are reciprocal actions. First, you can list your own preferences so that people know how best to engage with you. Second, you can learn and then leverage the preferences of people you collaborate with.

As an example of knowing your own behaviors, do you keep your calendar up-to-date? Or is your calendar irrelevant? Is that preference stated explicitly to the people who might reference your calendar? Is your calendar visible to your coworkers?

Text chat is useful for asynchronous interrupts. Text chats are better than stopping by in person or calling on the phone since in-person drive-bys and phone calls interrupt whatever I'm thinking about or discussing. The purpose of the text chat is either a reminder or seeking a convenient time to talk.

Email is useful for notifications or questions or setting up logistics. If I don't respond to your question or request for action within 2 days, please send a reminder.

Video calls are my preferred method for group meetings. Group meetings via video call scheduled in advance on my calendar are best. Impromptu video calls are acceptable but as interruptive as a phone call.

In-person discussions are my preferred method for one-on-one discussions. Stopping by my desk without an appointment interrupts whatever I'm thinking about. If a calendar invitation is inconvenient, a text chat confirming my

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availability before the in-person discussion is helpful.

Phone is useful when the caller is unable to be present in-person. Phone, being voice-only, is inferior to video calls. Unscheduled phone calls interrupt whatever I'm thinking about. I've intentionally disabled voicemail.

Status updates in electronic issue trackers or wikis or forums are best (rather than email-only). Notifying in text chat or email that a wiki page or issue is updated is helpful but not mandatory.

Given all those caveats, I prefer communication in any form at any time over surprises.

If you're not sure whether you should communicate, default to communicating. If you're not sure whether communication would interrupt something, check my calendar and then communicate. If it's urgent or blocking progress, ignore my calendar.

Know when to switch communication channels. When to start in one channel [Tag] Actionable Advice and then escalate. Text to phone to in person.

7.5 Communicating Professional Sense of Vulnerability

Emotionally vulnerable communication is personal. You are exposing personal issues. This personal emotional vulnerability deepens relationships. The risk is that information could be used to manipulate or harm.

Professional vulnerability is about being transparent about bureaucratic issues. Processes and incentives are reasonable topics of conversation among professionals. The ramifications are felt by individuals, but a bureaucratic process aimed at an individual would be unprofessional.

Discussions of internal intrigues of an organization are a form of gossip among professional. Gossip can be constructive (finding aspects to remedy) and lead to insights and shapes cultural expectations within the bureaucracy. As with personal gossip, professional gossip can risk harm if used against the organization.

As with personal vulnerability, professional vulnerability involves learning who to share what information with when. In interacting with a new-to-me person, I experiment by being professionally vulnerable and see whether they reciprocate or at least explore the topic with me. Being open and direct and curious helps the person I'm talking with feel more comfortable. Shared introspection is the objective.

As an example, I say something like, "Perhaps the reason behind (observation) is (reason 1) or (reason 2)." That gives the other person a chance to brainstorm with me without committing to a position. If the other person is unwilling to explore in depth, reverting to safer topics is easy.

Being vulnerable does not mean the other person will reciprocate. That is a risk on your part.

7.6 Social and Bureaucratic interactions

Interactions with other people in an organization are either social interaction or bureaucratic interaction.

As examples of each of these,

- Social interaction example: "Did you see the game on TV last night? Our team really did well, right? I thought about getting tickets for the game but they were sold out."
- Bureaucratic interaction example: "You'll need to get approval from Sue before presenting your idea to the board for their review. Then talk with Russ and get his thoughts."

Both social and bureaucratic interactions are vital to cohesion in an organization of people.

Bureaucratic interaction can be broken into two subcategories: visible bureaucracy (procedures and processes are written down and can be discovered by stakeholders) and invisible bureaucracy (procedures and processes are known to some stakeholders and are conveyed verbally to some of the other stakeholders).

Invisible bureaucracy is akin to invisible domestic or relation work outside the professional environment. The work associated with emotional cohesion, logistics, planning, scheduling, and communicating is hard to quantify so it does not get counted.

Processes default to invisible bureaucracy because documentation and discoverability require work, and because some processes are embarrassingly inefficient.

To make invisible bureaucracy visible, document the work.

The relevance of this jargon is to break down the components of an organization's "culture" experienced by participants. The ratio of social relationship to visible bureaucracy to invisible bureaucracy is a characterization of the culture. There are norms associated with each of these three categories.

7.7 Communication Tips

The role of verbal and written communication is critical for bureaucrats. Bureaucracy is distributed knowledge and distributed decision making, both of which benefit from effective coordination.

Plenty of advice on effective communication (e.g., enunciate, speak loud enough to be heard, be humble, be curious) exists; the advice below is included because of specific relevance within bureaucratic organizations. However, the following is generic to interactions outside of bureaucracy.

Tip: Not all Interaction Challenges are Communication problems.

Sometimes an inability to discuss ideas is not a communication problem but a psychological deficit of personality. Distinguishing "I'm an ineffective communicator" from "the person I'm talking with doesn't communicate effectively" from "that person has a diagnosed psychological reason they are unable to communicate" is tough for those of us who are not psychologists or psychiatrists.

Tip: Avoid relying on stereotypes.

Within an organization different teams may build up reputations for certain behaviors, or there may be significant events that the team is associated with. When interacting with members of a team that has a reputation, avoid relying on that stereotype or event as an opening for discussion. You're speaking to an individual, so discuss that person's behavior with them. Be curious.

Tip: Avoid questions that have a binary response.

Responding to a request with "no" is helpful for the person replying to the question. There is less work required, less risk of failure, and better continuity. As an example of a poorly framed question, I could ask, "Can I have a copy of the data you're using?" The person I'm asking is less disrupted if they refuse to share.

A more constructive phrasing is "I need information on X to work on Y, and I think you have information about X. How can you help me get information on X?" By clarifying my intent, I allow the person with the data to provide options I may not have considered.

Similarly, when I'm being asked for information, I try to learn the person's intent motivating the question. Sometimes the requester doesn't actually know

what to ask for. Instead of "no" I try to figure out how to enable the person to be successful.

Tip: Leverage the other person's experience while focusing on your own

Advice without context is less effective.

Bad: "Here is what I think you should do in that situation."

Better: "Here is what I did in that situation."

People usually find talking about themselves an easy topic if you are curious about their experiences. If you can learn the other person's background and history and motivations, you can weave that into the advice you provide. Tailoring your message increases the likelihood of implementation.

Tip: Avoid Platitudes.

Platitudes are thought terminating; the statement feels true and is resistant to debate. Platitudes capture a feeling with sufficient accuracy, but with imprecise language. As a result, there's no specific action.

Because platitudes result in a conclusion, the conversation participants may feel more bonded. However, that bond is shallow.

Example platitudes to avoid:

- Pick your battles.
- Some things you can't explain.
- Your time will come.
- You can be anything that you want to be.
- I just want to get through this day.
- It is what it is.
- I'm just one person.
- That's that.
- Life's not perfect.
- Life's not fair.

- There's only so much you can do about it.
- What is meant to be will be.
- It is God's will.
- It's part of God's plan.

If your goal is to understand a concept or issue deeply, you need to use precise language.

Tip: Strive to use Precise Language

Imprecise language causes miscommunication. Intent is unclear, as is expected consequence. Typically people get away with imprecise language because their actions are inconsequential. Only when the consequences matter does the problem of imprecise language manifest.

Tip: If you have a specific definition for a word central to the topic of interest, ask your new collaborator for their definition. Do not expect others to share your definition even when there are established norms for the topic.

Tip: Instead of asking a collaborator, "Are you taking action on this topic?" ask "What actions are you taking on this topic?"

Tip: If someone claims, "We plan to get to that action," ask for a timeline. A deadline can be for an artifact or a re-evaluation of the topic.

Imprecise language takes less cognition to create and can take less time to convey. Thinking harder about how to precisely convey an idea takes effort. The importance of precise language is proportional to the potential consequences of action/inaction/wrong action. Precision also should be proportional to the complexity of the topic being discussed.

Tip: Word is Bond

Your communication (verbal, written) is your reputation. People rely on what you tell them even if there isn't legal recourse. Reliance on your word is why precision matters.

Frustration and disappointment follow when you don't uphold your word, or others misinterpret your imprecise language, or you are misunderstood.

Communication implies responsibility for the content. There is a corresponding accountability in the relationship between speaker and listener (or writer and reader).

Tip: Take care near the Boundaries of Knowledge

Trying to find someone else's extent of knowledge is tricky – they don't want to appear stupid. They may interpret the exploration at a trap. "I don't know" can be an embarrassing statement to make, even if you don't share their embarrassment.

Knowing the limitations of your own knowledge and disclosing those boundaries to others is critical. Distinguish what you know from speculation about things you don't.

Tip: Listen all the way to the last word of the speaker

Formulating a response to the first part of an idea or a sentence is tempting. Waiting for the speaker to finish before thinking of how to response is courteous. Waiting creates a pause which makes you seem more thoughtful.

This is complicated by the speakers who include long pauses for contemplation and then resume.

Tip: Stop speaking over other people

Crosstalk occurs two people who are communicating verbally experience interference from another audible conversation. That can occur because a third person is talking at one of the original two participants, or when four or more people are holding two separate conversations concurrently.

Crosstalk in a bureaucracy is motivated by limited time available to communicate. A meeting participant may feel inspired by something someone else said and want to interject. Crosstalk can indicate engagement and enthusiasm, or it can be due to the speaker wanting to dominate the topic through interruption. The likelihood of crosstalk is dependent on the level of aggressiveness of participants. In either case (enthusiasm or power-seeking), the original speakers are disrespected. The original speaker may feel annoyed at being interrupted.

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The audience is frustrated by the lack of clarity of where to focus. This distraction causes participants to lose of focus and productivity of the interaction decreases.

[Tag] Actionable Advice

Bystander intervention for out-of-control meeting: raise your hand. This non-verbally reverts focus back to the discussion facilitator.

Tip: Account for Warnock's dilemma

Warnock's dilemma is the common experience of figuring out how to interpret not getting feedback. This is especially vital in meetings where the speaker or facilitator needs to gauge participant comprehension of delivered content. Simply asking "Does anyone not understand what I just described?" is likely to get no response from attendees because individuals want to avoid looking stupid.

Technique: Pick an individual to provide a recap.

[Tag] Actionable Advice

Technique: Survey the audience using multiple choice to gauge understanding.

Tip: Seek action with a Deadline

[Tag] Actionable Advice

When asking someone for help or input, specify a deadline for their response. This helps the person rank the urgency of their tasks.

Tip: Make Deadlines Explicit

Typically requests have two deadlines. The first deadline is when a response is sought. The second deadline is when a response is no longer useful.

As an example, suppose I am inviting people to a meeting. I send the invitation 5 days before the meeting and I want to know who is able to attend by 3 days before the meeting. The second deadline is the time of the meeting. Replies after that second deadline do not help me understand who is going to attend.

Tip: Identify the cause of miscommunication

 miscommunication the cause is often due to definitions of words used or differences in context. In this situation, more time spent communicating and taking different approaches is sufficient to remedy the issue.

- A speaker may be inarticulate. If the speaker is unable to coherently convey their internal experience to a listener, then the communication failure is of a distinct category. No amount of added communication will lead to improved understanding on the part of the listener.
- A speaker simply has nothing to say about a subject. Regardless of whether they are capable of articulating a concept, they may be unable to relate to the topic. Often a person in this situation still wants to take part, but they are unable to meaningfully contribute.

Empty talk is the use of words that are ill-defined, emotionally resonant, inactionable, and impersonal.

Tip: ask-tell-ask

Collaborating with fellow bureaucrats who have expertise in areas you do not requires extra work. There may be differences in the words used to describe certain situations, more precision in wording that you're used to, or thinking about situations in ways you are not familiar with. In that context, to bridge the differences you can ask, tell, ask¹.

The first step is asking what the other person's perspective is on the topic. This helps establish the appropriate level of nuance is and can tell you how that person frames the issue. The second step is to tell the person what you want to say. The "tell" step should leverage what you learned from the first "ask" step. Use phrasing that is consistent with what you just learned from the other person. The third step is to ask the person what they heard from you. If they are unable to tell you, you may need to refine your delivery. To improve the likelihood of success keep the content in the second step short.

The ask-tell-ask technique can be used iteratively in the same conversation, especially in discussion complex topics with a new collaborator. Using ask-tell-ask takes long than just telling but increases the effectiveness of the communication. You also get to learn more about the other person's perspective.

[Tag] Actionable Advice

Tip: Initial responsiveness and status updates

In a bureaucracy requiring approval, or asking for input, sometimes waiting can provide value to the person doing the waiting. The request may be overcome by

^{1 &}quot;The 10 Building Blocks of Primary Care: 'Ask Tell Ask' Sample Curriculum" and Ask-Tell-Ask: Simple Technique

events, or the person asking may remind which indicates priority.

Whether you are the only recipient or one of many receivers can change the intent of the email. Whether you are in the "to" or "cc" field matters. Unfortunately, "to" versus "cc" are not reliable indicators since email senders do not reliably conform to the expected use.

An email sent to multiple recipients may have different purposes for different readers. The reader's role or knowledge may factor into how they interpret the content. The inclusion or exclusion of recipients alters how the content is understood.

Tip: Don't seek Attribution for Contributions; Credit Others

Give credit to others for good ideas and beneficial actions. Either they accept credit and you are seen as a contributor to their success, or they push back and you look generous. Credit is not a zero sum game.

Tip: Offer to take Blame

Before an action begins, tell collaborators that you are willing to accept blame if something goes wrong. This alleviates their fear of risks.

Tip: Survey Stakeholders

Suppose you are a Peace Corps worker in Africa. You show up and the village doesn't have easy access to clean water. Villagers walk a long ways in dangerous areas for dirty, unsafe water. This is an obvious problem and all the villagers agree that they don't have good water and that this problem should be fixed.

Enacting the solution would take about a week - get the equipment to the village, drill a well, build a pump.

You could take more time and involve the villagers in this project. They could participate in getting the equipment, which should lead to a sense of ownership. But then when the equipment shows up, they don't drill the well. If the well is drilled, it soon falls into disrepair and the villagers are back to doing things they way they used to. What happened?

The villagers don't see access to clean water as the most significant issue. You came in and imposed your view of what the problem is and how to fix it. When you impose your view of what the problem is, the solution

[Tag] Story Time

won't be adopted by villagers because they don't prioritize it. It is better to survey the community to see how they operate. What do they think the problems are? Both leadership and the community members need to provide priorities.

This issue is exacerbated if you come to the village as a representative of a company providing wells. You are biased when you ask, "Do you have any problems?"

Of course the villagers have water problems which could be fixed with better wells. However, when you get into the details of placing or improving a well, they lose interest. What the community really wants is free installation, zero maintenance, easy to use, and no operational costs. That would improve their life.

When you say there's cost (both initial investment of capital and then operations/maintenance) and a learning curve associated with the solution, then the user's interest wanes – you are presenting another cost/benefit ratio for them to evaluate. Then they ask "Can we get by without the well?" Yes, they don't need the well – they've survived without it.

Novel solutions (in this example, drilling a well and installing a pump) have barriers to adoption. Two barriers are the current priorities of the community and the incumbent solution/processes.

If there are problems with higher priority, the community will delay enacting your solution. That's fine if the higher-ranked priorities are bounded, but they are often not. An example of this is the following: Suppose a person has three tasks, and you introduce a solution which is a fourth task. If the first task is "go from point A to point B," then that task will eventually be eliminated and there will be three remaining. If the second task is "secure your village," that is an unbounded task. The person won't get to or won't prioritize your low-ranked task.

How will your solution impact their higher-ranked priorities?

If enacting all these tips sounds like a lot of work, that's because it is. Effective written communication requires intentional effort because of the lack of augmenting channels (compared to voice or video or in-person).

Summary of what action should be carried out

As the outsider, you should help the community enumerate and document all of the problems they identify. Then you can help enumerate and document how the problems are related (dependencies). Only then can you help the community identify and document the root causes.

If the solution you, the outsider, identified really is the root cause, then the community will arrive at that independently. If that is the case, then you can enable them to enact a solution which addresses the root causes. The community will then have a sense of ownership.

Tips for Emails and Reports 7.8

For general writing tips, see Strunk's and White's Elements of Style and other resources ².

Why written communication does not happen

- Too many reports, emails, and messages to read and process and respond to. Bureaucrats feel emotionally and cognitively overwhelmed.
- The receiving bureaucrat may read slowly.
- The bureaucrat-as-author may type slowly, or their hand writing is poor.
- Potential participants fear imperfect communication. What if the email is incomplete or inaccurate or ambiguous?
- The bureaucrat views written communication as "official" or "plan of record" and does not feel comfortable brainstorming or creating contingency plans
- The bureaucrat wants to avoid accountability for their statements.
- The bureaucrat may not be confident in their writing ability spelling, grammar, sentence composition, structuring content. ³

Email and Reports do not Constitute Communication

Asynchronous communication has no requirement of a response or action. That's what makes it asynchronous. Any communication that occurs is merely incidental.

Written documents as notifications: Email can be used to documenting that you told someone something -

Email as a task request: Putting a task in another person's queue may or may not be read, and may or may not be acted upon.

²LEADERSHIP LAB: The Craft of Writing Effectively and LEADERSHIP LAB: Writing

Beyond the Academy

³For tips on writing, see The Elements of Style and DoDM 5110.04, Manual for Written Material

Email: A Piece of Art, A Form, and A Game

Email is Structured: Originality is not a requirement in bureaucratic writing. Plagiarism is acceptable. The consistency of a Mad Libs template is efficient.

Email is a Piece of Art: Effort invested in each email to improve readability means more than careful wording. Use visual cues (different fonts, different font sizes, highlighting, font color) and pictures to improve readability. See figure 7.4 for example.

Email is a Game: Email is a game of documenting decisions and responses so that the sequence of interactions is clear for audits and recrimination.

Email Responsiveness

There are three tiers of email responsiveness. Which level you are at depends on the speed of your reading, how fast you can write, number of incoming emails, number of outgoing emails, and how much time you allocate for email.

- 1. You are able to read all emails and reply to all emails.
- 2. You are able to read all emails and reply to some.
- 3. You are unable to read all incoming emails.

The following scenarios are focused on case 2, where you are able to triage (skim) emails but do not have enough time to respond to each.

In a situation where you have insufficient time, which of the following emails do you reply to? An email from your boss, an email from your peer, an email from a person who reports to you, or a person who you do not know? (The ratio of these email categories is not one to one to one.)

The email from your boss is likely the top priority. Of the remaining emails (peer, subordinate, unknown), the peer email is likely the next priority. The subordinate and unknown person are likely last.

The consequence of triage is that when there's insufficient time available, your transparency to subordinates and unknown people is likely to decrease.

Let's consider another scenario requiring triage of email. Three emails come in. One has no action, one is easy to reply to, and the third is difficult and takes time. Which one gets the response? As with the previous scenario, the ratio of these emails is not one to one to one.

The email that is easy to reply to gets answered first. The email that is difficult is second. If you only have time for one of the emails, it's likely to be the easy one. This is an example of ambiguity aversion. As a consequence, outsiders see this as you demonstrating bike-shedding; also known as the law of triviality.

Email Tips

Email Tip: Good emails balance enough context (the why) and relevant details (the what) against conciseness (word count).

Email Tip: Emails convey both emotional tone and facts. Your intent as an author is practically irrelevant; the reader's perception is paramount.

Email Tip: Use consistent design and structure for your emails. Emails are part of your professional reputation.

Email Tip: Emails start with a greeting: Hi, Hello, Good morning, Good afternoon, Good evening. Email greetings include the name of the targeted recipient(s).

Email Tip: Emails end with a professional closing, e.g., "Kindly", "Regards", etc.

Email Tip: Emails have a signature block with contact information – phone number, normal hours of response, which timezone you're in if your team spans timezones, how long to wait for a response before asking again, which communication channel I prefer, etc.

Email Tip: Email signature blocks do not include unnecessary images, as that uses more storage for recipients. Email threads focused on a specific instance of a recurring event include the date (YYYY-MM-DD) in the subject line.

Email Tip: Based on the purpose of the email, example key phrases for subject lines include: "meeting notes" versus "agenda" versus "question about".

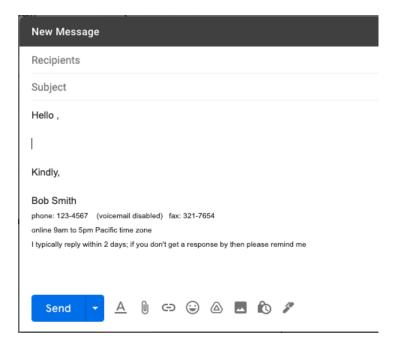


Figure 7.1: Template for new email messages. Greeting has a space after the comma – that is where the recipient's name will go. Signature block uses smaller after the name.

Email Tip: Revising an existing subject line can disrupt the ability of email software to thread conversations. However, sometimes the revision is worth breaking threading.

Email Tip: When replying to an ongoing thread, keep the original message as part of the thread to provide readers historical context.

Email Tip: When replying to threads with sensitive messages, sanitize the included content by removing name or identifying details.

Email Tip: If an email has multiple requests or questions, at the top of the email (after the greeting) explicitly say how many of each type. Then, in the body of the message, number them.

Email Tip: If an item corresponds to a requested action, separately highlight the action and indicate who is supposed to take the action and what the deadline for response is.

Email Tip: Computer commands should be distinct separate fixed-width font. This distinguishes the text from the rest of the narrative.

Email Tip: References to documents include a direct full path.

Email Tip: If referring to a previous separate thread, include the subject and the date+time that email was sent

Email Tip: For bullet points, explicitly specify that items are joined by one of the following: OR, XOR, AND.

Email Tip: If you have an unordered list, explicitly state that order is irrelevant.

Email Tip: If you have a sequence of steps, number them and indicate which steps are required versus optional

Email Tip: Use visual sketches to illustrate concepts rather than always relying on text. Don't use pictures all the time, and don't have too many pictures in an

	New Message
	Recipients
	Subject
	Hello Mary,
	Two questions for you:
	1: What happened with Jane? She looked upset after the meeting.
	2: When is Bill returning to work? I saw he wasn't at his desk today.
	Kindly,
	Bob Smith
	phone: 123-4567 (voicemail disabled) fax: 321-7654
	online 9am to 5pm Pacific time zone
	I typically reply within 2 days; if you don't get a response by then please remind me

Figure 7.2: Distinct items the recipient should address in a reply. A good subject for this email would indicate there are two questions you are seeking answers for.

weekly discussion on boat rowing meeting notes for 2021-10
Recipients
weekly discussion on boat rowing meeting notes for 2021-10-08
Hello Mary and Jane,
This week the topics were X, Y, Z.
For X, the oar is not in the water. action for Jane: check whether the oar is made of wood; reply all by 2021-10-12
For Y, the rudder may be broken. No action
Kindly,
Bob Smith
phone: 123-4567 (voicemail disabled) fax: 321-7654
online 9am to 5pm Pacific time zone
I typically reply within 2 days; if you don't get a response by then please remind me

Figure 7.3: Who has what action due when? The meeting notes are for a particular instance of a recurring event, so YYYY-MM-DD is included in the subject.

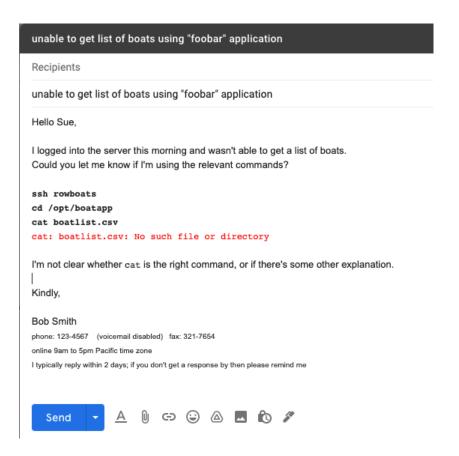


Figure 7.4: The computer commands use fixed width font. The author distinguished input from output through the use of bold vs non-bold respectively. The author highlighted the error message using red. Inline text like "cat" in the last line is also fixed width.

email.

Email Tip: Know how to both embed pictures inline and how to attach files and when to use which. Email replies should preferentially be at the top of the thread. If replying to multiple points in the previous email, embed replies inline, mark the distinction, and highlight the authorship.

Email Tip: If replying inline, explicitly state that at the top of the thread.

Email Tip: If the email is longer than a paragraph, provide a B.L.U.F or tl;dr or summary. In general emails should be short. Longer discussions should be held on the phone or in person, with a summary report after the discussion. Reliance on a BLUF or tl;dr risks resulting in the reader skipping the content.

Email Tip: Every email should have a purpose. What are you asking the recipient to do? How do you want them to feel? How should they respond?

Email Tip: When replying, starting your email with an expression of gratitude for the work the recipient has done so far sets a positive tone by acknowledging their investment.

Email Tip: Read each email/report to determine the purpose.

Problematic behavior: First you scan the text of a message to see if there is immediate action or response needed. If no action or response is needed, go to the next email.

That may not work for emails that have logistics associated with future events, or emails that alter your perception of the situation.

If you read an email to figure out the purpose of the email, that will help determine what action and response are relevant. Here I'm using "action" to refer to activities outside the email channel.

Below are potential intentions of the person writing the email.

Decision needed. Typically includes context.

Action: if the team maintains a decision log, update that. Response is selection of a choice.

Tip: Instead of asking for a decision, ask if the person is opposed. See section 8.11 on page 240 for more details.

reproducing an issue	
Recipients	
reproducing an issue	
Hello Sue,	
See my replies below in purple.	
Kindly,	
Bob Smith phone: 123-4567 (voicemail disabled) fax: 321-7654 online 9am to 5pm Pacific time zone I typically reply within 2 days; if you don't get a response by then please remind me	
From: Sue Sent: Friday, October 8, 2021 9:16 AM To: Bob Subject: Re: Rowing in one direction Good morning Bob, Three questions:	
1: when you use "docker run", what is the command you're using? [Bob] I'm using docker run -it <name image="" of=""></name>	
2: when you use "foobar epsilon", what command are you using? [Bob] I'm not sure what that means. Are you available for a phone call later today?	
Send ▼ <u>A</u> ① ← → △ ⊕ △ ■ ♠ ✓	

Figure 7.5: Bob's reply to Sue's questions. The third question is not shown in this illustration.

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Tip: Instead of asking for a decision, ask for the go-ahead. This framing biases the respondent towards action (specifically approval) rather than thinking.

Situational awareness.

Action: Expected default is no action, but interject if there's an issue.

Action or Tasking.

Action: Do something within some deadline

Approval sought.

Action: Confirm or deny

Feedback sought.

Action: Assessment of proposal

Meeting logistics. Can be an announcement (widely available), registration (limited attendance), or invitation (specific to you). Attendance is either optional or required.

 $Action: {\it Create or update a calendar event. Response should restate the logistics (time/date/location/purpose) to confirm.}$

Brainstorming

May provoke a response for building on an idea. "For your situational awareness, no action needed." Notification of activity by someone else. Or change in plans. If needed, a correction to the described direction might trigger a response or even a meeting.

Reference e.g. describing a process, or a business workflow, or a citation. *Action*: Copy process documentation to wiki. Copy citation to bibliography. Acknowledgement response thanking the sender for the update/clarification.

Setting a formal policy or issuing an informal edict

Action: move the policy/edict documentation to Confluence or Wiki Acknowledgement response needed only if the edit is aimed at just me or the group I am leading.

Question

If this is a recurring question, move to a "Frequently Asked Questions" page on Confluence or Wiki. Response needed that provides answer or seeks clarification.

7.9 Friction between teams within an organization

Ideally there is a clear division of responsibilities among teams. Even in that context there is necessarily some interaction among teams – one team may depend on the output from another team. Coordination among the teams regarding transfer of data or products or projects or knowledge is critical to the smooth operation of the organization.

An organization has finite staffing, money, time. Therefore, teams within the organization face a zero-sum distribution of resources.

Difference of decision making perspective based on local conditions, stupidity, or different incentives, different definitions of success

When attempting to resolve friction between teams, there is an authority common to the teams, but that person lacks the nuanced insight, doesn't have time to get involved in every challenge, and doesn't want to micromanage multiple teams.

Stakeholders care about the outcome of a decision. In some sense, every participant in an organization is invested the outcome of every decision made because there is consequence to how resources are divided and the direction of the organization. Every org member has an opinion, even lacking experience or expertise.

7.10 Financial models of communication

Late to a meeting is theft, and poorly written email and email to the wrong people has financial cost.

Meeting time compared to theft

In large organizations, there can be significant bureaucracy associated with even small purchases. A multi-step review process may be incurred for a \$2000 acquisition.

Another measurement of value is that if an employee were to steal even \$200 worth of materials, the organization would likely punish that employee.

In the book High Output Management [24], Grove points out that those metrics apply to tangible goods, but not to people's time. Consider a meeting of 10 people and each person's cost is \$200 per hour. A wasted meeting is not unusual and certainly would not incur bureaucratic review processes. The cost to the organization is fiscally the same – \$2000. Similarly, consider an employee who is late and causes a loss of productivity. Merely depriving the organization of \$200 worth of time is not punished in the same way theft is.

In fact, organizations default to meetings (even recurring meetings) rather than not meet. And being late to a meeting is accepted.

We can debate the differences between theft of materials and theft of time. The financial argument is clear.

Email is not free

Total cost of email:

- time spent writing
- time spent reading
- infrastructure maintenance

[Tag] Math

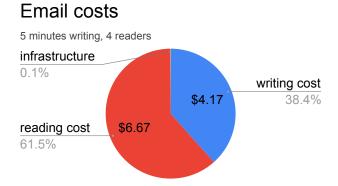


Figure 7.6: Breakdown of costs for Equation 7.2. If \$21 for an email doesn't seem too significant, consider the broader releavnce to the organization. If email consumes 2 hours a day per person, and staffing is 50% of the organizations budget, then 12.5% of the organization's budget is spent on email. The same math for applies to meetings, so that's 25% of the organization's budget on coordination.

Cost per email = (hourly rate of writer) * (time spent writing)+

(hourly rate of reader) * (time spent reading) * (number of readers)+ $\frac{\text{annual salary of maintainer}}{\text{number of emails per year}} + \frac{\text{email server cost}}{\text{number of emails per year}}$ (7.1)

Plugging in some numbers, suppose an author charging \$50 per hour spends 5 minutes writing an email to 4 people. Each of those four people also charge \$50 per hour and spends 5 minutes on reading.

$$50 * (5/60) + 50 * (5/60) * 4 + \frac{100000}{1000000} + \frac{10000}{1000000} = $21$$
 (7.2)

for one email!

Math

7.11 Well-run meeting

Explaining how to run an effective meeting (the scope of this section) is easy. Explaining why meetings are ineffective is a Nash equilibrium. No one player benefits by reducing the number of meetings or effectiveness even though the group would benefit. So we all sit in ineffective meetings.

The scope of this section is distinct from the processes covered by Robert's Rules of Order⁴.

Form relationships and understand constituents before the Meeting

Nemawashi

Don't invite everyone

Identify essential attendees. If someone does not need to be present, tell them in advance that you will share the meeting notes afterwards.

Create and use an Agenda

Bad: no meeting agenda Good: Have an agenda.

Better: Share the agenda with other participants. Having an agenda keeps attendees focused. Enables tracking of progress during the meeting so participants are more likely to get to all topics.

Best: For formal meetings, share the agenda in writing before meeting. Sharing the agenda in advance allows attendees to prepare.

Forces conspiring against agendas: takes time to create an agenda. Attendees might not take the time to read beforehand. Attendees may not stick to the agenda during the meeting.

Ensure facilities are adequate

For formal in-person meetings verify meeting venue has enough space, seating, working IT equipment. For formal virtual meetings ensure participants are familiar with virtual meeting controls. As a bureaucrat you may not see taking

⁴I have not used Robert's Rules of Order for a meeting internal to a bureaucracy. Inside bureaucracies I'm aware of Robert's Rules of Order does not appear to be commonly used.

care of details like this as your responsibility. Ensuring well-run logistics and effective use of infrastructure may not be your area of expertise, you lack training in this domain, it's not in your job description, and you won't get promoted for taking care of it.

Attention to detail outside the scope of your official duties benefits your reputation. Proactive concern for the smooth operation of the bureaucracy enables efficiency in time and resources.

Fire alarm or other emergencies.

Body language matters

If you are not speaking, are you reclined or leaning forward on the edge of your seat? Are you looking at the speaker?

If your eyes are closed, other people don't know if you're picturing something or falling asleep.

If you approve of something but don't want to verbally interject, a thumbs up is useful signaling.

Take and share Meeting Notes

Meeting notes are more detailed than the agenda but less detailed than a transcript of who said what. Meeting notes synthesize the discussion. Meeting notes specify follow-on who is taking which actions with what deadlines.

See also the discussion on why meeting notes do not get taken.

Facilitator ensures Presenters are Capable

Does the presenter know how to project materials? How to present slides?

Facilitator's ground rules

To run a smooth and productive meeting, I explicitly state two ground rules to the attendees:

- If you want to talk, raise your hand and I will call on you. If there are multiple people wanting to talk, I'll track the order of speakers.
- If you talk too long, I'll cut you off.

This approach is critical when there are many people present, when people with diverse backgrounds are present, or when there is a mixture of dominant and submissive personalities present. If a visual signal like hand raising is not used, reliance on verbal interruption defaults to dominant personalities. Waiting for a person to finish speaking doesn't work for everyone because some participants will use more than their fair share of time, speaking for a long time needs to be addressed regardless of whether an intentional effort to exclude others or a consequence of verbosity.

As a facilitator, my focus is on structure (distinct phases of the discussion) and ensuring participation. I remove myself from taking part in the discussion.

Facilitate Asking Dumb Questions without Feeling Intimidated

Asking a question of an expert from a position of ignorance can feel intimidating. You may worry you're wasting the expert's time. In a recurring meeting a facilitator can address this by having participants write questions on paper and submitting anonymously. The questions or discussion topics can then be raised at following meetings.

To facilitate the anonymity every participant must be given paper and pen, and every participant must write something on the paper. The facilitator then has to collect the paper from each participant. For contributors who don't have a question, they can write down feedback about the meeting.

This technique allows the expert to get the information needed for a response, or to figure out who the best person to respond is.

Collect feedback from Attendees on How to Improve

Follow up with meeting attendees to get feedback on how to improve.

7.12 Characterizing Meetings

Characterizing meetings is critical to distinguishing which norms are applicable, and what people expect from the different formats.

Types of meetings: internal meetings, customer meetings, conferences, scheduled one-on-ones, impromptu walk-around.

Many potential purposes of a meeting:

- To gather input from attendees.
- To make a pronouncement to attendees.
- To educate.
- To brainstorm ideas.
- To make progress towards an goal.

When the purpose is not explicitly stated, confusion arises. When multiple purposes occur in one meeting and the transition is not explicitly stated, confusion arises. The reason for this confusion is that the assumptions and expectations and norms of each purpose are different. When the attendees don't know the purpose or the purpose shifts, the expected behaviors and roles are unclear.

An attendee can ask what the purpose of the meeting is during the meeting but that is generally considered rude. An attendee can try to deduce the purpose of a meeting, but this takes time and attention and can result in the wrong conclusion. An attendee can try to set the purpose of the meeting during the meeting, but this can conflict with the intent of other attendees.

A meeting's purpose can shift during a meeting. If done intentionally, the changes should be stated explicitly. Otherwise an attendee may continue to work under the previous set of expectations rather than the current norms.

Level of formality, start time (early — on time — late), end time (early — on time — late), utility, duration, number of attendees, number of speakers, number of participants.

Meetings involve people, either known or strangers. Meetings involve information, either relevant or irrelevant. Relevant information is either new or related to previous work. Meetings either have a leader or no leader (brainstorming). If there's a leader, the leader may be disseminating info to participants, or gathering information from attendees.

Phases of a meeting

- 1. Establish understanding of what the topic is. Without a shared focus and a common goal a meeting is unlikely to be productive.
- 2. Set aside topics that are not the focus. Either discuss outside the current meeting or defer to a later meeting. Managing scope is critical to accomplishing the goal.
- 3. Establish a shared language specific to the topic and to the participants.
- 4. Establish each participant's viewpoint on the topic.
- 5. Brainstorm options.
- 6. Build consensus or nominate a decider.

Walk-around imprompt u meetings

Meetings aren't constrained to occur in conference rooms around a table with everyone seated. Walking around the shared office space and having conversations with coworkers can be an intentional form of informal meeting.

Ambushing coworkers when they aren't expecting interruption takes tact. As the (potential) interrupter, you need to be sensitive that other people may not want to be interrupted, while others seek diversion from their current task. If you're the person being interrupted by the coworker walking around, you have the right of deferral.

Walking-around and finding people to talk with can be for social engagement (see more on page 177) or to discuss tasks you are working on.

In the American Revolution, Baron von Steuben and George Washington both did walk-around meetings to understand needs of the members of their army.

One-on-one check-in meetings

Formal one-on-one meetings of a supervisor and a team member. Opportunity for the supervisor to coach the team member and for the supervisor to learn what the problems are on the team. From the team member's perspective, a one-on-one is an opportunity to ensure alignment with the team's direction and to provide insight on how to improve the team. Education in both directions.

One-on-one discussion take lot of time, so the mindset "no news is good news" or "everything is going well, no need to engage" is tempting. As a consequence only negative feedback causes interaction.

One-on-one meeting questions for helping the supervisor understand the team member's status. The one-on-one check-in should be tailored to the phase of the employee's progression. Frequency of check-ins depends on the newness of the team member, the complexity of the work, or how quickly the conditions are changing.

1. Name of phase: Welcome to the team!

Scenario: New team member, either new to the team or new to the organization.

Here the focus of the one-on-one is to ensure a smooth on-boarding process. Get them up-to-speed on the technical challenges, professional norms, and integrated with other team members. Resolve administrative blockers: Does the employee have the necessary computer log-in accounts? Do they have an email account? Are they on the mailing list?

Questions:

- What are the goals for the team?
- What items on the onboarding checklist are not yet completed?
- Who have you met on the team? What is your understand of their role on the team?

The duration of this phase could last between a day and two weeks.

2. Name of phase: Initial contributions

Scenario: Team member handles small tasks.

The one-one is for discussions on training and planning and task reviews. Characterized by the team member being dependent on others for their success. In this phase the employee collaborates on tasks.

Questions:

- What are the goals for the team?
- What are your task goals?
- What are you expecting to deliver to the team? When?
- What dependencies does that deliverable have (external to the team or internal to the team)?

The duration of this phase could last a few months to years.

3. Name of phase: Experienced contributor

Scenario: Team member handles large tasks (which get broken into subtasks).

The one-on-one is to help the team member define their success. Activities include planning, resource allocation, assessment. Characterized by the need to coordinate with others on the team or other teams. Team member understands task scope and intent and relevant processes. Team member decomposes task into subtasks.

Questions:

- How do the artifacts you're working on support your plan for the team's progress?
- What dependencies does that deliverable have (external to the team or internal to the team)?
- What insights do you have about the team or organization?
- What insights do you have about the relevance of the task relative to the intent of the organization?
- What should management be doing to enable the team's success?

The duration of this phase could be the rest of a career.

4. Name of phase: Facilitator

Scenario: Facilitating the productivity of others.

Rather than being task-oriented, this team member supports coworkers. Questions:

- What observations from mentoring team members do you have?
- What collaborations should we be fostering?

5. Name of phase: Peer

Scenario: Peer check-in.

This one-on-one is a form of mentorship. The value of the exchange is to get a different perspective and to hold each other accountable.

To evaluate when a team member and their supervisor should move to the next phase in the evolution, have an explicit conversation about the threshold for progression.

In addition to phase-specific questions, there are questions that fit all phases. A supervisor should ask the team member

- What have you been successful with since we last met?
- What is blocking our team's progress?
- What are your plans?
- How are you collaborating with the rest of the team?
- If there was just one thing you could change about our organization, what would it be and why?
- How do you plan to train your coworkers on topics you understand and they don't?
- What have you learned in the past month?
- What are the biggest risks for the team?
- What's limiting your productivity?

Responding to these questions takes time (an hour) and willingness to be open.

If the supervisor doesn't ask these questions, the team member has the ability to include these in the agenda and to bring them up.

A one-on-one meeting requires preparation. Before the meeting the team member should document

- What was discussed previously.
- What progress has been made since the previous meeting.
- What is blocking progress.

One-on-one meeting questions to spur discussion

Not sure what to discuss? An extensive list of questions on topics like career development, conversation starters, and job satisfaction are available on https://github.com/VGraupera/1on1-questions.

⁵comments

7.13 Bad Presentation

Occasionally I attend a bad presentation. The slides may appear slick but the content is poorly thought out. Or the presenter does not understand the topic well. Or the presenter has good content but does not convey it well. Or the presenter is wrong about the topic. Regardless of the cause, I assume the presenter is making their best effort.

I could remain silent, complain, criticize, ask leading questions, or offer constructive feedback. My silence may result in other attendees and the presenter leaving with incomplete or wrong information. If I speak up I'll prolong the meeting or limit the presenter's time to convey their material.

My assessment of the presentation may be wrong. I may lack relevant information. A reliable technique for interjection is to assume a state of confusion instead of confidently asserting the presenter is wrong. If I believe the presenter is wrong, asking about the source of the information is a good entry point.

When the information is correct but presented poorly (or above the level I understand), I ask for clarification.

Chapter 8

Bureaucratic Processes

If you haven't pondered bureaucratic policies and processes before, consider your own personal habits. You might eat at the same time every day, or you might go to bed at the same time. Those are both examples of personal policies. In the same way, bureaucrats in organizations seek routines to decrease uncertainty.

Comparing bureaucratic processes for organizations to a person's habits is intended to make the concept relatable to your experiences. Both are routines which ease the burden of decision making. A habit can be intentional (e.g., my policy is to brush my teeth before going to bed), just as a process can be designed. Habits can be unconscious (e.g., arriving at work without recalling driving there), just as processes can arise without design.

An intentional habit of an individual person is motivated by a personal policy. Similarly, bureaucrats acting on behalf of an organization apply processes that support the policies of the organization.

8.1 Definition of Process and Policy

A bureaucratic process is a sequence of tasks, with each task invoking policy enforcement by bureaucrats. The policy of an organization is a decision about what action is required, allowed, or not allowed.

A process has inputs and outputs. A process can be decomposed into other processes. Processes operate on both information and tangible objects. Processes require work and time. Processes are carried out by people or machines.

The alternative to process is an exception – see page 227 for more details. Creating and maintaining processes is burdensome, as is dealing with exceptions. This is the Dilemma of Consistent Policies.

There are options for responding to policies and processes. You can

- Accept them. The default for most bureaucrats in an established organization.
- Intentionally break them maliciously. Typically limited to a small number of participants.
- Intentionally break them for disruptive innovation. Your perception of innovation may be indistinguishable from malice for other bureaucrats.
- Be ignorant of them. This may initially be easier for you but causes friction for everyone else and results in you being less effective.
- Work in an environment where the rules have not yet been set. Here you
 are limited in scale or complexity, or you will need to form new policies
 and processes.

Processes are typically divided into separate tasks associated with distinct roles. The distinction of roles originates in skill specialization, separation of responsibilities, and narrow authority. When there is insufficient staffing then individual bureaucrats have multiple roles. This can lead to a conflict of interest among the roles and is experienced by the bureaucrat as a dissonance. For example, when one person has both the responsibility to implement the plan and review the completed implementation, the oversight is ineffective. ¹

Processes are important for organizations because they create a defensible story for the bureaucrats involved. The processes are not correlated with fair distribution of the shared resource managed by the bureaucracy. Management of

¹For a formal mechanism of documenting roles, see the Responsibility Assignment Matrix.

shared resources require policies, and implementing policies require processes. The processes are one step removed from the management of the shared resources.

The above observations are theoretical and generic, but there's already some practical relevance:

- The point to understanding concepts like process and policy is so that you know when to work within versus work around, when to accept versus change, when to ignore, how to leverage, and how to design.
- As a bureaucrat you administer a process. When you do that, check that
 the person you are inflicting the process on can explain the steps back to
 you. If they cannot, their confusion will likely create more work for the
 bureaucrats.

[Tag] Actionable Advice

 As the subject of a process, check that your understanding of the process is consistent with the bureaucrat's intent. Summarize the next steps and applicable deadlines so they can confirm.

The simplification necessary for making policies and the neglect of specific circumstances results in process friction. Process friction manifest in waste of resources (tangible or expertise), temporal inefficiency, emotional frustration, and social distrust of institutions.

Types of Process

The generic definition of process above obscures distinct subcategories. In practice there are three types of processes: heroic, bureaucratic, and social.

A heroic process is exemplified by a single person or a small number of people doing the work associated with a specific task. The person may be acting in multiple roles and typically relies on expertise from multiple domains. This approach is not sustainable as there's significant dependence on the hero(s). The heroic process is a common pattern because it minimizes the work of other bureaucrats and is more efficient because there's less hand-off between bureaucrats. The heroic process may cause demoralization of the hero and result in burn-out.

Processes with fewer people and fewer steps can be quicker and use fewer resources, but they are more fragile and are less representative. Having more people involved helps with edge cases but slows down the process. Hero culture is rarely an intentional design; it is based on personalities and cost to the

organization. Redundancy like having a buddy system (pair programming for software, RAID 1 for data storage) costs more in the short term.

The arguments against hero culture center on the long-term benefits of resilience and scalability. Those motivations lead to the next type of process.

A <u>bureaucratic process</u> is a sequence of steps with each step administered by a different bureaucrat. The steps of the process may not be communicated to process participants, which often causes frustration when the subject of bureaucracy has to discover each step sequentially. The number of steps in the bureaucratic process may seem onerous to subjects going through the process because of the multiple interactions with different bureaucrats (compared to the heroic process). The process often takes longer than desired due to loss of information and context in the hand-off among bureaucrats. The participant has to re-explain the same background to each bureaucrat.

In contrast to heroic processes and social processes, bureaucratic processes are associated with forms (paper or electronic). Forms are meant to ensure consistent application of policy, and to catch people who shouldn't get the resource (both in cases of accidental request and malicious request). For malicious requests, a more burdensome process merely filters the low-cost grifters.

A <u>social process</u> is undocumented and relies on relationships instead of hierarchy. There is a strong sensitivity to prior experiences of the bureaucrats and on the skills of the people involved. There is no single person that represents or manages the social network, so the entry point is through relationships with bureaucrats who have existing connections.

Once distinctions are recognized, tactics can be used to address the challenges associated with each.

If you are blocked by the hero of a heroic process, you can try waiting until the hero leaves. Given burn-out and turn-over, sometimes this is only a few years. Alternatively, you can try creating a positive relationship with the hero. If you're the hero and don't want to be, look for ways to transition to bureaucratic or social processes.

For the social process, participants are swayed by reputation more than title. Prestige and reputation matter. Doing favors for participants helps. Bring cookies and donuts and brownies fosters relationships and good will. Instead of bringing food when a favor is needed, bring food on a recurring basis before the favor is needed.

Social processes can work well for small tasks that are infrequent. Social processes can be effective in anomalous situations.

[Tag] Actionable Advice

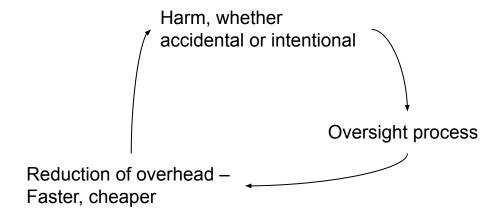


Figure 8.1: The harm-oversight-improvement loop that motivates policies and processes.

Bureaucratic processes are useful under typical conditions. When you are forced to use a bureaucratic process, avoid starting with the most important or hardest problem. Send a test dummy through the sequence of steps. This enumerates the process, provides a measure of the time needed to get through the process, and identify key personnel. In an ideal bureaucratic process your reputation wouldn't matter. That assumption turns out to not be valid.

Thinking of bureaucratic processes in opposition to social relationships is a false dichotomy. Bureaucratic processes are formalized versions of interactions intended to displace the need for social relationships among bureaucrats.

When no process exists, only people with relationships succeed. Processes enable novices to an organization to contribute value and gain experience.

Processes (whether heroic, bureaucratic, or social) are not consistent because relationships vary – both among the bureaucrats administering the process and the person going through the process.

8.2 Why do Processes Exist?

Bureaucratic organizations manage shared resources (tangible or expertise). A subjective decision about a resource that is administered by bureaucrats is a policy. Processes inform the decision making of bureaucrats and result in access to or denial of shared resources.

The following sections provide more explanation for why organizations rely on processes. The reasoning matters to you as a bureaucrat when you design a process or try to revise an existing process. Similarly, as a person going through a process, the reasoning below explains why you are experiencing process friction.

Processes Ensure Consistent Application of Policy

Organizations are designed to be insensitive to individual participants; that applies to both bureaucrats and subjects. Processes address risk to the allocated resource and risk to the bureaucrats carrying out the process.

The risk addressed by the use of processes is both current bad behavior and the potential of things going bad in the future. Process is the guardrail limiting harm to bureaucrats and the shared resource.

One motive for bureaucracy is the tragedy of the Commons, which says that when there is a shared resource someone will try to get away with behavior that is harmful to the community of users. Limiting harmful behavior can take the form of oversight processes. If oversight processes are not in place malicious actors dominate.

Another example guardrail is keeping stakeholders informed (justifications) so that intervention can be taken if needed.

In isolation each process for oversight/review/approval may be justifiable, but the aggregate can feel unreasonably burdensome to both subjects and bureaucrats.

Processes exist to Simplify

Compared to an ad hoc approach, processes are intended to simplify what could otherwise be complicated moral decisions, coordination challenges, or financial assessments.

A positive view is that specialization allows narrow focus and thus deeper understanding and skill. An alternative perspective is that specialization allows for dumbing down the role, thus enabling a cheaper workforce. In that view process allows dumb individuals to, as a group, do complicated things. As a specific example, consider the process of designing and building a car. That complexity is feasible to undertake for a skilled and knowledgeable individual, but the cheaper approach is to hire individuals capable of installing the passenger-side doors in an assembly line.

The relation between complexity of a task and skill of the bureaucratic workforce is another motive for the creation of processes. See figure 2.1 on page 43 for a visualization of the trade-off.

Processes Enable Increased Throughput

Processes that leverage specialization can improve scalability. Adam Smith's pin factory example cites a productivity gain of 240x. Similarly, the introduction of moving assembly lines in Ford's car factory produced an 8x improvement of throughput ².

While social processes may work well for low-volume ad-hoc requests, formalized bureaucratic processes become necessary for recurring high-volume activities.

Processes Decrease Reliance on Social Relations

The relation between bureaucratic processes and social bonds was noted by Selznick in his 1943 paper [49]. The needs of individual members of an organization may be at odds with (or at least not aligned with) the purpose of the organization. This dissonance is observed as the interplay between personal relationships and bureaucratic processes.

Generalizing claims about social bonds in an organization is unfounded. For a given complexity and given scale, there are people who are more social and less social and therefore desire more or less process. There are bureaucrats who want documented processes and are confused as to how things are operating when those aren't present.

The invisibility of social relationships limits bureaucrats not attuned to the importance of these bonds. Social influence among bureaucrats lacks transparency–discoverability and documentation. In contrast, processes are easier to understand and to track. The counter to social influence is the hierarchical

²Wikipedia entry describing Ford's assembly line

org chart described on page 23. Social influence is not antithetical to processes. There's always a mixture of the two.

Processes Help New Bureaucrats and Subjects

Bureaucrats new to a team are likely to ask, "What are the processes and where is the documentation?" Bureaucrats who have been on a team for a long time say, "Don't burden me with processes, I just need to get things done using the relationships with the people I have." One motive for processes is to help with onboarding team members who don't have relationships available.

Besides not having formed a social network, there's a second reason new people seek processes. New team members who recently graduated from school are used to the existence of formal processes at the high school or university level. Therefore when they join a job, they expect a similar set of conditions for processes to exist and follow.

Once this motive for processes is recognized, the relevance when onboarding new hires is apparent. New hires will need to discover the existing processes while they form social bonds. Discovering processes comes through oral folklore or written documentation. To augment both process discovery and creation of relationship, one technique is to have new hires sit with experienced team members. This is described in the section on Prisoner exchange on page 238. Where you sit matters to your effectiveness as a bureaucrat.

[Tag] Actionable Advice

Processes exist as Artifacts for Promotion

Processes can arise organically (bottom up) or be created top-down. In either context, creating new processes counts as bureaucratic innovation. Process creation is confused as promotion-worth because of the distinction between novelty and innovation. Real innovation incurs risk, whereas new processes are merely novel. Both cause change, but processes are typically designed to decrease risk.

8.3 Riding the Chaos

Bureaucratic organizations are not perfect. Somethings work, others do not. A bureaucratic organization is a complex and chaotic³ environment. A natural response is to impose processes and hierarchy and roles. Imposing structure can feel intellectually fulfilling and emotionally satisfying. Imposing structure looks like progress and may even help with your promotion in the hierarchy. The challenge (or continual source of employment) is that chaos is dynamic. A process created in response to chaos create new problems and is disrupted by changes in number of staff, changes to who is part of the process, changes to amount of work. The half-life of structure depends on the rate of change of tasking and the rate of personnel turn-over; see page 243.

A bureaucrat in the organization could strive for perfection, run away from the chaos (to something less chaotic), exploit the chaos, or adopt an attitude of "I do what I can" or "I'll wait out the problem." Another option is to build skills for navigating the chaos of a bureaucratic organization.

Build and maintain your network of connections with fellow bureaucrats. This augments the chain of command of a hierarchy. There is a turn-over in both hierarchical roles and in your professional network, which means you need to continually invest effort in creating new bonds and maintain existing relations.

[Tag] Actionable Advice

See change as an opportunity for improvement rather than a destruction of your previous investments. The sunk cost fallacy applies to your emotional state and the resources you invested. Fear of change is understandable – it disrupts the comfort of stability and known processes. Anticipating change and preparing for it ease the stress of change.

Leverage personalities and unique traits rather than expecting everyone to be interchangeable and treating differences as flaws. By knowing the strengths, interests, and weaknesses of coworkers you can facilitate the process of change.

[Tag] Actionable Advice

 $^{^3}$ Chaotic in the mathematical sense of non-linear dependence on initial conditions, not just colloquial sense of disorder

8.4 Automating Processes

For a workplaces that deal with intangibles the sequential process of evolving towards of process automation are well-trodden. (When physical objects are involved, then robotics is necessary for automation.)

The evolution of automating a process involves

- 1. Identify who is involved in the process. How did the process get created and how has it evolved? Who evaluates success of the process?
- 2. For existing processes transition verbal folklore to written documentation.
- 3. Transition from plain text documentation to structured data. Examples of structured computer-parsable text include decision trees and workflow diagrams. Implementation could be in Graphviz or Powerpoint.
- 4. Collect metrics (for example, number of times application was opened, time spent on webpage) for existing manual processes to enable cost evaluation for enacting automation. This is the modern version of a time and motion study.⁴
- 5. Implement stand-alone software (scripts) for each task using personal automation tools like PyAutoGUI or AutoIt.
- 6. Tie the scripts in the previous step to the task workflows from step 2.
- 7. Create an automation assistant that actively monitors your activities (keystrokes, mouse clicks, on-screen events) to detect repetitive actions that are candidates for automation.

The skill of identifying opportunities to automate depends on practical skill (what are you capable of) and experience.

Automating bureaucracy from the bottom-up can be augmented and supported by management. At the organizational level, there are system-level changes like

- Hire people who desire automation and the skills to enact automation.
- Use tracking bits in PDFs and webpages to collect data on how systems are
 used. This decreases the burden on process participants to report metrics
 and can be less biased since it does not rely on self-reporting.

 $^{^4{\}rm see~https://xkcd.com/1205/}$ and ${\rm https://xkcd.com/1319/}$

- Provide a metrics aggregation service. The ability to store metrics from multiple teams enables a holistic perspective on the organization and can help identify chokepoints. Without the ability to view the entire organization, premature optimization is likely.
- Align incentives (e.g., pay, promotion) with implementation of automation.
- Transition from paper to PDF to website to API. To read about how this worked out at Amazon see ⁵ ⁶ ⁷.
- Members of bureaucratic teams should be trained to develop software, share code, use APIs, create APIs, and maintain APIs.

⁵https://gist.github.com/chitchcock/1281611 ⁶https://news.ycombinator.com/item?id=3101876

⁷https://news.ycombinator.com/item?id=27566676

8.5 Processes typically involve a Person new to the Process

Bureaucratic processes require working with other people. One source of friction is that participants may lack familiarity with the process.

This observation can be quantified with a small number of assumptions. The distribution of employee tenure might fit a power law distribution – there are more inexperienced people than experienced people. What matters in this context is how long the employee has been in their role (rather than how long they've been a member of the organization). Therefore let's assume a max tenure of 10 years⁸. If the process involves 5 people, the least experienced member will have a median 97 calendar days of experience.

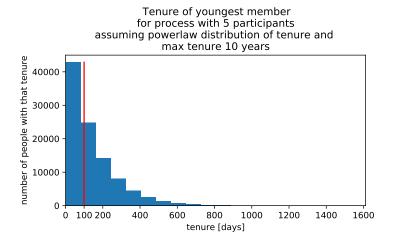


Figure 8.2: With power law distribution of tenure, a=5, the median tenure of the youngest participant in a process with 5 people is 98 days.

Three calendar months (or 70 business days) may be inadequate for complex processes or processes that are infrequent (quarterly or annual), especially if there was no training. When the number of participants is 10 people, then the median tenure of the youngest participant is 51 calendar days (37 business days).

To recap, the assumption made were

• Random independent sampling of organization members.

 $^{^{8} \}rm https://www.bls.gov/news.release/pdf/tenure.pdf$

8.5. PROCESSES TYPICALLY INVOLVE A PERSON NEW TO THE PROCESS225

- Tenure in role matters, not tenure in organization. (Excludes transfer learning among roles.)
- Tenure in role fits power law distribution.
- The power law distribution is characterized by (a=5, max tenure=10 years).
- There are 5 people involved in the process.

If that last parameter is varied, the 3 month estimate is reasonable for processes with 5 or more participants.

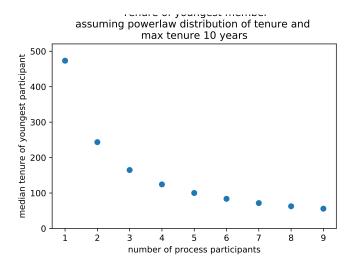


Figure 8.3: Median tenure of the youngest participant (in calendar days) as a function of the number of process participants with tenure following a power law distribution, a=5, and max tenure = 10 years.

Even when there's a single participant, the median tenure is less than 2 years because of the power law distribution of tenure.

What if the power law distribution of tenure were replaced with a uniform distribution? Surprisingly the shape of the distribution of youngest participant's tenure is not uniform, see Figure 8.4

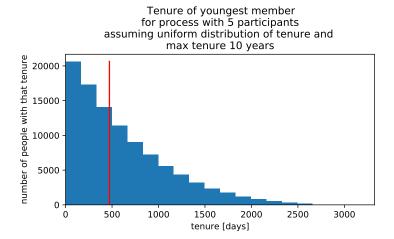


Figure 8.4: With uniform distribution of tenure, the median tenure of the youngest participant in a process with 5 people is 472 days.

The median tenure of the youngest member of a 5 participant is 15 months.

Exceptions to a Process 8.6

Process designers are usually motivated to address a specific issue. When bureaucrats execute a process to support a policy, there may be cases that violate the designer's assumptions. Now the person with the exceptional case and the bureaucrat carrying out the policy have extra work to deal with the broken process. This is a source of bureaucratic debt.

When the routine process seem inadequate, there are routes for exceptions:

- Correct the process to address the exceptional case.
- Ignore the process.
- Ignore the task.
- Seek an exception to the process. Exception can be recurring or one-time. The justification for the exception can be based on social capital (title, reputation) or be a data driven argument or some mixture of both.

The designer of a process may not be able to anticipate future circumstances, but expecting the capacity to be responsive to change is reasonable. The process designer should use sunset provisions and escape hatches. A sunset provision can [Tag] Actionable Advice be time-based (this policy expires after 3 years) or based on a threshold (this policy expires after 1000 cases). An escape hatch specifies the conditions under which the participants are excepted from the policy.

Time Sensitivity of Exceptions

Routine, priority, urgent, stat. Each is a time bound, varies by domain and by location. 9

⁹http://docport.columbia-stmarys.org/EHR/PhysicianOrdersPriorityandDeptServiceHours.aspx

8.7 Process Mistakes

Any process involving humans incurs mistakes ¹⁰. The purpose of pondering bureaucratic mistakes is to come up with limitations on the ability of mistakes to cause damage.

Why fixes are Difficult

Imposing checks meant to reduce mistakes creates more bureaucracy. Oversight roles carry prestige in an organization, so checks intended to limit mistakes propagate up the chain of command.

Why fixes Fail

The path of information from the person with a problem to the person who can address the situation may pass through many people.

The consequence is familiar to people who have played the game of telephone.

The person with problem explains the problem to the helpdesk staff member. The helpdesk staff member hears the problem with incomplete context and from their own frame, then relays it to their manager, who talks to the manager of the engineering team, who delegates the responsibility to the engineer.

This is a solvable problem: the engineer could talk with the customer.

At each hand-off there is a significant chance the information is unintentionally mangled.

Where Process Mistakes come from

Mistakes in a process can originate from the bureaucrat who inflicts the process, in the hand off between participants, or from the subject of the bureaucratic process. Typically there are more checks on subjects and fewer on bureaucrats.

Choices about Mistakes

As a process participant, I may cause a mistake or observe a mistake. My options are to can ignore it, fix it (which incurs extra work), or report it. If I chose to

[Tag] Story Time

¹⁰Muphy's law

report it, I can do so an onymously (which decreases the risk of harm to my reputation, but also eliminates feedback) or with my name so that discussion can occur and I get feedback.

8.8 Change Existing Processes

Bureaucratic Inertia

Creating an organization, staffing, funding, getting office space, setting up communication technologies, and creating processes is a significant investment of time and money and people. Changes to the size of an organization (making it larger or smaller) to better reflect the scope of task and the number of tasks has a lag. Changes to processes or creating new processes displace how participants think of their roles, or rely on new skills.

Seemingly simple tasks like buying pens incurs significant overhead of work and time.

Another source is the over-subscription of tasks to amount of attention available and resources available. The response to some tasks is necessarily delayed or left unaddressed, impeding workflows that depend on those outcomes.

Why Processes Change

When impact of activities in an organization is unclear, bureaucrats are promoted based on change, not improvement.

Any Nash equilibrium is constantly being upset by the change in conditions and change in people (who have varying motives).

Processes change over time because the conditions change. Processes are implemented differently than intended because the people implementing them are not the same people who came up with and designed them

Why Change a Process

Why change:

- To make an improvement to an existing processes that are working as desired (i.e., a more clever solution).
- Improving an existing process by undoing mistakes previously made.
- Inventing a new process where there previously was not one.

If you recognize that processes are evolutionary, then the right response is to allow and look for iterative change (fail fast) rather than trying to create static processes.

How to Change a Process

Top-down:

benefit: unified vision enables global optimization.

inefficiency: can't see all the details from the top, so solutions may not fit well. resolution: better reporting up the chain.

Bottom up:

benefit: each component in the hierarchy has local control, sees local aspects, and creates solutions for the local problem.

inefficiency: local optimization across multiple components in a workflow can yield suboptimal outcomes.

resolution: each local component acts with same objective

Segment your stakeholders into

- people interested in active collaboration. They may not share your zeal, but finding shared activities is helpful for participation.
- people who passively support the activity but do not provide resources.

 May provide feedback or enlarge the coalition
- people who don't care and are not engaged.
- people who disagree with you. Seek these contrarians out to refine the idea or scope. Negotiate
- people who are actively working against you. Try to understand their motives. Not through speculation, but by direct discussion. Written communication is inadequate.

Which segment a person is part of changes as your scope and timeline shifts. Their activities and priorities may cause their position to evolve.

- 1. Humans use OODA loops.
- 2. To change an organization, change the OODA loops of participants.

- 3. Not all humans are equally important in an organization. For that reason, surveys may be misleading. Organizations typically have a few dominant participants the mavens. These people may or may not be leaders in the organization.
- 4. Use a social implementation of Page Rank to find the relevant participants. In a one-on-one interaction, ask the person who they would recommend talking to. "Who else would you recommend talking to about this topic?" is the last question in the first conversation. To start this search process, simply start with your first-order social connections. Cover both low-level participants and the chain of command.

Leverage the trust already in the social network by starting conversations with "When I spoke with Bob he recommended I talk to you about <name of topic>."

Changing complex processes is hard because individuals involved in the process may depend on steps that are not visible to other people.

Processes do not exist in isolation ¹¹.

¹¹https://www.hyrumslaw.com/

8.9 Deployment of Processes: Policy Update

Deploying a new process in a bureaucratic organization has similarities with product management and project management.

Transitioning from legacy processes to new processes impacts the bureaucrats involved. Reasonable innovation or improved efficiency has to overcome legacy investments. People can feel threatened by change of role or skills.

Incompetent people can innovate just as much as well-informed experts, but the output of inexperienced people is more likely to be disappointing, wasteful, or even harmful.

Design processes to prevent bad people from joining the process, detect them when they are in the process, and remove them when they do not change their behavior. Simultaneously, enable and detect good ideas and promote them and give them resources. Promote efficiency, have enough justification so that something goes wrong there's a clear track of why without burdening too much documentation.

When designing a process, look for ways to minimize the impact on the people involved. Minimizing work (both physical and mental) for the people involved means less sensitivity to entropy in a bureaucracy. Minimizing work requires significant situational awareness on the part of the designer. To minimize effect on existing bureaucracy, it's vital to minimize the requirements to achieve success.

Similar to product deployment in that similar dilemmas are faced.

Deployment of processes and products need to account for normal users, Power users, malicious users, and edge cases.

Innovator's Dilemma applies within bureaucracies to policies and processes.

Diffusion of Innovation

Internal Product Development and Deployment

Teams in a bureaucratic organization

- consume from outside-the-organization
- consume from within-the-organization
- produce to outside-the-organization
- produce to within-the-organization

This section focuses on the relation between teams that produce to withinthe-organization and teams that consume from within-the-organization. Tools or products that are created internally and consumed internally.

Feedback mechanisms and incentives in a non-profit monopoly. The claim of success that a team created a product that met all design requirements on-time may have no actual benefit to users. Or maybe a product that benefited internal customers was created and there were happy users, but the originating team has to quickly move onto the next project to create another success and thus has no attention to on-going support. Determining the metric of success is tricky. do you want to aim for highest average happiness of stakeholders, or are some more important?

captive users who have little leverage

Slowing Deployment of Processes

Three tactics which inhibit deployment of changes within a bureaucratic organization are stonewalling, slow rolling, and red herrings.

Stonewalling is when the recipient of a request or question simply doesn't reply. There are legitimate reasons for a lack of response. The person may be busy and didn't see your message, or they did see your message but didn't have a chance to reply yet because a response to you is lower priority than other tasks they have. I'm unable to differentiate those from when the recipient doesn't want to enable me to proceed. They may disagree with my objective and see silence as less confrontational than explicit rejection.

One way of circumventing stonewalling is to ask if the respondent is opposed to your idea. Then a lack of response indicates no opposition. This tactic applies if you are confident the recipient will read or hear the message.

An unintentional source of stonewalling is when you ask on the wrong channel. Sending an email may result in what appears to be stonewalling if the person relies on chat messages or the phone. The solution for this is for the person who only uses certain channels to explicitly indicate that. An automatic out-of-office email that says, "Contact me by phone" tells the sender the preferred channel.

If you need time to think or gather information before responding, tell the person asking that you acknowledge their message and will follow up in more detail later (with a specific timeline).

Slow rolling is when you get a response to your request or question, but the response isn't helpful. There is a delay in the outcome because you have to

[Tag] Actionable Advice

[Tag] Actionable Advice

[Tag] Actionable Advice

iterate to get an answer. There are valid reasons for a slow roll and there are uncool reasons for a slow roll response. Perhaps the person wants to acknowledge your request but doesn't currently have time to provide a full explanation. The person may need to gather more information for the complete response. Or the person may understand your question and does not want to enable your progress.

The reason for a slow roll should be made explicit by the respondent, and a [Tag] Actionable Advice timeline for a complete response is helpful.

Bikeshedding is when the recipient of a question or request focuses on unimportant details relative to the primary topic.

A <u>red herring</u> response is misleading, whether intentional or not. The respondent provides what looks like a reasonable answer but results in unproductive work. Occasionally there is a coincidental benefit of discovering something unexpected, but that wasn't the intent of the respondent.

8.10 Processes involving Two Organizations

When two independently-managed processes interact, there can be friction. Process friction, especially between two organizations that lack shared coordination, results in either exceptions to the process or lying or change in process.

[Tag] Story Time

Data Transfer from one Team to Another

Suppose there are two teams, each with a data storage and data processing capability. Allen's team sends Bob's team data on a weekly basis. The two data storage capabilities are not compatible. Members of Allen's team prints all the records (usually about a hundred pages) and then delivers them to Bob's team. Members of Bob's team then has to retype in all the information.

Recently the office went paperless. Now Allen's team sends Bob's team a set of PDF files. Member's of Bob's team type in the content from the PDFs into the database for Bob's team.

Why doesn't the organization common to both teams hire a data scientist to automate the recurring data transfer? Or train the current staff to learn to program a solution? Or create a third team that manages a common server?

Because the current staff skill set supports printing and typing data entry. Training someone with a new skill set takes an investment of money, time, is an opportunity cost, and makes them a flight risk. Hiring a data scientist is expensive. Whether the task is feasible is uncertain, and how long the task will take is uncertain. Even once they create a connection, then a person with the skill set to maintain it is needed. The cost of ongoing maintenance and implementation is unknown. Known working suboptimal with known cost versus unknown potential improvement of unknown degree for an unknown capital and ongoing cost. And if that improvement works out, staff who were implementing the old solution now need to find new work.

Example of coordinating processes between two Organizations

Example: receipts from one process submitted for reimbursement to another process. Submitting the receipt shifts the accountability and justification burden

to the accepting bureaucrat.

[Tag] Story Time

I have dental insurance. I visited the dentist December 2 and one of the procedures during a routine cleaning was "bitewing x-rays." This procedure is covered by my insurance, so I was surprised when I received a bill for it from my dentist.

I called my dentist and they explained that the dental insurance had declined to pay for the procedure. I called the insurance company January 3 and they confirmed that the procedure was covered by my policy. Every time I call the insurance provider I had to provide my social security number, date of birth, and zip code twice – once to the automated system, a second time to the person I talk with. The insurance company apparently had made a mistake and said they would cover the cost of the procedure. I followed up with my dentist and explained the situation.

I called the dentist to see if they had received payment yet. They had not, so I called the dental insurance provider again February 6 and 8. February 8 the insurance company said they would process the payment within 7-10 business days. I called again February 20 and the claim hadn't been started within the insurance company. I spoke to the supervisor and she said she would personally visit the claims office within the insurance company.

From the perspective of the dentist, they are seeking money for the service they provided me.

From the perspective of the insurance company, delaying payment on a claim makes good financial sense – the policy holder is likely to just pay the balance to avoid going to court with the dentist.

From my perspective, the question is whether chasing this issue makes financial sense. I think of my hourly rate as \$40, so after an hour the charge of \$38 would have been better to pay out of pocket. Effectively I'm devaluing my time. The emotional stress and thought-cycles spent are also relevant, though harder to quantify.

Streamlining bureaucratic processes does not occur automatically. There needs to be both incentive to change and authority to make the change.

Deploying Bureaucrats to Different Teams or Organizations

One method of addressing friction between teams or organizations is to deploy a person. This may not result in a specific change, but it can help members of both the originating team and receiving team better understand their counterpart. For the rest of this section I'll use "team A" as the origin and "team B" as the receiver, though the concept applies to exchange of organization members. The name of the bureaucrat in this example is Mark. This example covers an informal deployment in which Mark remains employed with team A. While Mark is with team B he provides the management of team A with a weekly activity report.

The easiest question regarding Mark's deployment to team B is "how long?" That depends on the purpose of the exercise and the complexity of the work Mark will be doing with team B, as well as how long team A can operate without Mark's contributions. What is a successful outcome for Mark? For team A? For team B? For the organization? How long will integration of Mark onto team B take? Does Mark need time on team A to delegate current work?

A deployment harms the productivity of originating team A by loss of staff. The deployment also harms Mark's productivity for his work with team A. The deployment harms the receiving team B since they have to train or integrate Mark.

Incentives for this investment include cross-training for Mark, better process empathy for both teams, and temporary (exceptional) support. What is team B expecting from Mark? How will team A benefit? What is Mark expecting to gain from the deployment? Or is this a sacrifice on Mark's part?

Cross-training Mark can improve productivity of Mark and the teams. Team B gets to hear an outsider's perspective from Mark, and Mark returns to team A with a broader perspective of the organization. A deployment can build relationships among the teams. Both teams are better able to address process friction or exceptional interactions.

Potential engagement modes for Mark: consultant (providing knowledge to team B), integree (increasing the capacity of team B), or shadowing (learning from team B). Shadowing can be of an individual on team B, or Mark can shadow team B by attending meetings.

Mark could be deployed full time for the entire duration, or split his him between teams, or build-up/back-down over the course of the deployment.

Are there criteria for early termination of the deployment? Are there criteria for extending Mark's deployment?

If this sounds useful to your team there are a few considerations. Are you on the originating team A or the receiving team B? Who gets deployed? How is Mark picked? Was the opportunity advertised? If you're receiving Mark, what are your acceptance criteria? How many concurrent deployments can your team support?

Service-Level Agreements

When two teams or two organizations need to interact on a recurring basis, a formalized approach is to create a Service-Level Agreement. While a Service-Level Agreement (SLA) is constructive for outlining what each party expects from the other, within a bureaucracy an SLA is typically not a legally binding contractual agreement. Instead of a judge resolving disputes, an SLA within a bureaucracy may be adjudicated by a supervisor common to the two teams.

A Service-Level Agreement within a bureaucracy is dependent on the good will and honor of the signatories. Since an SLA is a formalization of a relationship, it is subject to revision when there is turn-over of signatories in any of the teams.

An Service-Level Agreement should include providing historical and live data to stakeholders so violations can be measured. The need for measurements is because enforcement of the SLA is by the signatories. Observability is key to accountability.

A supervisor common to the parties may be invoked when an SLA is not met, or if there is a dispute over the interpretation of an SLA. Usually the threat of invoking oversight is enough to coerce change in negotiations. When the common supervisor gets involved there are not many options available for sanctions. The supervisor could withhold bonuses or promotions, or assign a new team lead, or re-negotiate the SLA.

Because creation of SLAs are burdensome to all parties invovled, monitoring to enable enforcement incurs work, and punishment is limited, most cooperation between teams and between organizations is informal and ad hoc. Relying on personal relationships is easier than formal agreements.

8.11 Tactic: Approval, Forgiveness, Opposition

A common bureaucratic task is seeking consensus regarding action or spending resources. There are distinct options about how to get that consensus:

- Seek approval before taking action. This approach incurs both providing justification and waiting.
- Ask forgiveness after taking action. Often viewed as being in contrast to seeking approval. Less delay, and usually works if things go well or if no one notices.
- Notification of Intent with deadline for response. The window for response should be sufficient to actually allow feedback.
- Solicit opposition before taking action¹². This is a different framing from approval or forgiveness. It decreases the risk the approver has to take on.

The best way to proceed depends on the personalities of the people involved in building consensus and their relationships.

Most organization default to an approval-based processes. Each new idea needs to be signed off as approved by a sequential list of bureaucrats. The sequence (not concurrent) process may be known in advance, or it may be ad hoc if the request is novel.

Relying on approval is harmful to innovation because sign-off by each bureaucrat is interpreted as "I am 100% in agreement with this." Each stakeholder has to bless innovation and tie their reputation to the outcome.

The "I won't stop this" (soliciting opposition) is a more useful paradigm. With the consensus process language changed to "I won't stop this," then the bureaucrat can avoid taking responsibility for the idea and therefore are not tying their reputation to the result.

¹² "Unless Otherwise Directed" in Iraq

8.12 Static and Dynamic Process

Change within an organization is to be expected since the external environment the organization exists in is not static. Internal change is driven by staff turnover and changes of technology. With that premise, why are static processes that are not robust to change created in the first place? Answer: so policy creators can point to an effort and avoid looking neglectful.

Creating robust processes that are dynamic takes more effort to create. First, the underlying process must be documented. What is expected to happen? Who are the stakeholders? This logic is fragile to change. Second, document assumptions used in the process. If the assumptions are invalidated, then the process is broken and needs to be discarded or at least revised.

The problem is that even when the process is documented and assumptions enumerated, they may not be checked to see if revision is necessary. Measurements need to be periodically taken to see if the assumptions are still applicable. Another approach is to use sunset provisions – there is an intent of forcing renewal.

A more quantitative approach is to tie a process to a cost/benefit model. The benefit to implementing a process comes at some cost. If the assumptions of the process can be tied to a cost/benefit model, then we can determine whether the process is worth implementing. Periodic measurements are needed to update the cost/benefit model and determine whether the process is effective.

The steps for creating a robust process are

- 1. Document the process that is fragile.
- 2. List assumptions used in the process.
- 3. Relate the assumptions to a cost-benefit model.
- 4. Determine the measurable parameters of the cost-benefit model.
- 5. Collect recurring measurements to verify the assumptions.
- 6. If the assumptions are broken, revise the process.

A robust process is just a fragile process with a feedback loop informed by ongoing measurements.

8.13 Decisions and Processes Create Bureaucratic Debt

Suppose a process is enacted and later found to be ineffective. Some work is needed to revise the process and hopefully improve effectiveness (or an exception is needed). Bureaucratic debt is the cost of the work needed to change a process¹³. The bureaucratic debt is caused by choosing an easy solution now (with limited information or insufficient resources) instead of using an approach that would take longer to design and enact.

Decisions occur in a resource constrained environment. Getting information (measurement) and analysis are costly in terms of money, time, skill, and labor. Each decision made results in options that are not explored. These missed opportunities are associated with short-term versus long-term trade-offs of costs.

The opportunity costs (options the organization doesn't take) alters which future decisions become available.

The purpose of defining this concept is to capture the work resulting from decisions that would otherwise be unaccounted for. Once the concept of bureaucratic debt is understood it can be tracked.

To document bureaucratic debt, we need to capture decisions as they are made:

- What is the decision to be made?
- When the decision was identified?
- When the decision was made?
- Who made the decision?
- What options were identified?
- Which option was chosen?
- Why was that option was chosen over the other options?

The purpose of documenting decisions is to enable both aversion to bad decisions and attraction to good decisions. Without documenting decisions, there is no transparency, accountability, or historical ability to track dependencies.

The documentation of decisions needs to be disseminated to stakeholders. This should occur as promptly as possible.

¹³Similar to technical debt

For bureaucrats there are the processes and policies which get applied to customers, the documentation of what those processes and policies are, and guidance on when the processes and policies should be applied.

The scale of decision impact determines the level of documentation. "Do I choose pencil or pen?" incurs negligible bureaucratic debt; therefore the documentation needed is also negligible. Projecting impact of decisions is a subjective prediction.

8.14 Design Processes for Turnover of Staff

When designing a process, there are a few goals to optimize for: time-to-first-result, average latency, initial financial cost, total financial cost, flexibility to input conditions, throughput, scalability. In a theoretical sense all these factors should inform decision making. An often neglected aspect which is harder to predict and harder to measure is the importance of employee turnover. On a long time, scale turnover of bureaucrats is a significant source of risk for any team or project.

Designing processes relies on roles: participants are treated as interchangeable with other people who have similar skills. Accounting for differences in enthusiasm or communication is difficult. Designing processes that are robust to turn over does not mean ignoring the unique talents of participants. Emphasize documentation (how and why) and training of new participants.

Making processes resilient to change requires educated bureaucrats. That education occurs during on-boarding of the bureaucrat, during the process, and as bureaucrats exit participation in the process.

On-boarding of new bureaucrats involves technical training, explanation of norms, learning the processes, and creating a professional network of coworkers. During this on-boarding the new bureaucrat should be documenting their observations. Postponing the creation of documentation until the new person has experience results in a skewed and incomplete capture of the challenges.

Trained and experienced bureaucrats executing a process are responsible for coordinating with other bureaucrats. Bureaucrats should be cross-trained in other roles to gain familiarity with other parts of a process.

Bureaucrats exiting the team or organization or changing roles have a responsibility to document their knowledge for team members. An exit interview can inform how the team improves.

In each phase documentation is the mechanism for spreading knowledge. Documenting the why (in addition to the how) is critical for the reader. Access to documentation should be measured to determine whether there is value to the investment.

Chapter 9

Skills of an Effective Bureaucrat

You could operate within a bureaucracy and entirely focus on just doing the job you were hired for and ignore administrative distractions. Or you can be more effective in your job by understanding the role of engaging with other people – peer bureaucrats, supervisors, and subjects.

Learning bureaucracy as a skill doesn't mean you can ignore personalities of individuals. Bureaucracy as a skill separate from and in addition to being a good person, being an effective member of a team, being a good project manager, being a good product owner, skillful writing, excellent verbal communication skills, applying technical skills, etc. The distinction from those aspects is that as a bureaucrat you understand the complications and constraints of your environment and then can more effectively operate within those conditions.

If you are new to being a bureaucrat, then this book armed you with understanding your environment. On your first day of employment you are poised to frame incoming information constructively. If you are an experienced bureaucrat, it is not too late to improve. Even on your last day of employment you can learn and be more effective.

In this book I described bureaucracy and provided options for action. If you are able to apply these generalized perspectives to your specific situation, you are applying the paradigm developed throughout this book. Concepts like learning the history of your situation, identifying and engaging stakeholders to learn their perspective. Brainstorming the incentives of the individuals involved,

and listing what levers they have for action. What are the dilemmas? Are there feedback loops?

The narrow scope of your role (which hopefully leverages your education or training) does not capture all relevant aspects of your job. Based on the definition of bureaucracy, the critical aspects of success are having knowledge, sharing your knowledge, leveraging the knowledge of others, effective communication, working well with other people, understanding the role of both processes and social influence, and how those interplay.

Because bureaucracy is a system of distributed knowledge and distributed decision making, coordination is critical.

- You are able to facilitate meetings. This means agenda, providing rules on interaction (raising hands), taking notes, sharing notes, and following up after the meeting.
- You take part in meetings, whether that means actively contributing or intentionally supporting other attendees. You leverage relationships with other attendees.
- You invest effort in written communication (emails, text-based chats, reports). Your writing empathizes with readers, captures relevant context, is concise, and is clearly worded.
- You communicate verbally concisely and precisely. You listen and you teach. You seek shared definitions. You are professionally vulnerable.
- If in-person with colleagues, you walk around and talk with people oneon-one.
- In your role as bureaucrat you leverage project management skills: you
 have a vision, you make and share plans, all while building consensus with
 stakeholders.
- You apply your negotiation skills [10] that improve your interactions and outcomes.

The attitude of the effective bureaucrat is that of realistic optimism. A realistic optimist will occasionally be wrong but makes progress, whereas a pessimist will be right (because the prediction is self-fulfilling) but not make progress.

Appendix A

Assessments for Publication

A.1 Reader's Report

An view from inside bureaucracy as a complex adaptive system. Central claims:

- Everyone in modern society takes part in bureaucracy. Therefore learning to be a skilled bureaucrat is useful.
- Individuals already have experience with bureaucracy from conventional roles in modern society.
- Emergent behavior and being a wicked problem make the complexity of bureaucracy irreducible to a simplistic model.
- The techniques of bureaucracy are meetings, processes, communication.
 These facilitate the coordination of distributed knowledge for distributed decision making.
- Bureaucracy occurs when there is a lack of common quantitative feedback mechanism for individuals.

The consequences of thinking like a bureaucrat include

 You are not limited to only the direct personal interactions that you have with other people. Bureaucratic processes that exceed your direct visibility and experience extend your influence.

- Help you recognize options beyond the naive defaults associated with fallacies. What's feasible? What's negotiable? Once you realize rules and processes are subjectively created and enforced, negotiation (and identifying who to negotiate with) is more obvious.
- Decreased surprise when thing is not the way you naively expect. See the discussion of dilemmas and known hazards.

The effects of bureaucracy are not attributable to one person, but each person can improve bureaucracy.

A.2 Audience Analysis

The primary audience for this book is self-identified novice bureaucrats and people planning to work in a bureaucracy. The value of this book is advice beyond "be a good person" and specific to the role of a bureaucrat, while avoiding adjacent domains like project manager, team lead, software developer.

The secondary audience is white collar workers who have experience working in a bureaucracy and are beginning to realize they are bureaucrats. This audience will find some of the information to be already known. The value for this audience is a re-framing of the environment and problems.

The tertiary audience is non-bureaucrats who want to better understand why bureaucratic systems are challenging. Americans consider themselves "individuals" and neglect the necessary integration of operating within a society. This book won't be a popular best seller, but it is intended for a lay audience and does not assume prior academic exposure to the topic.

Lastly, researchers of bureaucracy. This book is not a theoretical systemic analysis.

I assume the reader has a college education.

Appendix B

Interview questions

Interviewing candidates for a bureaucratic position should involve evaluation of skills specific to bureaucracy. For example, draw out whether the candidate can communicate to facilitate coordination, work with experts from other domains, learn from self-reflection, has an ability to professionally disagree, and practices negotiation.

B.1 Interviewing a Candidate

- Tell me about a time you had competing priorities. What to evaluate for:
 - Did the interviewee coordinate a response with other people? Teamwork is an essential skill in a bureaucratic organization.
 - Did the interviewee clarify a misconception?
- How does this position fit into your career goal? What to evaluate for:
 - Can the organization provide the candidate what they are seeking?
- In previous jobs, how often did you check in with your supervisor (formally or informally)?

What to evaluate for:

- Does the candidate communicate with their supervisor?
- Who starts the discussion?

 In previous jobs, how often did you check in with your coworkers (formally or informally)?

What to evaluate for:

- Does the candidate communicate with their peers?
- Who starts the discussion?
- In previous jobs, in what situations did you turn to your boss for help? Or did your boss help you?

What to evaluate for:

- When the candidate's boundary is tested, how do they engage?
- Who starts the discussion?
- In previous jobs, in what situations did you turn to your coworkers for help? Or did your coworkers help you?

What to evaluate for:

- When the candidate's boundary is tested, how do they engage?
- Who starts the discussion?
- How do you engage with coworkers who know something work-related that you want to learn?
- Tell me about a time you were given the wrong scope (or an ill-defined scope) for a task.
- In previous jobs, how did you evaluate the success and short-comings of your organization?
- What are the leading indicators you look for that the team you are on is headed in a bad direction?
- Tell me about a time you started a collaboration with a coworker to leverage their expertise?
- Tell me about a time you worked with someone who had a distinct perspective from yours. How did you collaborate?
- Tell me about a time when project requirements were unclear, ill-defined, or constantly shifting.

- Describe how you responded to a mistake you made at work.
- Tell me about a time the organization you were in changed and how you navigated that.
- Tell me about a time when you, in your role as an expert, collaborated with people who didn't share your expertise. How does that compare with interacting with fellow experts?
- When you have learned a new topic in the past, what strategies did you use to balance understanding the theory and doing the practice?
- How have you assessed your progress when you were learning a new topic in the past?
- How have you structured your time when faced with a novel challenge?
- \bullet How do you distinguish between accidental complexity and essential complexity? 1

 $^{^1{\}rm from~Brook's~No~Silver~Bullet}$

B.2 Moving to a New Team

Prior to leaving the team you're on, reflect on your current role:

- What are my current care-abouts?
- What would I miss from my current role? Are there projects, tasks, responsibilities, or people that I will miss? If yes, can I change my current role to have more of what I like?

You can negotiate with your management and coworkers to address your needs. Sometimes other people are not aware of what you want.

Once you are interviewing for a position you should be considering the interactions as a chance to learn more about the work and the people. When interviewing for a new position, ask the following questions² 3 4 :

- Is the team growing or is the focus shifting?
 (Teams hire to replace or grow. If replacing, why did the person leave? If growing, is it an increase in capacity or expansion of scope or change of focus?)
- What's the turn-over rate of the team I would be joining? Has anyone quit? Has anyone recently joined?
- How many members are their on the team I would be joining?
 (Is the team size stable, or does it fluctuate according to changes in tasking?)
- Would I be on a single team or would my work span multiple teams?
- How many different roles would a person in my position have?
- What would my day-to-day routine be like?
- How many meetings would I have per day? Per week?
- What indicates success in my new team?
- What indicates failure in my new team?
- How am I evaluated as an employee?

²See also 51 Great Questions to Ask in an Interview

³github.com/Twipped/InterviewThis and news.ycombinator.com/item?id=32519547

⁴github.com/viraptor/reverse-interview

- How is my team evaluated?
- Who do I report to?
- How many bosses do I have?
- What balance of independence and collaboration is expected of me?
- Do I identify what to work on or is a task assigned to me? If a task is assigned, who assigns the work? (the customer or a manager or another team?)
- What is the typical duration of a task I would work on?

 (An hour or a day or a week or a month or a year.)
- How does my new team support my autonomy?
- What support does the organization provide a person in my role? (Training)
- In the past year, how quickly have new employees been trained in this position?
- What computer resources are available? Are other equipment relevant to the job?
- How often would I interact with customers?
- Who are my customers? What do my customers want?
- How many customers are there?
- How often would I interact with coworkers?
- How often would I interact with boss(es)?
- What are the goals for the organization? For the team?
- What is your favorite part of working in this organization?
- What are the technical challenges?
- How does the team document shared knowledge?
- Does the team have current onboarding materials to reference? Or is the process more social?

- What are the biggest challenges someone in this role faces?

 (Sometimes the challenges are political or personality rather than technical.)
- How diverse are the educational and experiential backgrounds of team members?
- What skills do other team members have?
- What gaps in skills does the team have that you are looking to fill?
- Where is the office I would be working in located?
- Is the location of the office expected to change in the next six to twelve months?
- Would I expected to travel?
- How many different tasks would I be expected to work on in a day? In a week?
- Do you expect the answers to any of the above questions to change in the next six to twelve months?
- What are the next steps in the hiring process?
- When will a hiring decision be made?
- When would I be starting in this position?
- What are ethical issues or moral challenges should I expect to face if I were employed on this team in this organization?
- What are the known conflicts of interest that exist?
- Who is working against the progress of the team?

That's a long list of questions, and it doesn't even include questions specific to the role your interviewing for or the organization you're interviewing. Bringing a printed out list shows you are thinking ahead and preparing.

Glossary

bureaucracy An organization of bureaucrats comprises a bureaucracy. A bureaucracy facilitates coordination of stakeholders. Bureaucracy is how large organizations make distributed decisions using distributed knowledge.

Everything in a bureaucracy is made up by other participants.

Bureaucracy is a macroscopic phenomenon emergent at sufficient scale. The scale is important because there is no longer dependence on individual relationships.

Bureaucracy arises when there is no common objectively quantifiable feedback mechanism for individual participants in the organization.

Bureaucracy is a wicked problem [46]. vi, 1, 4, 60, 161, 167, 246

bureaucrat A person who is a member of an organization and is responsible for subjective implementation of policy for the organization. Conventional examples of a bureaucrat role: teacher, police, government employee. 1, 4, 5

bureaucratic debt The cost of work need to change a process caused by choosing an easy solution now instead of using a better approach that would take longer. Bureaucratic debt is a trade-off, conscious or unconscious, of what work to do and risks to take. More effort (work, time) could be spent building a better product, but customers want solutions now. 242

culture Norms; expectations around interaction among people. 139

essential bureaucracy The minimum processes and staffing and skills necessary to address the complexity of the problem space. 59

feedback loop Consequences for the decision maker. 12

invisible bureaucracy Processes are known to some stakeholders and are conveyed verbally to some of the other stakeholders. 177

- org chart organizational chart identifies formal roles and the formal relations among roles.. 23, 131, 220
- organization An assembly of teams. The name of the concept might be a corporation, an agency, a department, a bureau, or any other aggregation of smaller organizations. 5
- **policy** Formalized opinion that can be applied uniformly across scenarios with particular conditions. 4, 5, 214, 218
- process A task broken into a specified set of subtask dependencies, typically with subtasks in a sequence. Each task is associated with the application of policies enforced by bureaucrats. Two distinguishing features in the context of bureaucracy are authorization and justification. A process has inputs and outputs. A process can be decomposed into other processes. Processes operate on both information and tangible objects. Processes require work and time. Processes are carried out by people or machines. 40, 214, 242
- process empathy what incentives do people in each role have, what information does each person have, and how does that manifest as actions by the team or organization. 2
- process friction process friction is caused by simplification of assumptions and the neglect of specific circumstances. Process friction results in the waste of resources (tangible or expertise), temporal inefficiency, emotional frustration, and social distrust of institutions . 215, 218
- reference experience Something you have done or observed in the past. 42
- **reputation** Your reputation as a bureaucrat is what other people expect from you. 154
- **ripple** A decision maker selects an option and that propagates to schedule, what is possible, and dependent tasks. 27
- shared resource community resource either tangible items (e.g., land, air, water) or expertise with associated policies and enforcement. Examples:

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- A play put on by actors for an audience.
- A movie in the theater.
- A road used by cars and trucks and buses.
- A parking lot public or private.
- A kitchen with multiple users.
- A viewing platform overlooking a waterfall.
- A server hosting a webpage accessed publicly or only available internally to members of an organization.
- Education teachers
- Bulletin board for community announcement
- Health care doctors, dental
- Insurance
- A hiking trail.
- Law enforcement
- Judicial system
- A library.
- Religion is a bureaucracy premised on the constraint of finite expertise concerning what God wants you to do. The shared resource is the expert's knowledge.
- A stairwell.
- A hallway used by renters in a multi-unit building, or used by hotel guests.
- A house for a family. For example, a policy of taking your shoes off when you enter.
- Parks public (city, county, state, national) or private (e.g., paid access).
- Safety of passengers on a plane, bus, train; quiet, no strong smells, no flashing lights.
- Safety of cars and trucks on a road.

Private or public is irrelevant; commercial or non-profit is irrelevant . 1

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simple decision Has one correct or beneficial choice and one or more wrong or harmful choices. 13

- stakeholder A person who cares about the process or the outcome; distinct from a participant. Stakeholders can be subdivided by who is affected and who has control. 37
- **subject** The person experiencing bureaucracy. See page XIV of Lipsky [34]. 4, 37, 228
- thought terminating Thought terminating statements at first sound reasonable but, upon reflection and analysis, are incorrect. 60, 179
- **visible bureaucracy** Processes are written down and can be discovered by stakeholders. 177

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