

IS THE LODGE ALIVE AND WELL?

Part I: Complex Adaptive Systems

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Abstract

Understanding and improving the function of one's Masonic Lodge is an ongoing challenge that is largely impacted by the ability of individuals to work together as a cohesive group while preparing for the future. In an effort to analyze and evaluate the cooperative nature of a Lodge as well as opportunities for improvement, a Lodge is compared to a complex adaptive system. Complex adaptive systems are groups of heterogeneous, autonomous individuals interacting with one another such that the whole becomes greater than the parts. While complex adaptive systems are continuously gaining experience and will never optimize, they are characterized by perpetual novelty and flexibility which allows for an ability to anticipate future needs. Application of these methods into the organization of a Masonic Lodge will create a flexible, agile organization prepared to face the future. Many natural and biological systems are characterized as complex adaptive systems, therefore examples from Nature are described and evaluated to better understand the relationships. This is the first inquiry into the question, "What lessons from the natural world can be applied to Freemasonry?" or "Is the Lodge alive and well?"

Introduction

Everyone travels through the world with a unique perspective. As a consequence of that perspective, everyone creates unique opportunities and challenges in their interactions with others. Those relationships, regardless of intimacy or detachment, are subject to the discrete convolutions of individual interactions and the nuanced complexity of group social structure. Therefore, navigating interpersonal interactions requires empathy, active listening, open-mindedness, and understanding. Effectively connecting with others is a complex, ever-changing process that involves learning and adaptation.

In a group, every person is working toward a common goal for the greater good while simultaneously achieving individual goals to further their own well-being. This should not imply that individual goals are deleterious to the common goal or that they must directly support the greater good; however, potential contradictions and conflicts lead to complex organizational structure and reduced predictability. The unpredictability of social interactions can frustrate many individuals and lead to isolation rather than camaraderie. As a result, team efforts require the balancing of numerous potentially conflicting interactions. On the other hand, the unpredictability of cooperation also

provides opportunities potentially unavailable to, or unnoticed by, the solitary worker. Therefore, if managed properly, the same intricacies and nuances that create challenges in relationships are simultaneously assets to creativity and productivity.

Every relationship is built on communication, but not every person communicates in the same way. Some are verbose and rapidly share potentially overwhelming volumes of information. Others rely on non-verbal cues providing an abundance of information if correctly interpreted. Some wear emotions on their sleeves. Others show no emotion at all. Many are in search of a leader to follow. Some are actively seeking leadership. And others subtly work behind the scenes with few noticing they are at the helm. Regardless of style or approach, every individual deals with conflicts, creates trust, and influences colleagues when working in a group as well as being affected by those same interactions. Under the best of circumstances, group exchanges become cooperative behaviors and lead to unique solutions. In less-than-ideal conditions, miscommunication leads to misunderstanding and hinders progress. And under the worst of circumstances, conflicts lead to the destruction of an organization. Management of interpersonal relationships often determines the group trajectory, therefore a leader must assess the personalities with whom he works and create an environment of cohesion allowing individuals to maximize productivity and minimize conflict.

A Masonic Lodge is a unique and valuable entity with a special place in the heart of every Freemason. But at its core, the Masonic Lodge is simply another group of individuals interacting to achieve a common goal. As such, the Lodge is no more immune to the complexities of social interactions than other organizations. In some ways, the Masonic Lodge is more likely to succumb to negative social interactions. By virtue of a secretive initiation, most of the members did not initially understand the subtleties of the organization they joined. As a result of a progressive line, officers may be mechanistically moved into leadership positions as a result of continued attendance rather than ability. Leaders are typically limited to a single year. They must quickly assess possible interactions and navigate complex relationships in that finite time to achieve success. Additionally, Masonic Lodges are rare organizations in which all previous leaders are immediately retained as an advisory board; an ever-present, not-so-silent minority ready to point out “That’s now how we did it in my year!” Therefore, a Masonic Lodge is, first and foremost, an organization of people who must learn to work together to achieve a common outcome regardless of the aspirations and individual goals of its members.

Learning from Nature

Before focusing further on the complexities of human relationships or the specifics of Masonic Lodges, consider the bigger picture of man’s place in the world. It is a common conception that man is the most advanced and ultimate achievement of Nature. As such, man is inclined to imagine his accomplishments are the result of unprecedented significance resulting from complexity in mind, body, and spirit. However, complexity is universal and hardly limited to human endeavors. The creativity, efficiency, and complexity of nature precedes and supersedes man’s capabilities. The world was a wondrous pool of complexity before man. The world would be a spectacular display of

complexity in his absence. In fact, countless examples of complexity exist in this world that are far more elaborate than human relationships. Consider a few examples of Nature's complexity often overlooked by man's biased eye because that which is frequently mistaken for common is actually indicative of impressive complexity:

- Every bird in a flock appears to focus on its own needs when viewed individually, but the combined efforts of hundreds or thousands of birds result in beautifully complex patterns of movement. Those patterns serve multiple purposes including the protection and survival of the group.¹
- Every drop of water flowing in a river appears to simply follow the effects of gravity. Yet, at each moment in its journey, the droplet interacts with and disrupts its environment leading to complex patterns of erosion spanning generations and impacting the Earth forever.²
- An aqueous solution with thousands of chemicals rushes through arteries and veins. Blood and its components are governed by a natural complexity of subtle molecular interactions perpetually responding to changes in pressure, concentration, and temperature. As a result, the essentials of life are delivered to every part of the body at the moment they are needed.³
- Every niche on the planet is an amalgam of thousands of organisms co-existing; from the tree-tops of the rain forest to the frozen Arctic tundra. Every organism attempts to thrive and manipulate available resources to ensure the best opportunity for survival. Some organisms succeed by working together. Some organisms survive at others' expense. In all cases, the interactions of an ecosystem are complex and intertwined.⁴

¹G. Beauchamp. Flocking in birds increases annual adult survival in a global analysis. *Oecologia***197**, 387-394 (2021).

L.V. Ritters, C.A. Kelm-Nelson, J.A. Spool. Why Do Birds Flock? A Role for Opioids in the Reinforcement of Gregarious Social Interactions. *Front. Physiol.***10**, 421-437 (2019).

M. Ballerini, N. Cabibbo, R. Candelier, A. Cavagna, E. Cisbani, I. Giardina, B. Lecomte, A. Orlandi, G. Parisi, A. Procaccini, M. Viale, V. Zdravkovic. Interaction ruling animal collective behavior depends on topological rather than metric distance: Evidence from a field study. *Proc. Nat. Acad. Sci.***105**, 1232-1237 (2008)

²C. Johnson, M.D. Affolter, P.I. Inkenbrandt, C. Mosher. An Introduction to Geology (Free Textbook for College-Level Introductory Geology Courses. *opengeology.org* (2017)

M. Denis, L. Jeanneau, P. Petitjean, A. Murzeau, M. Liotaud, L. Yonnet, G. Gruau. New Molecular evidence for surface and sub-surface soil erosion controls on the composition of stream DOM during storm events. *Biogeosciences***14** 5039-5051 (2017)

S. Doetterl, A. A. Berhe, E. Nadeu, Z. Wang, M. Sommer, P. Fiener. Erosion, deposition and soil carbon: A review of process-level controls, experimental tools and models to address C cycling in dynamic landscapes. *Earth-Science Rev.***154** 102-122 (2016)

³R.K. Dash, J.B. Bassingthwaight. Blood HbO₂ and HbCO₂ dissociation curves at varied O₂, CO₂, pH, 2,3-DPG and temperature levels. *Ann Biomed Eng.***32** 1676-1693 (2004)

C. Jorgensen, M.B. Ulmschneider, P.C. Searson. Atomistic Model of Solute Transport across the Blood-Brain Barrier. *ACS Omega***7** 1100-1112 (2022)

⁴P. Chesson. "Species Coexistence" in K.S. McCann, G. Gellner (editors), *Theoretical Ecology: Concepts and Applications*. Oxford University Press, Oxford (2020)

L. Geyrhofer, N. Brenner. Coexistence and Cooperation in Structured Habitats. *BMC Ecology***20** 14 (2020)

The complexity of Nature is exacerbated by an ever-changing environment. Sometimes it gets colder. Sometimes it gets dryer. And sometimes new organisms arrive. Every group and every individual must unremittingly adjust to the changing circumstances in order to survive. While adjustments and adaptations occur at a species level over multiple generations, the intent here is to focus on the modifications made by an organism, or group, within a lifetime to promote success. Thus, survival in Nature relies on timely recognition of cues from a complex scenario and adaptation to the positive and negative feedback received.

Perhaps it is human nature to overestimate one's own abilities and underestimate that with which we share the world, but appreciating the complex, inter-connectedness of Nature provides two options: Man can live in awesome jealousy of Nature's complexity. Or man can revel in it, learn from it, and become better men by taking advantage of the lessons demonstrated. To learn from Nature, one must strive to understand the complexity as well as the adaptability of the surrounding world.

A complex adaptive system is a group of autonomous agents interacting independently to produce system-wide patterns such that those patterns individually alter the behaviors of the agents.⁵ In simpler terms, complex adaptive systems are groups of individuals working separately, but together, such that individuals learn from one another in a process that improves the whole. No one agent is completely responsible for the success of the system. However, every individual has the opportunity to contribute and every individual learns from the successes and failures of its counterparts. Not all natural systems are complex and not all complex systems are adaptive; however, complex adaptive systems are particular examples of naturally occurring associations from which much can be learned in order to improve our own interpersonal relationships and group successes.

In most complex adaptive systems, the individuals are unaware of the impact they have on the greater good. Each individual develops an approach to achieve the best outcome within the constraints of its circumstances and provided its specific opportunities. Because the individuals necessarily have varying characteristics, behaviors, and strategies, differing approaches produce diverse outcomes. Therefore, heterogeneity of the individuals, their differences, is a collective strength of the group. The manner in which each individual pursues and achieves the goals of the system influences neighboring agents and gradually improves the system over time. As a result, the system constantly revises and rearranges individual agents based on the gained experiences of the assembly.⁶

Many diverse individuals simultaneously pursuing multiple approaches increases the chances of arriving at the most efficient method of solving a problem. The actions of some individuals will lead to positive results. The actions of some individuals will lead to negative results. And the actions of other individuals will have no significant impact. The best outcome for the group will build on the actions of the individuals improving as a

⁵M.M. Waldrop *Complexity*, *Simon & Schuster*, New York, (1992) pg. 145-147.

J.H. Holland *Complexity: A Very Short Introduction*, *Oxford University Press*, Oxford (2014) pg. 24.

Human Systems Dynamics Institute; www.hsdiinstitute.org/resources/complex-adaptive-system.html

⁶M.M. Waldrop *Complexity*, *Simon & Schuster*, New York, (1992) pg. 146.

result of both successes and failures. In reality, the actions of any individual agent are insignificant enough they will not immediately impact the overall outcome of the system. The advantage of this insignificance is that although a positive effect will not immediately benefit the whole, neither will a negative effect result in catastrophic failure. Through this methodology, success is not guaranteed for all individuals, but a multi-pronged approach assures success for the collective despite the short-term failures of some individuals. Nature plans for success but expects failure and as such individual successes and failures fuel the adaptive process of the whole.

Complex adaptive systems achieve success through selection and revision of strategies originated by individuals within the system. A successful strategy is then tested and adapted by other individuals until iterative modification leads to an optimized strategy. Negative effects will be abandoned by most agents; eventually disappearing from the system. Positive effects will be mimicked by other agents; eventually distributing throughout the system. Interestingly, this process of optimization and distribution is achieved without direct supervision to ensure individual agents stay on task. In short, complex adaptive systems lack a central command; however, they do not lack organization. To achieve the system-wide goals, expectations of the individual agents are set in the form of a few simple rules. If those rules are followed, the overall goals will be achieved without global oversight. If an individual fails to follow the rules, their actions will directly interfere with other individuals' progress. To prevent further interference and ensure every individual has the opportunity to succeed, the agents within the system are self-policing. Therefore, order and organization arise out of a few simple rules.

- Consider a flock of birds. Computer programmers exerted great effort attempting to simulate the patterns observed when large groups of birds fly together. Despite building long, comprehensive lists of rules, the simulated flocks did not correctly mimic natural birds. However, in a different approach, the list of rules was reduced to only three and the simulated birds began to respond as expected.⁷ Those three rules: 1) Align flight with neighbors. 2) Avoid hitting neighbors. And 3) Remain an average distance from neighbors. Within a flock of birds, all other decisions are left to the individual as long as those three rules are followed.
- Consider army ants. Using their own bodies to build bridges in order for the group to span seemingly insurmountable distances would appear to be a complicated skill to teach or learn. However, the ants achieve this skill with two simple rules: 1) If there's an ant on your back, freeze. And 2) If there's been no ant on your back for a certain amount of time, go.⁸ All other decisions are left to the individual as long as those two rules are followed.

⁷A. Banks, J. Vincent, C. Anyakoha. A review of particle swarm optimization. Part I: background and development. *Natural Computing*. **6** 467-484 (2007)

C. Hartman, B. Benes. Autonomous Boids. *Comp. Anim. Virt. Worlds*. **17** 145-169 (2006)

P. Friederici. How a Flock of Birds Can Fly and Move Together. *Audubon Magazine*, March-April 2009. (www.audubon.org/magazine/march-april-2009/how-flock-birds-can-fly-and-move-together)

⁸K. Hartnett. The Simple Algorithm That Ants Use to Build Bridges. *Quanta Magazine*. February 26, 2018. (www.quantamagazine.org/the-simple-algorithm-that-ants-use-to-build-bridges-20180226)

- Consider human behavior. Man would like to believe he is more complex than birds or ants. However, a stadium with tens of thousands of people can easily be convinced to do “the wave” with the application of one simple rule. Everyone simultaneously picks up on this one rule without being specifically instructed: Do what the person to your left does.

An individual within a complex adaptive system is free to pursue a discrete, independent course of action in order to reach the desired goal as long as they abide by the short list of rules. Each individual agent will pursue a course commiserate with the specific conditions in which it exists and the materials it has available. Different agents pursuing different courses will lead to varied degrees of success. Positive results will be mimicked by other agents which will continue to modify and improve on the successful outcomes of their companions. Continuous mimicry, modification, and reorganization of individuals is a common feature of complex adaptive systems leading to system optimization.

- Instead of flocking like other birds, geese are known to fly in the classic “V.” This formation reduces wind resistance and sustains flight for long durations. However, an individual goose must constantly adjust to the circumstances of the flight. If the goose is directly behind and in the downdraft of the previous goose’s wing motion, the effort is more difficult instead of less.⁹ Depending on the decisions, actions, and behaviors of each individual in the line, every other individual reacts and adjusts their behavior to reduce the effort exerted.
- The collective behavior of army ants during bridge-building is a remarkable display of adaptation and coordination. In some cases, great effort must be exerted to ensure the individual follows the first of the two simple rules. Ants on the bottom layers might lock their legs or mandibles together to ensure they are not pulled apart, providing a stable base on which others will climb. Ants on the top layers may form arches or platforms, creating a walkway for others. They continuously adjust their positions to follow the rules and ultimately maintain the bridge's stability. If an ant loses its grip and the structure weakens, the surrounding ants readjust to reinforce or repair the bridge. Some ants even take on the role of guide to prevent congestion or disruption and ensure the second rule is followed by all individuals.¹⁰

Natural systems are regularly presented with changing environmental conditions. Organisms are faced with food scarcity, temperature fluctuations, water shortages, water surpluses, invasive species, and increased predation to mention a few. The varying behaviors, differing strategies, and multiple approaches developed by the numerous individuals in a complex adaptive system lead to continuous modification and self-reorganization. Unpredictable environmental changes result in unforeseen needs of the system. The constant modification and self-reorganization creates flexibility through the

⁹F.R. Hainsworth. Precision and Dynamics of Positioning by Canada Geese Flying in Formation. *J Exp Biol.* **128** 445-462 (1987)

E. Young. Birds That Fly in a V Formation Use An Amazing Trick. *National Geographic* January 15, 2014. (www.nationalgeographic.com/science/article/birds-that-fly-in-a-v-formation-use-an-amazing-trick)

¹⁰C.R. Reid, M.J. Lutz, S. Powell, A.B. Kao, I.D. Couzin, S. Garnier. Army Ants Dynamically adjust living bridges in response to a cost-benefit trade-off. *PNAS* **112** 15113-15118 (2015)

development of new individual behaviors. The new behaviors may prove to be advantageous as environmental conditions change allowing the system to accommodate unforeseen needs. A beneficial outcome in one environment may be detrimental in another, but an under performing agent in one environment may excel under different circumstances. Therefore, a complex adaptive system is prepared for wide ranging conditions that arise in an ever-changing environment. The varied behaviors, differing strategies, and multiple pathways allow for a flexibility in the system as the conditions of the environment create a moving target. Within biological studies the flexibility of individuals to cope with new situations is referred to as behavioral plasticity.¹¹

Many species exhibit behavioral plasticity, but mice represent an example of which most readers will be familiar. To ensure adequate food supplies, mice readily investigate new areas to find food, water, and shelter. They adjust their diet based on the availability of food sources; switching between seeds, fruits, nuts, insects, discarded human scraps, or even consuming other small animals when necessary. An ability to hoard food allows them to survive periods of scarcity and provides a buffer against food shortages. However, some adopt a scatter-hoarding strategy in which they cache food in multiple locations, while others store food in a central location. Mice adjust their foraging patterns to optimize energy expenditure and ensure safety. Individuals will forage at different times of day to avoid unfavorable temperatures. Foraging locations will be altered to maximize food availability and minimize exposure to predators. Additionally, some species exhibit social learning; observing foraging techniques and adopting the strategies exhibited by adults within their social group.¹² Like the mice, organisms across the biological spectrum demonstrate flexibility and adaptability in their behavior, adjusting to changing circumstances to survive and thrive in their environments.

Mankind, like other animals, face a wide range of conditions and environments. Therefore, adaptability is an innate and fundamental characteristic that has led to the survival of the human species. Characteristics such as biological, physical, behavioral, and migrational adaptation are shared with other species. However, technological, cultural, and educational adaptations set human flexibility apart. Man's unique ability to adapt may be best illustrated in his development and advancement of technology.

- Consider the development of musical performance. A time existed in which music was only available by live performance. Eventually recording devices were invented allowing music to be more readily distributed. Next, the recordings were utilized along with the manipulation of radio waves allowing music to be transmitted into our homes. As people became mobile, radios were included in automobiles so music could be taken with us. Radios eventually included methods to play prerecorded music and we could choose what we wanted to listen to at any moment. Prerecording technology evolved from 8-track tapes to cassettes to CDs to downloadable files. Eventually streaming services eliminated the need to store

¹¹B.C. Allf, P.A.P. Durst, D. Pfenning. Behavioral Plasticity and the Origins of Novelty: The Evolution of the Rattlesnake Rattle. *Amer. Nat.* **188** 475-483 (2016)

T. Caspi, J.R. Johnson, M.R. Lambert, C.J. Schnell, A. Sih. Behavioral Plasticity can facilitate evolution in urban environments. *Trend Ecol. &Evol.* **37** 1092-1103 (2022)

¹²M.L. Kapoor. Will only the flexible survive? *High Country News.* August 22, 21017. (<https://www.hcn.org/articles/climate-change-will-only-the-most-adaptable-species-survive>)

recordings. As such, the enjoyment of music transitioned from a demand for live performance to living with performances on demand.

Mankind also has a significant advantage over most other organisms through the use of verbal communication. Like his bestial counterparts, man is capable of rudimentary interactions and responses to fundamental social cues which leads to behavioral adaptations and improved outcomes for the group. However, unlike those counterparts, man also has the ability to discuss, measure, and analyze relationships and interactions. Analysis allows for the thorough evaluation of successes and failures. Human behavior readily exhibits behavioral plasticity with the additional advantage of communication and analysis.

Human communication, education, and analysis incorporated into the traditional characteristics of complex adaptive systems leads to potentially more efficient methods of self-organization and self-optimization. The advantages of analysis and communication provide abundant opportunities to learn about and improve a situation in response to environmental conditions. Nonetheless, this assessment of behaviors should not suggest control or mastery over an inherently complex world. While the abilities to discuss, measure, and analyze are advantageous, they can lead to flawed conclusions and less than optimal outcomes. Man likes to believe he has all the answers, but one strength of a flexible and adaptable system is the opportunity to discover unexpected answers. Thus, misuse of analysis, education, and communication may cause mankind to overlook naturally occurring opportunities. Preconceived notions must be avoided during analysis to ensure the best solutions are identified no matter how unconventional. Communication of best practices, without prejudice, rapidly improves opportunities for success.

Application to Freemasonry

Freemasonry has established itself as a hierarchy for the purposes of management. Committees within a Lodge answer to the Master of the Lodge. The Masters answer to the District Deputy Grand Master. The District Deputy Grand Masters answer to the District Adviser. The District Advisers answer to the Grand Lodge. And the Grand Lodge answers to a single man, the Grand Master. This is a typical example of a top-down organizational structure.

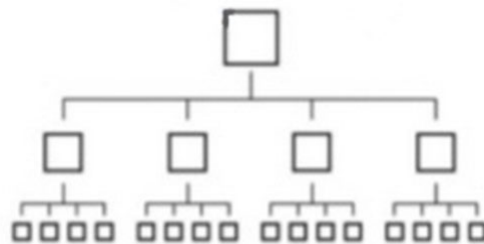


Figure 1. Illustration of a traditional top-down structure. Managers make decisions by gathering knowledge, analyzing it, and drawing actionable conclusions. The managers then develop processes which are filtered down through a hierarchical structure and

implemented by the team. The connections are between managers and the workers in their direct lines to facilitate the flow of communication and set expectations.¹³

Most organizational hierarchies, follow a top-down strategy in which decision-making authority and control are concentrated at the top levels of the organization with a clear chain of command. Communication and expectations flow from upper management through middle management to the lower levels. A top-down structure is an efficient method for executing tasks while maintaining substantial control over processes. Challenges are addressed by a single individual, or a very small group. Decisions by that individual can be quickly distributed and implemented throughout the organization which accommodates a rapid decision-making process and a timely, uniform response. Situations such as military command or a company built on the knowledge and expertise of an individual lend themselves to a top-down structure to provide the best opportunity for success.¹⁴ However, in a top-down organization those individuals working at the lower levels are expected to closely adhere to well-defined procedures while operating with limited autonomy. Additionally, a single leader deciding the path forward risks solutions lacking diversity. When sitting at the top of a hierarchy, it is effectively impossible to consider every conceivable situation. Adaptation to changing conditions may be a challenge.

Although typically organized as such, a Masonic Lodge is not a traditional hierarchy. A Masonic Lodge is a collective of equals consisting of many excited Brothers who want to be involved. They do not want instructions to mindlessly follow. They want to contribute. Rather than attempting to control every step of every task of a Lodge, a Master may be better rewarded to relinquish control of decision-making to those Brothers who have been trained in the teachings and philosophies of Freemasonry and trust they will make good decisions.

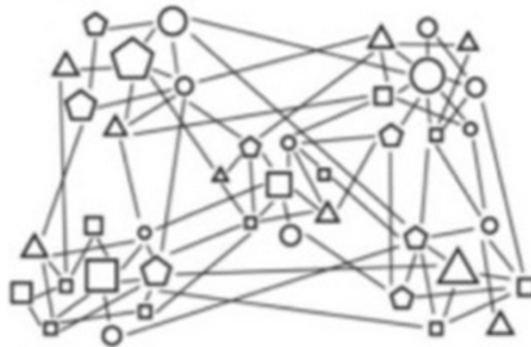


Figure 2. Illustration of a traditional bottom-up, or team of teams, structure. Employees are included to participate in goal setting largely informed by feedback. The goals,

¹³L. Sisney. Top-down vs. Bottom-up Hierarchy: Or, How to Design a Self-Managed Organization. October 13, 2016. (www.linkedin.com/pulse/top-down-vs-bottom-up-hierarchy-how-build-lex-sisney)

¹⁴For example, an executive kitchen is a top-down hierarchy with the executive chef at the top of the structure because they are responsible for setting the vision, creating the menu, and making the decisions that direct the kitchen. The Head Chef has a more hands-on role with the responsibility to meet the Executive Chef's vision. The Sous Chef focuses primarily on food preparation to ensure each station is working correctly. Senior Chefs work in each section and report to the Sous Chef. Junior Chefs and Kitchen Porters follow the instructions of the Senior Chefs completing the basic tasks. (cpdonline.co.uk/knowledge-base/business/the-kitchen-heirarchy-explained-kitchen-roles/)

projects, and tasks are then communicated by each team to the other teams and senior leadership. The connections are between individuals and teams to facilitate rapid, open communication to capitalize on emerging ideas.¹⁵

Most complex adaptive systems are characterized by a bottom-up strategy in which limited parameters are provided to the individual and decision-making authority is relinquished to the lower-levels of the organization. This allows many parameters to be simultaneously explored through numerous pathways. Bottom-up strategies rely on regular feedback from all participants as means of improving the process. The individuals working at the lower levels are provided significant autonomy resulting in a diversity of solutions that may allow for adaptation to changing conditions and opportunities for emergent, or unexpected, solutions to arise. However, identification and disbursement of solutions through the system can be slow.

To summarize, complex adaptive systems have the following characteristics which can be largely applied to Freemasonry:

- *Individual agents are unaware of their impact on the greater good.* Although most Brothers are not completely unaware, one's impact on the greater good can often be difficult to realize. Nonetheless, Freemasons are acknowledged for a behavior that is simply the right thing to do regardless of whether it is noticed.
- *Heterogeneity is a collective strength of the group.* Freemasonry is noted for a great similarity around the world, yet the Fraternity is comprised of millions of diverse individuals from many different cultures. Not to consider the varied ideas and contributions available from the membership would be a subversion of the greatest resources.
- *A positive effect will not immediately benefit the whole, but neither will a negative effect be catastrophic.* Like most complex adaptive systems, Freemasonry is a large organization through which the transfer of ideas and practices can move slowly, Therefore, Brothers should freely explore new ideas and approaches with the comforting knowledge that no great harm can be done. Likewise, they should never be discouraged by slow reception considering even the greatest benefits will only trickle into the regular practices of the Fraternity.
- *Successful strategies originate from individuals.* Grand Lodges often create intriguing, successful programs to engage their members; however Lodges and individual Brothers can be resistant of ideas handed down to them with even the appearance of orders or mandates. The most accepted programs are those created on the local level, proven out in the smaller environment of a Lodge, and shared between friends and Brothers.
- *Supervision is not necessary.* Freemasonry is a collective of equals. Every man who joins the Fraternity is entrusted with the teachings that have guided men for centuries. If a Brother is well informed in the principles of the Order and trusted to behave according to the expectations of a Freemason, there is no need for micromanagement. If a man is to be trusted by the word he has given, there is no reason to watch over his labors. Once given a task, he should be trusted to complete that task to the best of his abilities and to the ideals of the Order.

¹⁵L. Sisney. Top-down vs. Bottom-up Hierarchy: Or, How to Design a Self-Managed Organization. October 13, 2016. (www.linkedin.com/pulse/top-down-vs-bottom-up-hierarchy-how-build-lex-sisney)

- *Organization derives from a few simple rules. And Individuals pursue their own course of action.* Since a man can be trusted to behave as a Freemason and taken at his word, an understanding of the goals and an explanation of the guidelines should be sufficient to allow him to complete a task. No two men may operate in the exact same manner, but the approaches can be different and equally valuable. Freemasons are a diverse group of men who will choose different paths. The different paths and diverse methods lead to different, new ideas which strengthen the Fraternity.
- *Flexibility allows the system to hit a moving target.* Although founded on the same solid principles, the Freemasonry of today has changed from the Freemasonry of a hundred years ago, or two hundred years, or from any other time in history. And Freemasonry will continue to change moving into the future. Just as our predecessors could not have imagined the opportunities and challenges of 21st Century Freemasonry, modern Freemasons can not predict what the future will bring. Embracing a diversity of ideas and approaches generated by the whole membership ensures Freemasonry's bag of tools is full and well-equipped. Drawing from the resources of every Brother will ensure the strength and longevity of the Fraternity.
- *Communication without prejudice improves opportunities for success.* Freemasonry is founded on perfect principles, but Freemasons are imperfect men. While tendencies may exist to accept the ideas and methods of one Brother over another, none should be discredited with prejudice. Every Brother's contribution should be given equal consideration to ensure no good idea is overlooked. The next great idea, or program, may come from the most unexpected source.

Conclusion

Freemasonry is an organization of connections. The Fraternity has existed through the ages and across geographies because of the endless connections that Freemasons make with one another. Allowing individual Brothers to form the naturally occurring connections of Freemasonry as the complex adaptive system it is; effectively allowing a Lodge to function like a living organism, is to encourage a culture of growth and promote success. When a Masonic Lodge follows the expectations and guidelines of a bottom-up structure, it is prepared for unexpected changes in culture, environment, and leadership in a way that Lodges following a top-down structure are not. For a lodge to be alive and well, it must rely on the connections of its members, let them thrive, and eagerly await the new ideas that will emerge from the unplanned and unexpected interactions resulting from those connections of Freemasonry.

Instead of a top-down hierarchy, consider the possibility of managing a Lodge like a complex adaptive system. Taking a lesson from Nature, a Lodge will be better served by allowing multiple ideas to progress simultaneously, then supporting the more successful and productive programs that emerge while modifying or postponing the less successful. Men do not generally find success with rigid, narrow control. Men are adaptable, robust,

and resilient such that they learn from their mistakes and improve themselves¹⁶. Members should be given open-ended tasks with a few simple rules to guide their actions. New ideas should be encouraged in a manner that embraces the possibility of failure and the opportunity to learn from those failures. Thus, members should be encouraged to explore new approaches through the empowerment of individual ideas and an emphasis on collaboration. Communication and interactions between individuals at all levels should be open and transparent to ensure successes and failures are quickly shared. Rapid communication allows for rapid analysis, evaluation, and adaptation.

An embrace of bottom-up Lodge management structure will require significant cultural changes by all Masons. Those in leadership positions will have to clearly state goals, then avoid micromanagement: required to relinquish decision-making at the finest levels and convey expectations in broad strokes. Past Masters will have to accept new ideas may not resemble the methods they used. Masters will have to accept the final product of a project may look different than they initially conceived. All Brothers will have to be actively involved in the day-to-day operation of their Lodge. And, in order to be actively involved and regularly contribute, the Brothers must be properly trained. They must be well versed in the principles of Freemasonry such that their behaviors are properly guided. However, this new effort and the acceptance of change will pay in valuable dividends. New ideas and emergent results can be achieved if the diverse characteristics and skills of every Brother are regularly utilized.

Due to the connections inherently established in the Fraternity of Freemasonry, Masonic Lodges are complex adaptive systems. The individual agents, or rather Brothers, follow the three simple rules of Masonry, or rather the tenets of Brother Love, Relief, and Truth. In doing so, each Mason finds his best path forward in the pursuit of making himself a better man and making the world a better place. Occasionally a Mason will misstep or follow an errant path, but he has his Brothers to lean on for support to correct his way. Likewise, on occasion a Mason will discover a valuable new insight into the teachings of Freemasonry and he will freely share it with his Brothers so all of Masonry grows¹⁷. By promoting the regular formation of new connections between Brothers, committees, Lodges, and Grand Lodges, Freemasonry will become an adaptable, flexible entity destined for long term survival. The Freemasonry produced by these connections may not be the Freemasonry of our fathers, but it will be the Freemasonry of the future. It will be an adaptable, flexible Freemasonry capable of guiding and preparing good men to lead the next generation.

¹⁶M.M. Waldrop *Complexity*, *Simon & Schuster*, New York, (1992) pg. 351.

¹⁷Freemasonry can also be considered a complex adaptive system of complex adaptive systems. While each Lodge is a system of individually functioning Brothers, each Grand Lodge is a system of individually functioning Lodges. Therefore, the insights of complex adaptive systems and bottom-up structure should be applied to growth opportunities of Grand Lodges as well as individual Lodges.