

CAUSAL CLAIMS AND THE OPERATIONAL ENVIRONMENT:
AN ANALYSIS OF CONVENTIONAL AND EMERGENT CAUSALITY
AS APPLIED TO THE SYSTEMS IN 2007-2008 IRAQ

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ABSTRACT

CAUSAL CLAIMS AND THE OPERATIONAL ENVIRONMENT: AN ANALYSIS OF CONVENTIONAL AND EMERGENT CAUSALITY AS APPLIED TO THE SYSTEMS IN 2007-2008 IRAQ, by Christopher M. Rowe, 64 pages.

Causal claims are unavoidable in military affairs. However, causal claims are also insufficient when attempting to understand and intervene in complex environments. Hence, notions of conventional causality must be supplemented with an understanding of emergent causality. This paper examines three competing claims about the decline in violence in Iraq from 2007 to 2008 from two perspectives: Craig Parsons's logics of causal explanation and William Connolly's concept of emergent causality. I find that an understanding of both types of causality is necessary for a full appreciation of what happened in Iraq. I argue that the military professional requires a nuanced understanding of conventional causality since such claims are integral to understanding and interventions; however, the military professional requires also a nuanced understanding of emergent causality and an accompanying philosophy for how to intervene in the world.

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ACRONYMS

COIN	Counterinsurgency
IAD	Institutional Analysis and Development
US	United States

CHAPTER 1

INTRODUCTION

Causal claims are unavoidable in military affairs. However, causal claims, conventionally understood, are also insufficient when attempting to understand and intervene in complex environments. Hence, notions of conventional causality must be supplemented with an understanding of emergent causality; the idea that something new and unexplainable can arise that defies conventional causal logics. This paper examines three competing narratives about the decline of violence in Iraq from 2007 to 2008 from two perspectives: Craig Parsons's logics of causal explanation and William Connolly's concept of emergent causality. I find that an understanding of both types of causality is necessary for a full appreciation of what happened in Iraq. I argue the military professional requires a nuanced understanding of conventional causality since such claims are integral to understanding and intervening; however, the military professional also requires a nuanced understanding of emergent causality and an accompanying philosophy for how to intervene in the world.

I came upon the idea for this paper through two primary life experiences. First were my combined operational experiences as a platoon leader in Iraq during Operation Iraqi Freedom III and as a Company Commander in Afghanistan during both Operation Enduring Freedom VIII and X. During this period, especially as a company commander in 2d Battalion, 503d Infantry (The ROCK) during Operation Enduring Freedom VIII and the battle of Wanat, I began to realize the importance of causal mechanisms to explain why certain events happen. I also began to understand the importance of conducting experimental interventions in the operational environment to achieve our endstate.

Second was my participation in a scholar's group I attended during my tenure at the United States (US) Army's Intermediate Level Education Course, called the Local Dynamics of War. The Local Dynamics of war focuses on the socio-political aspects of the operational environment, in which the military professional finds himself on a daily basis. It broadens the professional through challenging individual and collective scholarship. Through this program, the professional gains a better understanding of how our actions within the operational environment are influenced by "implicit and explicit theories about how the world works and how to effect change."¹ As the recent report from the 2010 House Committee on Armed Services said, "This is the fundamental challenge the US military will confront: providing the education so that future leaders can understand the political, strategic, historical, and cultural framework for a more complex world, as well as possess a thorough grounding in the nature of war, past, present, and future."² In this paper I attempt to bring these scholarly teachings to bear against the three main narratives for the decrease of violence in post-Surge Iraq.

Although a comprehensive review of America's involvement in Iraq is beyond the scope of this paper, a quick overview of key events is necessary. This review highlights several key actions leading up to the Surge in Iraq, that either directly or indirectly led to changes in tactics, strategies, and-or policies on the war.

¹Celestino Perez, *Local Dynamics of War*, Syllabus (Ft Leavenworth, KS: Government Printing Office, 2011).

²House Armed Services Committee, *Another Crossroads? Professional Military Education Two Decades After the Goldwater-Nichols Act and the Skelton Panel* (Washington, DC: House Committee on Armed Service, 2010), 16.

On 16 May 2003, then-Special Envoy to Iraq, Paul Bremer III ordered the de-Baathification process which prevented former Sunni Baathist Party members from holding offices in the new Iraqi government. The de-Baathification process had two unintentional effects. First it intensified the sectarian divide between the Shiites, who now found themselves in power, and the Sunnis, who were effectively shut out of power, by prohibiting their ability to hold offices in the Iraqi government. Second, it created the opportunity for an insurgency to arise. By this I mean the Sunni were now more willing to accept al-Qaeda as an alternative to the US-led coalition. These events, the sectarian divide and the rise of the insurgency, led to Iraq experiencing sharp increases in violence throughout the country. Ultimately these two actions bring the country to the brink of civil war by the end of 2006.³

In response to the increasing violence, two main events occur in 2006. First, the US military begins to revise its tactics and operational approach to dealing with an insurgency. Specifically, then General David Petraeus revised the US Army's doctrine on fighting a counterinsurgency (COIN). Second, then President George Bush convened a special council to create a new overall strategy for the war in Iraq.⁴ Following the change in tactics and strategy, violence in Iraq began to decrease as soldiers were now focused on population-centric COIN tactics, and the governance increased as the Sunni elite were now able to hold public offices. These two events, the population-centric approach to COIN and the increase in overall governance, created a window in which the people of

³See, *New York Times*, "Iraq 5 Years In," http://www.nytimes.com/interactive/2008/03/18/world/middleeast/20080319_IRAQWAR_TIMELINE.html#tab1 (accessed May 2, 2012).

⁴Ibid.

Iraq started to side with the US-led coalition. The outcome of all of these events leads to the claims made by the three narratives I will discuss later.

Following the Surge there was a noticeable and measurable decrease of violence in Iraq. What caused this decrease in violence? Did the US do anything to precipitate this decrease, or was it entirely due to external influences outside of US control? Is there something that the US military and-or US policy makers can take away from this period and possibly apply to future events? These are all important questions that have not been completely explained. I will introduce three main narratives as to why the decrease in violence occurred.

The first of these narratives is represented by Colonel Gian Gentile who is currently a professor in the History Department of the United States Military Academy. It is Gentile's claim that the decrease in violence is due to events that occurred in 2006, prior to the Surge. Gentile posits large sums of money used to pay-off Sunni leaders coupled with Muqtada al-Sadr's ceasefire were the central factors that led to the stabilization of Iraq.⁵

The second narrative is espoused by John Nagl. Nagl believes the implementation of the US Army's new COIN doctrine Field Manual 3-24, the additional 30,000 US troops that surged into theater in support of the new doctrine, and the efforts of Petraeus were the main factors that led to a decrease in violence and a more stable Iraq.⁶

⁵Gian P. Gentile, "A (Slightly) Better War," *World Affairs* (Summer 2008): 60.

⁶John A. Nagl, "Learning and Adapting to Win," *Joint Forces Quarterly* no. 58 (3d quarter 2010): 123.

The third narrative comes from Douglas Ollivant. Ollivant attributes the success in Iraq to a realignment of US and Iraqi aims: the commitment of President Bush to support the people and the country of Iraq throughout the remainder of his time in office, the realization of the Sunni Elite that their civil war was all but lost, the Shiite's, particularly Prime Minister Maliki, re-stabilizing their power base in Iraq, and the new civil-military approach that was adopted by Petraeus and Ambassador Ryan Crocker.⁷

However, what if each of these theories, and others, are both partially right and partially wrong? Here I will introduce two main concepts: causal logics, as defined by Craig Parsons, to properly identify the causal mechanisms that each narrative proposes; and, emergence, as defined by William Connolly, as an alternative narrative to explain the decrease in violence. A causal mechanism according to Parsons is an event or action that offers an explanation to why another event occurred.⁸ Shapiro observes the following in reference to causal mechanisms,

Scientists start with questions about the world, usually (but not always) with some aspect of it that seems counterintuitive or difficult to comprehend, and they try to explain the apparent facts or anomalies. . . . The ways in which scientists show how outcomes are produced by causal mechanisms depend on the nature of the question being asked. . . . The injunction to describe how causal mechanisms work entail no fixed set of methodological implications for the practice of science; there is no single correct method of causal analysis.⁹

⁷Douglas A. Ollivant, "Countering the New Orthodoxy," *New America Foundation* (June 2011), http://newamerica.net/publications/policy/countering_the_new_orthodoxy (accessed April 23, 2012), 8-9.

⁸Parsons, 22-23.

⁹Ian Shapiro, *The Flight from Reality in the Human Sciences* (Princeton, NJ: Princeton University Press, 2005), 40-41.

Simply put, event A, the causal mechanism, caused event B to happen. For example, a Company Commander orders one of his platoons to conduct a cordon and search of a village. During the course of the mission, the platoon detains several known insurgents thereby winning the trust and future cooperation of the local people and achieving the company's desired endstate. The causal mechanism in this case is the cordon and search of the village. The future action that is created by the causal mechanism is the increased cooperation of the villagers with the soldiers. I will discuss Parsons's four causal logics in later chapters.

However, in a "world of becoming," Connolly argues that not all situations can be separated into their individual parts.¹⁰ A world of becoming is the idea that we live in a world of open-systems (people, nature, political institutions, etc.) that interact with each other on different modes of time sometimes creating new and unforeseen results due to their interaction.¹¹ That is to say, all things, human and non-human, are interacting on a daily basis and continually shifting and changing to produce sometimes emergent entities. I will argue that the events leading to the decrease in violence are due to emergence as defined by Connolly and that they are, "neither reducible to chance, nor to explanation according to a classic concept of causality, nor to probability within a known distribution of possibilities."¹²

¹⁰William E. Connolly, *A World of Becoming* (a John Hope Franklin Center Book) (Duke University Press Books, 2011), 19.

¹¹Connolly, 6-7.

¹²*Ibid.*, 19.

Why is this important? As scholars and military practitioners, we look on past events with the intent of understanding them more clearly. Scholars study the different causal mechanisms that were at play, and then produce frameworks, models, or processes to guide their interventions for future events. It is no different for military practitioners. The Army has dedicated an entire manual, Training Circular 25-20, *A Leader's Guide to After-Action Reviews*, to teach soldiers how to conduct a thorough and proper after-action review.¹³ Once a leader has completed his after-action review, he codifies the lessons learned into some form of tactics, techniques, and procedures or standard operating procedures to guide his unit during future missions. This happens across all spectrums of intelligentsia: mathematics, natural science, political science, and the military. Professionals and scholars tend to believe that if we are smart enough, study hard enough, and formulate the correct processes, we will attain a better understanding of the causal mechanisms surrounding any event. Indeed, through a nuanced understanding of these causal mechanisms, with Parsons's help, the additional hope is that we will be better capable of rigorously identifying causation and intervening, should these or similar situations arise in the future. But, with Connolly's, world of becoming, there are limits to what conventional causal claims can adequately explain.

A subsequent purpose to this research is to inform and generate questions from the intelligent Field Grade Officer by exposing him to the possibility that not all plans are perfect, even if you have properly identified the causal mechanisms that are at play. However, the purpose of this paper is to neither solve the debate as to what caused the

¹³U.S. Army, Training Circular 25-20, *A Leader's Guide to After-Action Reviews* (Washington, DC: Government Printing Office, December 1993).

decrease of violence in Iraq nor is it to instill a sense of hopelessness within the military professional. It is important that all officers, leaders, and scholars look at the entire problem with the understanding that often, the best we can hope for is to nudge or prod the situation along. Through experimental interventions, we work toward a better state of affairs that ultimately achieves our desired endstate.

In chapter 2, I discuss in more detail the literature that is central to my research and establish the “gap” in the content for my study. Chapter 3 discusses my methodology for dissecting the problem and how I plan to apply Connolly’s concept of emergence to the debate on Iraq. In chapter 4, I analyze each of the three key debates through Parsons’s causal logics and apply the concept of emergent causality to better explain the decrease in violence in Iraq. Chapter 5 will contain my conclusions and a few recommendations for the way ahead.

CHAPTER 2

LITERATURE REVIEW

In this chapter, I highlight two distinct sets of gaps. One gap appears at the macro level in the understanding and application of causality with reference to the scholar and military practitioner. The second gap is at the micro level in how the practitioner addresses causality to better understand the decrease in violence in post-Surge Iraq.

To address the gap at the macro level I first call attention to the US Army's doctrine and its reluctance to suggest the need for a deeper understanding of causation despite causation's being grounded throughout most of the Army's doctrine. Army Tactics, Techniques, and Procedures 5-0.1 states that "The military decisionmaking process (MDMP) helps leaders apply thoroughness, clarity, sound judgment, logic, and professional knowledge to understand situations, develop options to solve problems, and reach decisions. This process helps commanders, staffs, and others think critically and creatively while planning."¹⁴ Additionally, it states, "assessment focuses on developing an understanding of the current situation and determining what to assess and how to assess progress using measures of effectiveness and measures of performance."¹⁵ It is clear that a more thorough understanding of causation, why something has occurred, is absolutely necessary for the military practitioner to properly intervene in the operational environment and achieve his endstate.

¹⁴U.S. Army, Army Tactics, Techniques, and Procedures 5-0.1, *Commander and Staff Officer Guide* (Washington, DC: Government Printing Office, September 2011), 4-1.

¹⁵*Ibid.*, 4-1.

Similarly, the second gap at the macro level is the military practitioner's failure to put Parsons's and other relevant arguments to use due to their reluctance to engage scholars in open discussion. A review of the course readings and syllabi for the average Command and General Staff College Intermediate Level Education student shows a lack of scholarly works.¹⁶ It is only when the individual instructor or student go beyond the initial reading does the military practitioner become immersed in these debates. However, not all fault or neglect is left on the military practitioner.

The final macro level gap is the neglect of the scholar to see the applicability of his work for the practitioner. Parsons does not fully grasp the usefulness of his causal map as a way of injecting more rigors into the practitioner's explanation of past and current events as well as predictions about future interventions. Parsons's principal aim is toward two audiences, "One is the graduate students entering these disciplines (and especially political science). . . . The other target audience is established scholars. Just as a clear and relatively comprehensive typology may help our students find their feet, so it may help us engage more open, meaningful scholarly debates."¹⁷ As practitioners and political agents executing policy driven missions, the military officer must become more involved in these debates.

At the micro level, I focus on the three distinct narratives that account for the decrease in violence in Iraq and my two primary scholars, to highlight the need for a better understanding of causality, to more fully explain the outcomes following the Surge.

¹⁶Command and General Staff College, C400/C500 Course Books (Fort Leavenworth, KS: Government Printing Office).

¹⁷Craig Parsons, *How to Map Arguments in Political Science* (New York: Oxford University Press, 2007), 4.

The first narrative is that of Colonel Gian P. Gentile. Gentile states that there were two major factors that influence the outcome of the war, both of which predate the Surge. First, Gentile cites the use of large sums of money to pay off our former adversaries, the Sunnis, thereby allying themselves with the US-led coalition in the fight against the foreign al-Qaeda in Iraq. Second, Gentile points to Muqtada al-Sadr's cease-fire and fleeing to Iran once his Shiite support base had weakened and Iraq was no longer hospitable. It is interesting to note that both of these events did begin prior to the Surge, sometime in 2006.¹⁸ Furthermore, Gentile states that some of the practices, specifically those outlined by Nagl later in this paper, have not worked in the past and are problematic. He argues that the principles of our current COIN doctrine were the same ideas that were specifically "developed by Western military officers to deal with insurgencies and national wars of independence from the mountains of northern Algeria in the 1950s to the swamps of Indochina in the 1960s."¹⁹

The second narrative is from Nagl, a graduate of the United States Military Academy and retired Lieutenant Colonel who was on the writing team that produced Field Manual 3-24. Nagl argues that only since the implementation of a coherent COIN campaign has Iraq seen a dramatic decrease in violence and an increase in strengthened governmental institutions.²⁰ Particularly, he argues the leadership of Petraeus in crafting the new doctrine and campaign strategy coupled with the additional 30,000 troops to

¹⁸Gian P. Gentile, "A (Slightly) Better War," *World Affairs* (Summer 2008): 60.

¹⁹Gian P. Gentile, "Time for the Deconstruction of Field Manual 3-24," *Joint Forces Quarterly* no. 58 (3d quarter 2010): 117.

²⁰John A. Nagl, "Learning and Adapting to Win," *Joint Forces Quarterly* no. 58 (3d quarter 2010): 123.

execute this operation were the causal mechanisms that led to Iraq's stabilization.²¹ It can also be argued that prior to the new campaign strategy and additional troops, most units were unable to remain out and among the people thereby limiting their ability to conduct a true COIN plan. However, with the surge of 30,000 additional troops, the US military was now numerically capable of getting off of the large installations and out into the community in smaller combat outposts.

Ollivant presents my third narrative on Iraq. Ollivant is a retired Lieutenant Colonel who worked on the Multi-National Division-Baghdad staff just prior to the Surge and is cited as being part of Petraeus's "brain trust." Ollivant differs from his counterparts in explaining that, "the military-centric analysis cannot fully account for the dynamics of social stability reasserting itself in Iraq, as it ignores the deep social and political forces that are in play during any civil war."²² He goes on to identify 2006 through 2008 Baghdad as a political crisis coupled with a Sunni versus Shi'a civil war.²³ Ollivant attributes the decrease in violence to four, primarily, policy based factors. First, the Sunni casualties had reached such a level that further fighting was not in their best interest. The Sunni Elite then began looking for a political settlement to end the conflict. Second, Shi'a leaders in general, and specifically Prime Minister Maliki, sought to consolidate their gains and accumulate wealth which required a level of stability throughout the country. Third, the overall increase in numbers, training, and leadership of the Iraqi governmental institutions, especially the army, allowed them to focus on countering other destabilizing

²¹Nagl, 123.

²²Ollivant, 2.

²³Ibid.

elements, such as al-Qaeda in Iraq, instead of fighting a civil war. Fourth, the US provided the necessary support to enable Iraqi institutions to flourish, from the unequivocal support of then-President Bush, to increased, targeted special operations missions, to the unique civil-military partnership between General Petraeus and Ambassador Ryan C. Crocker.²⁴ For the practitioner to fully understand the arguments of Gentile, Nagl, and Ollivant he must have a firm grasp on causal mechanisms, that is, how and why people act. This is also important when looking to future action, as a nuanced understanding of causality better enables the practitioner to intervene in future events. For this, I turn to my two main scholarly sources to better illuminate causality.

To define conventional causal mechanisms, I use Parsons's four causal logics. Parsons outlines a causal map of four types of explanations for human action. The four types of arguments are structural, institutional, ideational, and psychological.²⁵ Before defining each, Parsons highlights two sets of distinctions or sub-groups of these causal logics. The first set of distinctions is that of logics of position and logics of interpretation. Structural and institutional claims are logics of position which, "explains by detailing the landscape around someone to show how an obstacle course of material or man-made constraints and incentives channels her to certain actions."²⁶ I use the example of a well-emplaced minefield to better demonstrate this idea. Imagine you are defending a piece of terrain with only one feasible avenue of approach. To defend this area, you emplace a minefield, or obstacle course to use Parsons's term, to block the enemy's

²⁴Ollivant, 2.

²⁵Parsons, 3.

²⁶Ibid., 13.

advance. Assuming that the enemy you face is a rationale actor, he will have no choice but to change his course of action upon discovery of the minefield. Prior to emplacing this obstacle course, the structure of the area was clear and passable. By emplacing the minefield, you have now altered the structure of the area thereby causing the enemy to seek another avenue of approach.

Ideational and psychological claims are both logics of interpretation. Parsons states that, “A logic-of-interpretation claim explains by showing that someone arrives at an action only through one interpretation of what is possible and/or desirable.”²⁷ For example, people act in a certain manner based on their historical backgrounds in the case of ideational claims or based on their hard-wired instincts in the case of psychological claims.²⁸ Each person defines their environment based on their personal biases, or their interpretations. These biases are not always rational as I will explain later.

Parsons’s second distinction takes the form of external and internal influences. Structural and psychological arguments are considered to be external factors in the sense that, “we trace actions to structural or psychological causes, we argue that people’s choices followed from given conditions in the environment or in their brains.”²⁹ That is to say that it is difficult for a person to change his geographic (structural) background or his hard-wired biases thereby lending themselves to the distinction of external influences. Institutional and ideational arguments, internal influences, are man-made, “to the extent that we trace actions to institutional and ideational causes, we argue that people’s choices

²⁷Parsons, 13.

²⁸Ibid.

²⁹Ibid.

were contingent until they built their own causal dynamics around them.”³⁰ Internal influences are man-made in the sense that we, people, create institutions and define the cultural identity of our communities in which we live.

With these distinctions in mind, I now define each of Parsons’s causal logics. Structural logics are what people do as a by-product of their position given material structures (i.e., geography, a distribution of wealth, or a distribution of physical power).³¹ Again, think of the minefield example that was previously mentioned. Once the commander changed the structure of the geographic terrain by emplacing the minefield, the enemy was forced to change his approach. An example of physical power would be the relationship between a Company Commander and his platoon leader. Within the limits of legality, the platoon leader does not have the power to refuse a direct order from his Company Commander. This is a structural logic.

Institutional logics are man-made systems that have unintentional results.³² For example, the Bowl Championship Series, or BCS to most college football fans, was originally intended to alleviate and-or placate those calling for a playoff system in Division I college football. While the Bowl Championship Series system did initially solve some of the issues, it is unlikely that at its conception the Bowl Championship Series committee could have anticipated the massive amount of financial fraud and misuse of funds that would occur due to the redistribution of wealth between a small set

³⁰Parsons, 13.

³¹Ibid., 12.

³²Ibid.

of major football venues.³³ Yet another example of an institutional claim would be the use of financial aid to needy countries. It has been argued that international aid, which was designed to help countries recover from war, natural disasters, etc., has unintentionally created a system of perverse incentives in which it is more beneficial, in some ways, to the countries in need not to progress as the system was designed.³⁴

Ideational logics are what people do as a function of their culture or religion and-or emotional elements that organize their thinking, and see these elements as created by certain historical groups or people.³⁵ I think of my time in Afghanistan for this example. I believe that one of the major reasons the US has had issues pacifying the Korengal District of Kunar Province is that the ideational make-up of the Korengalis is extremely hostile to outsiders. Their historical linkage to that specific region is so strong that even other Afghans who are not from the Korengal are considered foreigners. Moreover, after centuries of isolation, the Korengalis, and many others in this same region, have adapted their speech to a specific dialect that is not considered Pashto or Dari, but simply Korengali.

³³Austin Murphy and Michael McKnight, "Fiesta Bowl Scandal Results in Junker Dismissal, Casts Pall Over Bcs," *Sports Illustrated*, March 30, 2011, <http://sportsillustrated.cnn.com/2011/football/ncaa/03/29/fiesta-bowl-junker/index.html> (accessed April 26, 2012).

³⁴Clark C. Gibson, Krister Andersson, Elinor Ostrom, and Sujai Shivakumar, *The Samaritan's Dilemma: The Political Economy of Development Aid* (Oxford: Oxford University Press, 2005).

³⁵Parsons, 12.

Lastly, psychological logics are defined as the hard-wired features or biases that compose how we think.³⁶ Dan Kahneman's, *Why Hawks Win*, argued that US policy makers were more inclined to war than to political negotiations:

As the hawks and doves thrust and parry, one hopes that the decision makers will hear their arguments on the merits and weigh them judiciously before choosing a course of action. Don't count on it. Modern psychology suggests that policymakers come to the debate predisposed to believe their hawkish advisors more than the doves. There are numerous reasons for the burden of persuasion that doves carry, and some of them have nothing to do with politics or strategy. In fact, a bias in favor of hawkish beliefs and preferences is built into the fabric of the human mind.³⁷

However, the military does not use words like causality or causal logics. Instead it use terms like measures of performance (are we doing things right) and measures of effectiveness (are we doing the right things).³⁸ Parsons's causal logics explain a great deal, yet, they do not explain what happens when the results of our interventions yield new and unexpected events as in the case of emergence.

For the concept of emergence I turn to William Connolly. Connolly introduces several important concepts inside emergence that require further explanation which I will cover in this literature review. According to Connolly, emergence occurs when two or more open-systems on separate tiers of chrono-time collide in a moment of durational-time, sometimes creating a resonance machine of irreversible momentum, and produce something new and profound.

³⁶Parsons, 12.

³⁷Daniel Kahneman and Johnathan Renshon, "Why Hawks Win," *Foreign Policy*, 27 December 2006, http://www.foreignpolicy.com/articles/2006/12/27/why_hawks_win (accessed 5 May 2012).

³⁸U.S. Army, Army Doctrine Reference Publication 5-0, *The Operations Process* (Washington, DC: Government Printing Office, 26 September 2011), 5-2.

Open-systems or force fields are generally defined as any human or non-human entity that possesses a sense of agency or free-will and is capable of changing or adapting. That is to say they that, “organizations are strongly influenced by their environment. The environment consists of other organizations that exert various forces of an economic, political, or social nature.”³⁹ A rifle company and the village in which they operate is an example of two open-systems. As the company interacts with the village and vice versa they begin to influence each other. The company perhaps begins to empathize with the villagers thereby allowing a better connection between the two and increasing cooperation throughout their time in that area. Both of these systems have a sense of agency, read free-will, that enables them to choose whether they cooperate or not.

An event like the deployment mentioned above takes place along different modes of time. According to Connolly, there are two modes of time to which we must be informed, “chrono-or clock-time – the difference measured by a clock between, say, the length of a human life and that of a hurricane – from durational time – those periods of transition when reverberations between two force-fields set on different tiers of clock-time change something profoundly.”⁴⁰ To follow my previous example, the rifle company’s chrono-time can be explained as the year long deployment to that country. For the village, the chrono-time would also be that period in which the company interacts and engages its people. Durational-time would exist in a salient moment in time, where after

³⁹Michael N. Bastedo, “Open Systems Theory,” *The SAGE Encyclopedia of Educational Leadership and Administration* (April 28, 2004): 1.

⁴⁰William E. Connolly, *A World of Becoming* (a John Hope Franklin Center Book) (Duke University Press Books, 2011), 79.

which, the company realized they had won the trust of the village; and the villagers realized that the company was truly there to improve their lives. Perhaps this occurs during a particular *shura*, or meeting. Or, perhaps, it takes place when the company responds to a particularly trying disaster in the village. Either way, from that moment forward, the paths of both the company and the village have been changed. It is important to note that a moment in durational-time is not something that we can necessarily be attuned to or even see when it happens. It is a point in time in which everything that follows that particular event has been changed or altered. It is only when looking back, towards the causal mechanism perhaps, can we spot a moment in durational-time. Additionally, the interaction of open-systems can, but not always, create a resonance machine.

A resonance machine is “the idea that role performance, beliefs, desires, actions, and the larger assemblages in which all are set can resonate back and forth, so that a change in any also enters into the character of the others.”⁴¹ For a resonance machine to exist, it requires a degree of cooperation from all systems involved towards a mutually desired outcome. In the example of the deployment, both the company and the villagers would agree, to at least some extent, that they share the same desired endstate, a more stable and secure operational environment. Then, as they work towards that endstate, they would create a resonance machine in which both are changing and shifting their make-up to better fit the environment they wish to create. The company becomes more attuned to the needs of the village. And the people no longer accept the illegitimacy of an

⁴¹Connolly, 14.

insurgency within their village. How then do we explain what happens when something new and unexpected occurs?

Emergent causality, or emergence, in the human concept is the idea of past possibilities, either fulfilled or not, that lie below the level of recollection, can lead to future thoughts or actions.⁴² At the macro level, it is the idea that something new can be generated unintentionally or unknowingly from the interaction of open-systems. This idea creates a gap between conventional causal mechanisms (that, which we can see, know, and understand) and the actual event that takes place. Emergence explains that gap between what is seen and unseen. In the example of the deployed company, perhaps there was no one particular event or action by either party that led to an increased cooperation. Perhaps it was a combination of known and unknown efforts, both by the company (in the form of humanitarian assistance, security patrols, meetings with elders, a change in command philosophy, etc.) and the village (receipt of additional jobs and funds for the village, an increase in governmental legitimacy, or an increase in personal desire for a better life), that led to the achievement of the desired endstate. How then is the military practitioner supposed to operate in an environment where his actions may or may not produce something new and unknowable? It would be very hard indeed not to adopt a sense of resentment towards a place such as this.

Lastly, Connolly introduces the idea of “resentment.”⁴³ Living in a “world of becoming” where new things can arise from nothing could lead to a sense of hopelessness or resentment. After all, how or why should a person intervene in situations if the

⁴²Connolly, 4.

⁴³Ibid., 63.

outcome cannot possibly be known? According to Connolly, people should strive not to form a sense of resentment and instead act positively in their environments. Not to do so could serve to, “amplify the dangers and destructiveness facing our time.”⁴⁴ For the military practioner this means using experimental interventions across multiple lines of effort. The Company Commander could not reasonable expect to improve only one area of the villagers life and achieve their full cooperation and support. Instead, the Company Commander attacked the problem from multiple areas. He used his forces and the locals to provide security. He listened to the elders and took their concerns to heart. He continued to increase the overall quality of life for the village. Perhaps he even tried other measures. The point being that it is a combination of efforts. The practioner must continually experiment, assess, and move forward.

Now that I have described the key arguments (ala Gentile, Nagl, and Ollivant), the key concepts to more accurately understand them (Parsons’s causal logics) and the gap in their current methodology (Connolly’s emergence), I now proceed to chapter 3. Chapter 3 will discuss the methodology for my research. I lay out a roadmap that describes the process by which I analyze each of the main arguments according to conventional causal logics and emergence. In chapter 4 I show my analysis of each argument through the use of the conventional causal logics and through the use of emergence. In chapter 5, I provide my summarized conclusions and recommendations.

⁴⁴Ibid., 14.

CHAPTER 3

RESEARCH METHODOLOGY

Chapter 3 will focus on explaining the methodology of how I plan to analyze the narratives of Gentile, Nagl, and Ollivant using Parsons's causal logics. I will also discuss how I plan to introduce Connolly's notion of emergent causality. The method of research conducted in this paper was through both self-study and classroom instruction as outlined in the syllabus of the Intermediate Level Education scholar's program *Local Dynamics of War*.⁴⁵ The purpose of this paper is to propose a relatively new concept, emergence, as a possible explanation for the decrease in violence and stabilization of Iraq following the Surge. A subsequent purpose of this paper is to reinforce the need for the military practitioner to have a better understanding of causal mechanisms and how to influence the operational environment.

Before looking at the narratives, I briefly restate the key events that brought Iraq to the brink of civil war and increased the destabilization of the country. I then look at the narrative of Gentile that the pay-off of the Sunni Elite coupled with the removal of al-Sadr's direct influence in Iraq led to the decrease in violence. In relation to Parsons's causal logics I will describe each of these causations. I provide reasoning as to why each event meets the requirements for its causal logic. I then do the same for each of the remaining two narratives, Nagl and Ollivant. As Parson has stated previously, I have found that most of the events meet the requirements of multiple causal mechanisms.

⁴⁵Celestino Perez, *Local Dynamics of War*, Syllabus.

I then proceed to explain why a nuanced understanding of causal logics is important to the military practitioner. In this explanation I highlight a few of the gaps that exist between the practitioner and the scholar. I specifically point to US Army doctrine, key leadership throughout the Surge period, and emergence to illuminate these gaps.

After redefining the need for this research paper and assigning each narrative a causal logic, I then reintroduce and highlight the necessary key concepts of Connolly to ensure the reader has a reinvigorated understanding of these ideas. I do this through reestablishing the definitions of causality, open-systems, agency, chrono-time, and durational time.

I then combine all of the narratives and analyze them through the use of Connolly's emergent causality. To assist the reader visually, I introduce a graphic depiction of Connolly's concepts (see Illustrations). First, I begin by classifying the key actors into open-systems. Second, I describe how each of the open-systems has its own sense of agency which allows it to operate on its own as would a living, breathing human being. Third, I give an explanation of each open system's existence along a scale of chrono-time. Fourth, I describe how specific open-systems interacted in a moment of durational-time, to create a resonance machine that brought change in all of the systems involved during the Surge.

After applying the concept of emergence to the events in Iraq, I then explain why this qualifies as an example of emergent causality. I do this by describing how a majority of the events described by Gentile, Nagl, and Ollivant interacted with each other to create an irreversible momentum of events. To further elaborate this point, I cite Petraeus's 2010 interview on NBC's *Meet the Press*.

Finally, I explain how the military practitioner interacts in an operational environment where emergence is a reality. I highlight the need for the practitioner to look for specific moments in time that, if acted upon, change the shape of the battlefield. I cite the work of Perez, and how then-Colonel Sean McFarland was able to accomplish this in Ramadi through experimental interventions.

I have described my methodology for my research in this chapter. This paper folds a nuanced understanding of causality in to a re-description of military doctrine and the operational environment. As emergence is not an empirically testable concept, the primary shortfall of this paper is the contestability of emergence. In chapter 4, I discuss the analysis from my comparisons of the three narratives with conventional causal logics and emergence. At the end of chapter 4, I briefly cover a quick summary of the findings from the analysis. In chapter 5, I provide a detailed summary of all the findings from this work. Additionally, I provide a few recommendations based off the findings from this paper.

CHAPTER 4

ANALYSIS

The purpose of this chapter is to analyze the narratives of Gentile, Nagl and Ollivant through the lens of Parsons's causal logics and Connolly's concept of emergence. I will analyze each argument from the narratives of each author that accounts for the decrease in violence. Subsequently, I will then introduce Connolly's emergent causality to offer a fourth point of view for the decrease in violence.

Does an understanding of causal logics and emergent causality applied in a rigorous manner to the operational environment, lead to a military practitioner who is better capable of intervening in a, world of becoming? I argue yes. What follows will better illumine the practioner on matters of causality. Before I begin, however, it is important to note the inherent contestation of Parsons's own beliefs about his causal map: "In making them [the four logics] separable, however, I also try to make them abstractly compatible, such that we could imagine a world in which all were operating while we debate how much variants of each contributed to any given action."⁴⁶ Each claim can be argued to meet the requirements for one or multiple causal logics as they are themselves subjective and open to debate. Hence, what follows are my interpretations of Parsons's logics as applied to the narratives of Gentile, Nagl, and Ollivant.

The events in 2006 Iraq are escalating towards an all-out civil war between the Sunni and the Shi'a. Additionally, foreign fighters such as al-Qaeda in Iraq are preying on the sectarian divide that has been created through such events as the de-Baathification.

⁴⁶Parsons, 3.

Moreover, conventional Army tactics do not seem to work in quelling the rising violence. How did Iraq manage to come back from the brink of civil war towards stabilization? I now revisit the three narratives and dissect their arguments through the use of Parsons's logics.

Gentile's first main point is that the Sunni leaders were paid large sums of money to stop fighting.⁴⁷ I must first ask the question "why did this occur and what were the intended results" in an attempt to understand and properly apply Parsons's logics. In this case I find the argument meets the understanding of a structural and ideational logic.

It is structural in the sense that prior to this event, buying off of the Sunni leaders, the Sunnis were providing a base of support, both logistically and physically, to insurgents in Iraq. By changing sides in the war to that of the US-led coalition, this event altered the physical landscape for the insurgents. The insurgents would have to look for other means to support themselves in their cause.

The argument is also an ideational logic in that the war in Iraq was unfolding in a manner likely to lead to a continued loss of power and influence for the Shiite in Iraq. The Sunni hoped to maintain their identity as an influential people by accepting the payoff from the US and thereby consolidating their tribes' power base in Iraq. Additionally, the payoffs offered the Sunni leaders a manner in which to save face. The Sunni could then claim that they accepted the money not because they were losing the ongoing civil war, but because they wanted to help unite the people of Iraq against the foreign al-Qaeda fighters who were not respecting their cultural norms. As part of a

⁴⁷Gian P. Gentile, "A (Slightly) Better War," *World Affairs* (Summer 2008): 60.

Muslim culture, this would have provided credence for their tribes as it offered them the possibility of negotiating from a position of power rather than one of weakness.

Gentile's second claim is that Muqtada al-Sadr called for a cease-fire and fled to Iran.⁴⁸ I see this as primarily a structural claim. Why did al-Sadr call the cease-fire and flee to Iran? His power base was dwindling. Coupled with the Sunni pay-off and backing of the Iraqi government, the landscape in which al-Sadr had previously achieved success changed. The Sunni were in the early stages of establishing themselves on the side of the US-led coalition. Sunnis were now policing themselves and providing additional security. What once was a safe-haven with easier targets to attack no longer existed. Al-Sadr had no choice but to redefine his situation according to the new circumstances. In this case, he fled to Iran.

According to Nagl the decrease in violence is due to the events that occurred later during the Surge. Specifically, Nagl cites the additional 30,000 troops that were sent to Iraq as one of his three main reasons for the decrease in violence.⁴⁹ This is a structural claim in that the current force structure of our military was not sufficient to accomplish our mission of conducting a population-centric COIN plan. After introducing 30,000 additional troops in to Iraq, the US military altered the balance of power in their favor. They were now capable of leaving the larger installations and living among the people that needed security the most.

⁴⁸Gentile, 60.

⁴⁹John A. Nagl, "Learning and Adapting to Win," *Joint Forces Quarterly* no. 58 (3d quarter 2010), 123.

Nagl's second claim is the revision of past COIN doctrines to produce Field Manual 3-24 enabled the US military to change its strategy and better fight the war in Iraq.⁵⁰ This event leads to two causal logics. First is the institutional claim. The conventional Army that invaded Iraq in 2003 and the doctrine that was used during the invasion was designed for quick and decisive victory. However, the use of conventional doctrine during the sectarian violence had the unintentional consequence of making the situation worse as it was not capable of adequately dealing with the issues at hand. Moreover, it can be argued that our conventional Army led to the creation of an insurgency or at the very least led to the gap in which the insurgency arose. By this I mean, we were not suited and trained to fight in this manner. This also leads to the structural claim in that the Army had to redesign its current doctrine to adequately address the insurgency and civil war that had arisen in Iraq. The conventional Army that invaded Iraq no longer met the needs of the war. New doctrine and tactics were necessary to achieve our endstate. Hence we have the revision of COIN practices and the introduction of Field Manual 3-24.

Nagl's third claim is that the overall guidance and leadership of Petraeus directly influenced the outcome of the war.⁵¹ This is an ideational claim for a number of reasons. Petraeus provided a rallying point with which US soldiers could identify. Moreover, he created buy-in with both the US and Iraqis that fostered a sense of belonging as a whole and to their individual groups. This buy-in of soldiers, Iraqis, and policy makers led to a strengthened sense of pride in being part of his overall plan to win the war in Iraq. The

⁵⁰Nagl, 123.

⁵¹Ibid.

decrease in violence and the policies that General Petraeus helped implement enabled the Sunni Awakening and brought back a sense of pride to the Sunni people. Additionally, his continued support of the Shi'a that were already in power showed that he was not abandoning them.⁵²

Ollivant emphatically claims the following events, which were more politically based, changed the war. First he claimed that the Sunni Elite realized they were losing the civil war that was taking place in Iraq.⁵³ This claim has similar logical comparisons to Gentile's first claim of buying off the Sunni Elite in that it can be described as both structural and ideational logic. In realizing their position of power was weakening and with no hope of turning the tables of the civil war in their favor, the Sunni Elite sought to change the geography of the battlefield by accepting the terms that were being offered by the US and Iraqi forces. This is a structural logic for the same reasons as Gentile's first claim. The civil war was not winnable for the Sunni. The current distribution of power at that time was more favorable towards the US-led coalition and the Iraqi government. As such, the Sunni Elite sued for peace by offering to back the Iraqi government and begin providing local security for themselves. The Sunni were also able to subdue some of the more sectarian violence by calling for all of the Sunni people to side with the Maliki-ran government. The ideational logic lies in the Sunni Elite ensuring their people-hood continued in the new government through this truce. Prior to the 2003 invasion, the Sunni

⁵²George Friedman, "Petraeus, Afghanistan and the Lessons of Iraq," *Stratfor*, May 6, 2008, http://www.stratfor.com/weekly/petraeus_afghanistan_and_lessons_iraq (accessed May 6, 2012).

⁵³Douglas A. Ollivant, "Countering the New Orthodoxy," *New America Foundation* (June 2011), http://newamerica.net/publications/policy/countering_the_new_orthodoxy (accessed April 23, 2012), 2.

Elite had run the government under Saddam Hussein. The Sunni narrative had been one of importance and power. After the conclusion of the civil war, this narrative would continue through this truce.

Ollivant's second claim is that the Shi'a ran government, particularly people like Prime Minister Maliki, needed a stable Iraq to solidify its control and accumulate wealth.⁵⁴ Structurally, the distribution of power throughout Iraq and the government favored the Shi'a. The decision to help foster stabilization across the country and not continue the sectarian violence, allowed the Shi'a to consolidate their power and assured they would remain in key positions after the war was over. Ideationally, the argument is that the Shi'a ensured that their people-hood would not be made irrelevant as they had been under Saddam by consolidating their positions. Historically, the Shi'a comprised the majority of the people in Iraq. Despite being the majority, however, they had been heavily persecuted under the previous regime. Consolidation of key power positions and accumulation of wealth prevented a return to persecution and irrelevance.

Claim number three is that the Iraqi governmental institutions, particularly the Iraqi Army, were bolstered through additional training and partnership with the US.⁵⁵ The increase in governmental capacity is an institutional claim since the original designs for these institutions and for partnering with them was leading to unintentional consequences. The original plan was to be US-led until the Iraqi institutions were capable of conducting operations on their own. There was no solid timeline to transition control to the Iraqis prior to the Surge. US-led operations and planning allowed for a culture that

⁵⁴Ollivant, 2.

⁵⁵Ibid.

could shirk responsibility. Following this change in policy and training, the leaders of Iraq would take control and more importantly take the majority of the responsibility for the securing their country. The structural claim is again in the original design of these institutions. They were not adequate to accomplish the mission; specifically the numbers for the Iraqi Army and the training were not enough.⁵⁶ The US and Iraq partnership intensified recruiting and training efforts, to ensure better overall numbers and quality of soldiers being produced. This coupled with the previous two claims, allowed the security forces to focus on stabilization instead of fighting a civil war.

Ollivant's final argument is that the US increased their overall political support in the war effort.⁵⁷ Ollivant specifically cites the unique civil-military partnership between Petraeus and Ambassador Ryan Crocker which allowed for the unequivocal support from the political aspect, the separation of the warring parties through softer tactical means, and the removal of key insurgent elements from both the Shi'a and Sunni elements.⁵⁸ In Ollivant's final claim I find arguments for structural, institutional, and ideational logics.

The structural claim is that the increased political and civil-military support reshaped the geography of the battlefield. Prior to the partnership and increased US support, the Iraqi institutions' power base were inadequate to achieve the desired endstate. This claim is also structural in that key dissident elements of both the Shi'a and Sunni factions were removed from the battlefield allowing for a smoother transition to Iraqi control of security in key areas.

⁵⁶Ollivant, 2.

⁵⁷Ibid.

⁵⁸Ibid.

The institutional logic is the change in tactics. During this period the US-led coalition made sweeping changes in how they fought the war in Iraq. The US military switched from conventional tactics, (i.e. large cordon and searches, to targeted operations) through the increased use of Special Operations Forces and living among the Iraqi people.⁵⁹ Ollivant's argument in this sense is similar to the two arguments made by Gentile and Nagl earlier in this chapter, in that the tactics prior to the Surge were not producing the intended results.

Lastly, Nagl's claim is ideational in the sense that the increased support from the US government sent a clear signal to the people of Iraq that it was not going to back off until the mission, a stable and secure Iraq, was complete. It also had the effect of abating the fears of the Iraqi people and their leadership that the US was not there to occupy their country. For the American people, it showed that while our support to Iraq was unquestionable, the US had a plan to ensure we were not going to stay there indeterminately.

We have looked at all of the arguments through Parsons's causal logics. So what? What does this do for the military practitioner? Why should the military practitioner desire to have a better understanding of causal logics? I argue that it accomplishes three main points as highlighted in the gaps covered in chapter 2. First, it shows the centrality of causality to military operations. The need to understand causality is embedded throughout Army doctrine. The *Army Design Methodology* states the following:

Design is a methodology for applying critical and creative thinking to understand, visualize, and describe complex, ill-structured problems and develop approaches to solve them. Critical thinking captures the reflective and continuous learning

⁵⁹Ollivant, 6.

essential to design. Creative thinking involves thinking in new, innovative ways while capitalizing on imagination, insight, and novel ideas. Design is a way of organizing the activities of understanding, visualizing, and describing within an organization. Design occurs throughout the operations process before and during detailed planning, through preparation, and during execution and assessment.⁶⁰

You cannot properly intervene in a complex operational environment like Iraq if you do not have an understanding of what causal mechanisms are at play for the different actors involved. Furthermore, “During design, the commander and staff consider the conditions, circumstances, and factors that affect the use of capabilities and resources as well as bear on decisionmaking. As an organizational learning methodology, design fosters collaboration and dialog as commanders and staffs formulate conditions that define a desired end state and develop approaches that aim to achieve those conditions.”⁶¹ This clearly shows that a deeper understanding of causality via Parsons’s logics can lead to a more rigorous articulation by military professionals of explanations about current and past situations and predictions about future outcomes.

Second, this highlights the necessity for the military practitioner to become involved in the socio-political debate that is going around him. Otherwise, without the input from the people that are actually carrying out the fight, the practitioner is at the mercy of the political machine that dictates the policies to be carried out by the practitioner. It is no coincidence that Petraeus was arguably the most capably leader to

⁶⁰U.S. Army, Field Manual 5-0, *The Operations Process* (Washington, DC: Government Printing Office, March 2010), 3-1.

⁶¹*Ibid.*, 3-7.

carry out all of the aforementioned actions. Petraeus possessed, “unusual domestic political skills,” not traditionally found in military leaders.⁶²

Third, it reveals that conventional causality falls short in fully explaining the decrease in violence in Iraq following the Surge. None of the three narratives the thinkers make are completely dispositive. At best, it was a combination of all of the claims working together to produce stability in the region. At worst, the authors miss the point entirely. That is to say, it was experimental intervention on the parts of many leaders and soldiers involved in Iraq that produced the emergent stability.

To better explain this idea, I turn to the work of William Connolly. Nuanced understanding of his concepts is required before continuing. In the discussion that follows, I reintroduce several important principles, this time with comparisons to the Surge. Connolly explains the concept of emergent causality as the following:

Some causal relations are not susceptible to either efficient or mechanical modes of analysis. There are efficient causes, as when, to take a classic example, one billiard ball moves another in a specific direction. But *emergent causality*—the dicey process by which new entities and processes periodically surge into being—is irreducible to efficient causality. It is a mode in which new forces can trigger novel patterns of *self-organization* in a thing, species, system or being, sometimes allowing something new to emerge from the swirl back and forth between them: a new species, state of the universe, weather system, ecological balance, or political formation.⁶³

By this, Connolly shows us that conventional causal mechanisms cannot fully explain all actions. In a linear, or straightforward, battlefield, conventional mechanisms that explain why events occurred in a certain manner are adequate. However, the current battlefield that the military practitioner engages in is far from linear and straightforward. To

⁶²Ollivant, 8.

⁶³Connolly, 44.

understand causality in a non-linear and complex operational environment such as Iraq, the practitioner requires a detailed understanding of emergences and how to intervene. It follows then, that emergent causality occurs when two or more force-fields of differing degrees of agency interact with each other and produce something entirely new.

The second concept that we must understand is that of force-fields and open-systems. A force-field, “roughly speaking, is any energized pattern in slow or rapid motion periodically displaying a capacity to morph, such as a climate system, biological evolution, a political economy, or human thinking.”⁶⁴ A force-field or open-system refers to anything with agency (e.g. a person, a country, political institution, a religious sect, etc). The US national political parties, Republican and Democrat, are examples of open-systems. Both parties are constantly shifting, changing, adapting, and adding new ideas to meet their political objectives and assure their continued survival in the political make-up of America. Additionally, these systems have a sense of agency.

The third is the concept of agency. According to Connolly, we need to, “shift from the tri-archy–nature without agency, humanity with imperfect agency, God with perfect agency–to a heterogeneous world composed of interacting spatio-temporal systems with different degrees of agency.”⁶⁵ Put plainly, the degree of agency something has represents the degree of free will it possesses.⁶⁶ A human being has free will. Therefore, a human being possesses agency. However, according to Connolly, all things,

⁶⁴Connolly, 5.

⁶⁵Ibid., 22.

⁶⁶For a deeper discussion on non-human agency see Jane Bennett’s work *Vibrant Matter*.

animals, plants, or any living thing, possess some degree of agency or free will.⁶⁷ Furthermore, Connolly argues that we need not erase the differences between “nature” and “culture”. He believes that this idea of agency should, “encourage us to rethink the dicey problematic of agency, to convert a dichotomous view that bestows agency upon humans only . . . into a more distributive image of agency.”⁶⁸ The idea of agency is important as it applies in the case of the Surge in Iraq to collective agency, “complex assemblages of heterogeneous elements bound loosely together.”⁶⁹ Take for instance Connolly’s example of “a state-capitalist system” that seeks to improve its consumption habits. The system can change its practices and promote those interests which are pro-change. To promote these changes, the system “can use advertising, associational pressure, and erotically charged entertainment to work on cultural habits,” that are against the change.

The final major concept is Connolly’s notion of chrono-time and durational-time. Chrono-time is clock time, the life span of a beetle, species, or civilization. Durational-time is that moment, when all events that occur after which are forever changed in some way. Where chrono-time can be looked back upon and studied, a moment in durational-time can be more difficult to identify. Take for instance an example of a young student going to university and his professor. Chrono-time in this case could either be viewed as the student’s and professor’s overall life span or their time spent interacting while at school. For this example we will use the time in which they spent interacting at the

⁶⁷Connolly, 22.

⁶⁸Ibid., 21-22.

⁶⁹Ibid., 27.

university. An example of durational-time would occur when the student attends a particularly influential class given by the professor that caused the student and-or the professor to change in some manner. Perhaps after attending this class the student decided to pursue a career in teaching. Or, perhaps the student's interaction caused the professor to expand his course to a more diverse population of incoming students. Regardless, after this event occurred, one or both of them was inexplicably changed.

With these concepts in mind, I now dissect the narratives of Gentile, Nagl, and Ollivant and the actions that occurred before and during the Surge in Iraq (for a visual depiction, refer to Illustration 1). The first step is to recognize the open-systems that were in play during this period. This is not an exhaustive list of all the open-systems, but a list according to our three main pundits. The key open-systems were the following: the US government, the US military, the American people, the Iraqi government, the Iraqi military, the Shi'a population in Iraq, the Sunni population in Iraq, Muqtada al-Sadr, and the insurgency (al-Qaeda in Iraq). Each system is set on its own set of chrono-time and infused with its own sense of agency.

At this point each open system is moving along its separate tier of chrono-time. The US government and the military has been advancing and adapting since the signing of the Declaration of Independence. The current Iraqi government and military have been in existence since the toppling of the Saddam regime. The Iraqi Shi'a and Sunni people have been around the longest, since the introduction of Islam to the Iraqi people. Al-Sadr has been operating in Iraq since shortly after the invasion of 2003. The insurgency was created with the toppling of Saddam's regime and the disenfranchisement of the Sunni Elite. What happens when two or more open-systems, following along their separate tiers

of chrono-time, collide together in a moment of durational-time? When open-systems collide in this manner, they sometimes create a resonance machine.

In the case of the US government, US military, the American people, the Iraqi government, Iraqi military and Iraqi people, a resonance machine was created. As I stated in chapter 2, a resonance machine occurs when systems with similar interests coalesce towards a shared understanding of the future. As these systems worked together, they created a swirl of interaction and movements that changed all of them following the Surge. In a linear environment, interactions like this would create predictable results. For example, when system A collides with system B it may produce a change in system A thereby creating a new system, system A1. However, when system A collides with system B it will sometimes produce a new and unexpected result, emergence, seen as system C (see Illustration 2 “Resonance” for a visual depiction). In the case of 2008 and - 2009 Iraq, all of the aforementioned systems, to include al-Sadr and al-Qaeda in Iraq, traveling along their separate tiers of chrono-time collided during the Surge to produce a resonance machine in some and, I argue, an entirely unforeseen new system in all. It produced a system in which the violence in Iraq was greatly reduced; the American military was transformed into an institution better capable of countering an insurgency; American military leaders now saw the importance of combined civil-military operations; the Iraqi government was more by-partisan with both Shi’a and Sunni cooperating for the betterment of society; al-Sadr no longer enjoyed freedom of movement in Iraq; and the insurgency was no longer seen as a viable substitute to the legitimate government of Iraq.

Still the question remains. Did the events of the Surge, both prior to and during, lead to emergence? Or, were the resulting systems following the Surge products of

conventional causality? I argue that the collision of the events and systems resulted in emergence.

Yes, people will argue that the events espoused by Gentile, Nagl, and Ollivant were intentional and produced the desired effects for which they were intended. They may also argue that only one set of those events were the key catalyst. However, if you were to rewind time and interject these same events, there are no guarantees that you would see the same results. The whole of emergence is often irreducible to the sum of its individual parts.⁷⁰ It is more likely that all of the events mentioned combined to create an irreversible resonance machine from which something entirely new and unpredictable emerged. Moreover, as Connolly states, “Emergent causality consists of resonances within and between force-fields in a way that is causal but beyond the power to isolate and separate all elements in determinate ways. An element of mystery or uncertainty is attached to emergent causality.”⁷¹

Look, for example, at how some of the events interact and feed off each other to create a loop of unstoppable momentum. The Sunni Elite begin to realize that their civil war is a lost cause.⁷² Large sums of money begin to flow into Iraq with the intent to sway the Sunni leaders.⁷³ Sunni elders in places like Ramadi begin to feel disrespected by the

⁷⁰Connolly, 71.

⁷¹Ibid., 174.

⁷²Ollivant, 2.

⁷³Gentile, 60.

foreign al-Qaeda fighters.⁷⁴ The actions of the Sunni lead to a reduction in willing fighters and hospitable sanctuaries for insurgents. Simultaneously, Petraeus and other Army leaders identify a lack in proper COIN tactics and soldiers to accomplish a population-centric COIN plan.⁷⁵ Petraeus's plan for the Surge is approved by congress and then-President Bush which is ultimately interpreted as a sign of unequivocal support to the people of Iraq.⁷⁶ The US support to Iraq is interpreted by the Shi'a and Sunni leaders as a sign that the US is not in Iraq to occupy, but to help establish a legitimate government capable of securing its people. The US support reinforces the need of the Sunni to remain on the side of the coalition and primarily Shi'a-ran government of Iraq. This type of momentum is what Petraeus alluded to in his interview with David Gergen:

What we have are areas of progress, we've got to link those together, extend them and, and then build on it because, of course, the security progress . . . is the foundation for everything else, for the governance process, the economic progress, the rule-of-law progress and so forth. Obviously, they influence security as well. They can either reinforce it or they can undermine it . . . and the trick is to get all of it moving so that you're spiraling upward where one initiative reinforces another.⁷⁷

Now, how does the practitioner interact in an environment where emergence is a real and tangible occurrence? He does this by recognizing pregnant moments in time as they arise. According to Connolly a pregnant moment in time is when an event or action

⁷⁴Celestino Perez Jr, "The Soldier as Lethal Warrior and Cooperative Political Agent: On the Soldier's Ethical and Political Obligations Toward the Indigenous Other," *Armed Forces and Society* 38, no. 2 (August 18, 2011): 196.

⁷⁵Nagl, 123.

⁷⁶Ollivant, 2.

⁷⁷David Petraeus, "NBC interview with David Gergen," Meet the Press Transcript for August 15, 2010, http://www.msnbc.msn.com/id/38686033/ns/meet_the_press-transcripts/ (accessed May 7, 2012).

occurs and actors then intervene to change or reshape the current environment.⁷⁸ The practitioner does this through multiple and often simultaneous experimental interventions. For a more tangible example of how to intervene in the environment we look at an article published by Lieutenant Colonel Celestino Perez Jr. In this article, Perez mentions the deployment of then-Colonel Sean McFarland as a Brigade Commander in Iraq.⁷⁹ Perez mentions that McFarland's brigade turned the Sunni leaders in Ramadi from enemies into willing allies for the coalition through multiple meeting engagements that ultimately resulted in the creation of a local, tribal police force.⁸⁰ He goes on to mention how it was the keen situational awareness of McFarland and his soldiers that allowed them to notice the rising tensions between the Sunni and the foreign al-Qaeda fighters.⁸¹ The military practitioner must be acutely attuned to such fecund moments in time to quickly and properly intervene. As Perez notes, "No preconceived military plan can account for what will become the crucially important circumstances on the ground."

Throughout this analysis I have shown how conventional causality is always at play; therefore, the military practitioner must improve his skills at understanding these concepts through a stringent study of Parsons's four logics. To determine the root cause of why something has occurred and how to properly intervene absolutely demands that the practitioner fully understand these concepts.

⁷⁸Connolly, 19.

⁷⁹Perez, 196.

⁸⁰Ibid.

⁸¹Ibid.

However, conventional causality does not exhaustively describe everything that happens. For example, how then would someone explain how a past slight (read causal mechanism), which goes unnoticed on the conscious level to all involved, affects the actions of those people sometime in the future? Perhaps when I was a young boy I had a crush on a young girl. After mustering the required nerve to ask this young girl out, maybe she spurned my advances. Determined not to let this bother me, I move on as if nothing happened. Then, years later, all of my dating patterns and possibly those of the young girl are now irrevocably altered due to that one encounter. Perhaps even the unknown fear of rejection that was planted deep inside me during that encounter leads me to seek a public life full of constant attention seeking, thereby affecting my decision making and how I act. The unconscious fear of rejection that was developed in my early life is an example of emergent causality as it affects me unknowingly in my adult life. The practitioner must incorporate emergence into his understanding of the world. These two types of causality, wherein the complexity of real-world events oftentimes frustrates the execution of mission statements crafted with conventional causality in mind, require a certain mode of intervention.

Another method that could be used to explore causality would be Elinor Ostrom's institutional analysis and development (IAD) framework which was designed to study collective action problems.⁸² This framework is relevant in that it "employs a multidisciplinary approach that presents a practical method for dealing with multiple levels of analysis."⁸³ Specifically, she and her colleagues used this framework to identify

⁸²Gibson, 23.

⁸³Ibid.

and solve collective action problems. For instance, she and her colleagues study how collective choice pathologies hinder the international aid community's efficiency, accountability, sustainability, and equity in the systems used to distribute economic aid. The IAD framework consists of six main sections: the context, the action arena, incentives, patterns of interaction, outcomes, and evaluations. She further defines context and action arena with subcategories.

The first section of the IAD framework is context, which consists of three subcategories: biophysical (material) conditions, attributes of the community, and rules-in-use. "All parts of the IADs context—working rules, biophysical/material conditions, and community attributes—provide the initial conditions or 'the environment' that structures efforts to achieve outcomes."⁸⁴ The military practitioner understands context as the operational environment. The first subcategory is biophysical (material) conditions. Those are defined as the physical environment to which actors belongs, (i.e. their geographic location) and "produce incentives that affect the set of choices available."⁸⁵ For example, a farmer faces a completely different set of problems than a businessman from Hong Kong. The second subcategory is attributes of the community which "affect individuals' capacity to self-organize, although the importance of any single attribute, or mix of attributes, will likely vary from context to context."⁸⁶ How does a certain community typically handle larger problems? Do they resort to conflict or peaceful negotiations? The last subcategory for context is rules-in-use. "Rules are shared

⁸⁴Gibson, 35.

⁸⁵Ibid., 34.

⁸⁶Ibid., 35.

understandings among those involved that refer to enforced prescriptions about what (or states of the world) are required, prohibited, or permitted.”⁸⁷ What Ostroms’s colleague, Clark Gibson, means by rules-in-use is that these are the rules that are generally understood, followed by the participants of the community, and enforced. For example, is this a community where lying is acceptable to protect ones honor? However, rules-in-use are not to be confused with formal rules, such as legislation or contracts.⁸⁸

The action arena is broken down into two subcategories. The first subcategory is the “action situation.” According to Gibson, “An action situation is composed of variables including the actors, their actions, and the outcomes associated with those actions. . . . For many problems, it is useful to accept the view that an actor’s choice of strategy in any particular situation depends on how he or she perceives and weighs the benefits and costs of various strategies and their likely outcomes.”⁸⁹ In other words, the action situation is a combination of the actors, what they are doing, and why they are doing a particular action.

The second subcategory is the actors themselves. Actors “can be thought of as a single individual or as a group functioning as a corporate actor.”⁹⁰ For this paper, I prefer to equate the actor to open-systems.

Given the context of the environment combined with the action arena, I am now able to identify the incentives as to why actors behave in a certain manner.⁹¹ The first are

⁸⁷Gibson, 33.

⁸⁸Ibid., 8.

⁸⁹Ibid., 27.

⁹⁰Ibid.

what I describe as material or tangible incentives. Material incentives are physical evidence for the actions that have occurred between the actors given their environment. For instance, I go to work every day to receive a paycheck and provide for my family. Perceived incentives are those intangible reasons the actor believes they will gain based on their actions within their environment. For example, I continue to work as a Major in the US Army because it provides me with a sense of honor in serving my country. This is a perceived incentive.

The incentives lead to patterns of interaction. Patterns of interaction are simply that. This section gauges how the actors interact with each other in this setting, ultimately leading to the outcomes. Based on the assigned evaluation criteria, the outcomes are then assessed as to be favorable or not. If they are not favorable, then intervention occurs either in the context or action arena setting. When all of these elements are combined, the framework allows for better understanding of what is occurring in the situation and how to intervene in positive ways.

To put this into context for the practitioner and his use of causality, I suggest a few minor changes to the IAD framework (see Illustration 3 for a visual reference). I place the macro level open-systems into the context portion of the IAD framework. To better explain this to the practitioner and to ensure completeness, the list of open-systems at the macro level should include the systems that inhabit both the practitioner's area of operations (that area specifically assigned to his unit) and his area of influence (that area

⁹¹Gibson, 27.

outside of his control but capable of influencing actions inside his area of operations).⁹²

The combination of all the open-systems, each traveling along its separate tier of chronotime, provides the context of the operational environment at the macro level.

I suggest that the practitioner think of the key individuals or power brokers at the micro level that compose each of the macro level open-systems for the action arena. At a minimum, this should include the key actors within the practitioner's area of operations. Each actor, as with the IAD framework, possesses his own narrative that explains his interactions in the operational environment.

The incentives and the patterns of interaction remain constant as the actors are motivated through their perceived incentives. They continue to interact with each other and their environment, thereby creating a feedback loop that then alters the design and make-up of both the macro level open-system and the micro level individual actor within those systems. This demonstrates how each interaction causes a continual shifting in the design and make-up of both the macro open-systems and actors, ultimately creating a state of autopoiesis or self-organization.⁹³ Additionally, as all of these open-systems continue to merge and self-organize, the group as a whole then becomes a single open-system capable of interacting and influencing other organizations outside of its current sphere of influence.

Arguably the most critical action contributing to overall mission success occurs not in planning (which is the focus of most of our military's primary education), but in

⁹²U.S. Army, Army Doctrine Publication 3-0, *Unified Land Operations* (Washington, DC: Government Printing Office, October 2011), 12.

⁹³Connolly, 171.

execution. Since execution requires understanding the sociopolitical dynamics in the environment as well as causality, primary military education should focus its study on these two topics. It's a fundamental mindset change. The military practitioner need not be afraid to immerse himself in this type of study. Moreover, he needs to be willing to accept that not all answers can be found. The answer lies in understanding this notion and in intervening in such a way as to progress the current state of affairs.

In this chapter, I have discussed all of the key concepts of Parsons's causal map. I showed how each narrative from Gentile, Nagl, and Ollivant can be better broken down and explained through the use of causal logics. Connolly's key concepts and terminology were more clearly explained and used to show how emergence is a valid causal explanation of the events in Iraq. In the following chapter, I summarize the conclusions of this chapter and provide some recommendations in which I believe the military practitioner can apply and grow in their profession.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

In chapter 4 we analyzed Gentile, Nagl, and Ollivant through the understanding of causal logics and emergence. Does a nuanced understanding of conventional causality and emergence lead to a clearer picture of the operational environment and how to intervene? In this section, I discuss the conclusions that I have reached based on the analysis conducted in chapter 4.

I find that while some of the claims made by the narratives of Gentile, Nagl, and Ollivant are relevant and did in fact have an effect on the situation in Iraq, that none of these arguments singularly and adequately explains the decrease in violence following the Surge. Instead, it was a combination of many of their claims coupled with as yet unknown factors that led to a swirling of events. The swirling of events then created irreversible momentum that resulted in the emergence of a stabilized Iraq. Additionally, the collisions of these systems changed not only Iraq, but all of the open-systems that were involved.

It is absolutely vital that the military practitioner have an understanding of both conventional causal logics and emergence. The US Army has adopted the *Army Design Methodology* as one of its primary planning tools. Within the *Army Design Methodology*, doctrine discusses the need to “frame the operational environment.”⁹⁴ It goes on to say, “in framing the operational environment, the team focuses on defining, analyzing, and

⁹⁴U.S. Army, Army Doctrine Reference Publication 5-0, *The Operations Process* (Washington, DC: Government Printing Office, September 2011), 2-7.

synthesizing the characteristics of the operational variables.”⁹⁵ Operational variables are then defined as, “political, military, economic, social, information, infrastructure, physical environment, and time (known as PMESII-PT).”⁹⁶ With the operational variables in mind, causal logics and emergence are essential to painting the clearest picture possible for a commander to then decide when and where to intervene in the environment. Scholars such as Parsons and Connolly serve to clarify and enrich an increasingly muddy picture. Through this understanding of conventional causal logics and emergence, the practitioner is now capable of painting the clearest picture possible for his commander about how and why events are occurring inside their area of operation. Moreover, through this illuminated understanding of causality, the commanders and their staffs are also able to see the possible connections between events inside their area of operations and seemingly random events that have occurred outside their area of operations.

I also find that the progress in Iraq can be directly attributed to both the acute awareness of the soldiers who were in the middle of the fight and their leaders. The soldiers on the ground were attuned to the local dynamics inside their area of operations. Moreover, their leaders were aware of these pregnant moments and took the initiative to try new concepts of intervention, see the example in chapter 4 about Colonel McFarland and his deployment to Iraq. If these individuals and leaders had not acted upon these pregnant moments in time, then perhaps the irreversible momentum needed to bring about change, a lasting change in Iraq, would not have occurred.

⁹⁵Ibid., 2-7.

⁹⁶Ibid., 1-7.

Recommendations

The gap as previously identified between the scholar and practitioner in chapter 2 is ever widening. I recommend that programs like The Local Dynamics of War, which teaches concepts such as Parsons, Connolly, Arendt, Shapiro, Ostrom, and others, continue to be a part of the Army's primary military education program at Intermediate Level Education. Mid-Grade Officers, who one day hope to be the future leaders of the military, must be forced outside of their traditional comfort zones of tactics, logistics, administration, or whatever their specific area of expertise is, to foster growth in and amongst our ranks. As Perez mentions in one of his articles, "We can expect that instrumental reason, violence, and oppression will mitigate or frustrate the ample flowering of the political moment but the logic of politics remains always a force at play. . . . It follows that just as the soldier as warrior must contemplate the logic of war, so too must the soldier as a cooperative political agent contemplate the logic of politics. The alternative is that the soldier is insufficiently aware of what he or she is doing."⁹⁷

We as soldiers in the US Army are political agents whether we wish to be or not. Without arming ourselves and our future leaders with the prerequisite knowledge of political concepts and theories, we cannot hope to fully understand how and where to interact in the current battlefield that is comprised of fluid and ever-changing dynamics. Is a program like The Local Dynamics of War for every officer? I would argue no. Some officers are not prepared to learn and adequately apply these concepts. I say this not out of hubris, but with the knowledge that a majority of the skills that were commonplace

⁹⁷Celestino Perez Jr, "The Soldier as Lethal Warrior and Cooperative Political Agent: On the Soldier's Ethical and Political Obligations Toward the Indigenous Other," *Armed Forces and Society* 38, no. 2 (August 18, 2011): 191.

prior to 9 September 2001 have been taken for granted. A mastery of these skills should take priority over advanced learning. However, for those officers who have shown the capacity to accomplish their traditional jobs above and beyond the standard, then I say yes. Courses like this should be as mandatory as attending any other military courses, for example, Intermediate Level Education at the Command and General Staff College.

Additionally, I recommend that the military practitioner strive to be like the scholar. I say this in the sense that the practitioner should not be afraid to step outside of his comfort zone and openly engage such scholars in debate. We, as a military, talk about causation throughout most of our doctrine without actually saying the words. How then does it make sense that we do not talk about people such as Parsons and Connolly, the preeminent scholars on this subject? It does not make sense. I am not arguing that the words causation, causality, or causal mechanisms need to physically be in our doctrine. I am arguing that if the military is going to talk around these concepts, it needs a better understanding of what they actually mean and how to apply them.

ILLUSTRATIONS

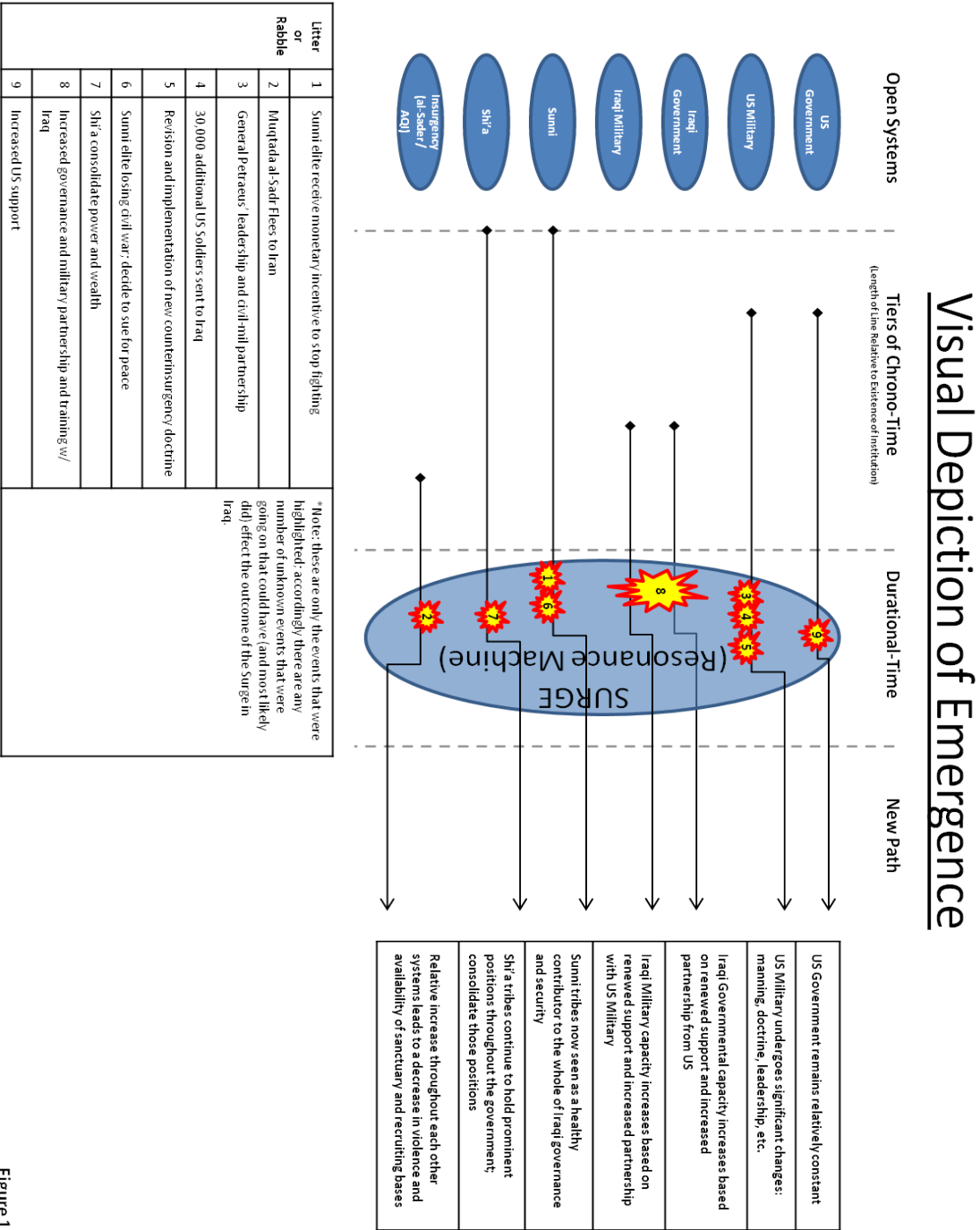


Figure 1

Visual Depiction of Resonance

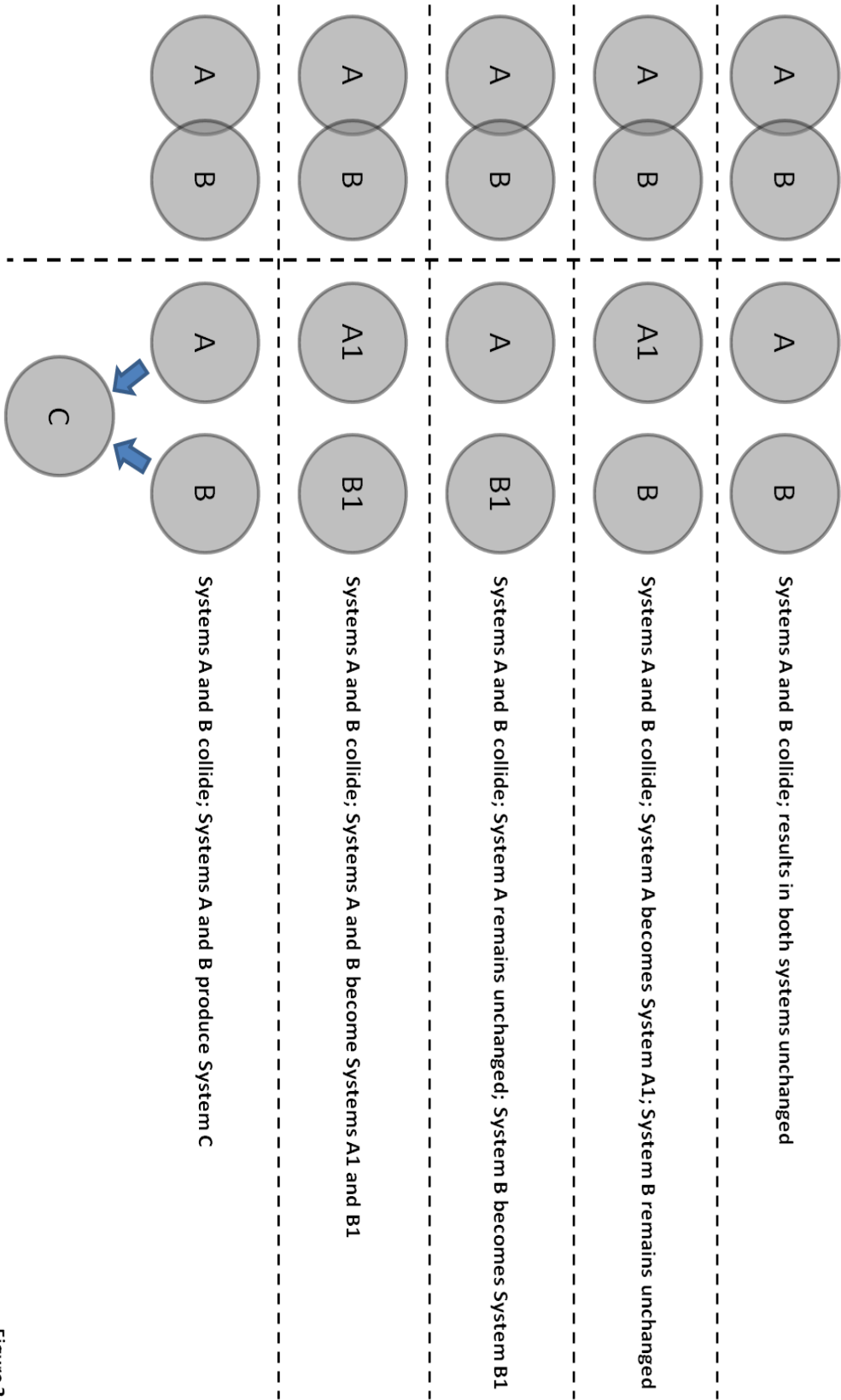
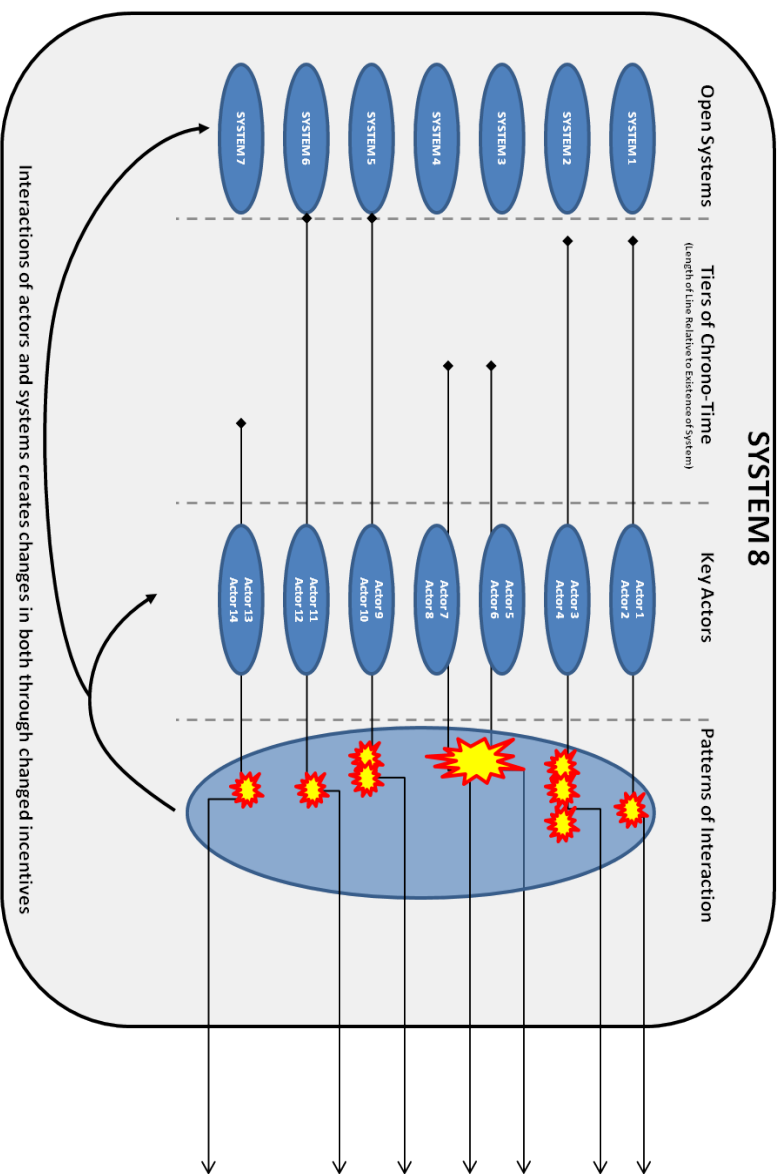


Figure 2

Visual Depiction of Framework and Autopoiesis



Entire System (System 8) has now reached a state of self-organization or autopoiesis that enables the system to maintain equilibrium. Interactions between all systems creates possible emergence of new systems. Explosions represent individual or group interactions during a moment of durational-time. Additionally, resonance may occur between two or more systems as shared end states and goals are formed between the individuals or groups.

Figure 3

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