Decentralized Stability Operations and Mission Command

By Jeffrey M. Shanahan

Since the term first appeared in U.S. Army Field Manual 100-5, Operations, published in 1982, mission command has steadily risen to prominence as the Armed Forces’ preferred command and control (C2) strategy. In fact, “the decentralized execution of centralized, overarching plans” permeates joint and individual Service publications across the spectrum of military missions, from amphibious warfare to stability operations. Yet arguably mixed results and seemingly slow progress in applying the concept to the stability operations mission set in Iraq and Afghanistan over the last decade have called into question the efficacy of the approach and its suitability to Phase IV contexts. The increasingly strategic, political gravity of otherwise tactical decisions in such environments, it is argued, renders the risks associated with decentralized execution simply too high, while the decidedly robust and capable nature of contemporary U.S. military communications networks leaves the approach ostensibly unnecessary. Furthermore, the complexity, turbulence, and dynamism inherent in postconflict environments make setting the clear, concise objectives and engendering the shared understanding so critical to successful mission command exceedingly difficult.
Paradoxically, many of these same characteristics necessitate the highly adaptable, flexible, and rapid decision and execution processes that mission command is uniquely suited to afford. Phase IV operations rarely provide clear distinctions among offensive, defensive, and stabilization efforts, demanding a C2 system capable of quickly transitioning from one mission set to the next, and often encompassing all three simultaneously. Solutions must be tailored, often to individual communities or villages, leaving a one-size-fits-all approach inefficient at best, and more often entirely ineffective. Adversary C2 networks, despite paling in technological sophistication compared to U.S. systems, are quick, elusive, and highly efficient, demanding that U.S. approaches afford superior speed and flexibility as minimum capabilities. Finally, the significant increase in applicable stakeholders inherent in stability operations—coalition and interagency partners, nongovernmental organizations, and private volunteer organizations—render traditional military C2 structures ill suited to the more holistic, team-based solutions required. 

In an attempt to address these competing concerns, this article examines the effectiveness and suitability of mission command as it pertains to postconflict stability operations. This is accomplished through a brief analysis of two decentralized C2 approaches as well as a more detailed examination of three contemporary initiatives in Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF). In short, it is posited that acknowledged shortcomings in the success of stability operations in OEF/OIF are attributable not to underlying weaknesses in mission command as a theoretical construct, or to its lack of suitability to Phase IV operations, but to a failure to meet fully the prerequisites so critical to the concept’s success. Ultimately, mission command remains an essential tool in overcoming the complex challenges inherent in Phase IV operations, and an essential tenet of U.S. military doctrine, one that should be further refined, developed, and studied as a means of ensuring future operational effectiveness.

**Historical Context**

The concept of distributive, decentralized leadership and mission execution in military operations is by no means new. Emerging in response to decisive defeats by Napoleon at Jena and Auerstädt in 1806, the concept is generally attributed to Field Marshal Helmuth von Moltke the Elder, Prussian and then German Chief of Staff from 1857 to 1888. First termed Auftragstaktik, the theory hinges upon the dispersed decisionmaking, initiative, and creativity of subordinates, each guided by a superior commander’s larger objectives,
constraints, and intent. U.S. interest in mission command, despite the evidence of its dramatic potential displayed by German tactical ingenuity during World War II, and the more obvious limitations of the U.S. penchant for centralized C2 processes in Vietnam, did not begin in earnest until confronted by the numerical superiority of an impending Soviet Cold War threat. Notwithstanding the relative diminishment of that threat in recent decades, the increasing complexity and dynamism of the modern battlespace and the world as a whole account for continued interest in mission command as a fundamental C2 concept among U.S. and several international forces.

The strategy was most recently reemphasized as central to U.S. military operations and culture in particular by General Martin Dempsey in a white paper entitled *Mission Command*, published in April 2012. General Dempsey noted, “Our need to pursue, instill, and foster mission command is critical to our future success in defending the nation in an increasingly complex and uncertain operating environment.” As described by the general, mission command is characterized by three overarching attributes or enablers: understanding, intent, and trust. These principles also generally complement those identified by researchers studying the Dutch military’s mission command doctrine: autonomy of action, clarity of objectives, adequacy of means, and trust between commanders. Taken in sum, such attributes reflect a continually evolving understanding of mission command as a guiding C2 strategy, yet also highlight the credible challenge in adequately quantifying what remains a fundamentally psychosocial leadership theory. Nonetheless, the widespread and lasting appeal of decentralized mission execution is abundantly clear.

Likewise, the prevalence of stability operations as a contemporary military mission set, and the concept’s development as a refinement of the more generalized term *military operations other than war*, is increasingly apparent. In fact, a 2004 Defense Science Board study found that, on average, the United States has conducted postconflict stability operations every 18 to 24 months since the end of the Cold War, with each operation lasting from 5 to 8 years. Moreover, while stability operations in Afghanistan and Iraq have undoubtedly taken center stage among U.S. foreign military interests, Michael J. McNerney, former Director of International Policy and Capabilities in the Office of the Deputy Secretary of Defense for Stability Operations, notes that additional, concurrent Phase IV operations conducted in the Philippines, Yemen, Georgia, and the Horn of Africa are clear evidence of the firmly entrenched nature of stability operations as a 21st-century U.S. military mission set.

U.S. military doctrine, however, has been slow to acknowledge this stark reality. Not until November 2005, with the issuance of Department of Defense Directive 3000.05, were stability operations established as “a core U.S. military mission” to be afforded “priority comparable to combat operations.” An accompanying U.S. Army field manual dedicated to the subject was not released until October 2008, and a joint publication of the same name did not appear until September 2011. Even more recently, then-Secretary of Defense Chuck Hagel suggested in 2014 that fiscal year 2015 defense budget proposals would limit the U.S. military’s ability to conduct future stability operations on the magnitude of those seen in OIF/OEF, perhaps reigniting the debate concerning Phase IV operations as a core U.S. military competency. The strategic implications of this discourse are ultimately well outside the scope of this article, but both the enduring nature of stability operations as an inevitable consequence of armed conflict, and the prevalence of such operations in the post–Cold War environment, are impossible to ignore.

**Two Decentralized C2 Antecedents**

While the U.S. military’s doctrinal commitment to mission command and the prevalence of Phase IV operations as a contemporary military mission are readily evident, less so is the relationship between the two, and more specifically, the potential and suitability of decentralized C2 constructs in meeting the daunting challenges presented by stability operations. Prior to assessing mission command’s validity in modern postconflict contexts, however, it is prudent to consider its historical antecedents. While some form of Phase IV operation has accompanied virtually every sustained U.S. combat effort, the two in which C2 decentralization efforts bear closest resemblance to OEF/OIF stability operations, and the two therefore most suited to comparison, are those conducted during the Philippine-American and Vietnam wars.

At the conclusion of formal hostilities in the Philippines in 1902, U.S. efforts to stabilize the country and its population were largely based upon the decentralized, tactical unit execution of larger strategic and operational intent. Employing more than 500 small garrisons throughout the islands, the United States succeeded in neutralizing the remaining insurrection and stabilizing the Filipino population within 1 year of conflict termination, an accomplishment made all the more remarkable by a decade of similar struggle in OEF/OIF. According to historian John Morgan Gates, ultimate success in stability operations in the Philippines was attributable to both the broad distribution of American units as well as to the wide variety of techniques and tactics employed by localized subordinate commanders. In fact, the writer purports that much of the credit for any transfer of American ideals or conventions to the subsequent colonial government was a result not of a grand operational initiative, but rather the relationships between individual soldiers and the Filipino population.

While the positive impact of decentralization in stability operations during the Philippine-American War is strikingly obvious, its effectiveness during Phase IV of the Vietnam War is less palpable, largely overshadowed by more conventional approaches that met with eventual failure. While admittedly slow in reaching its ultimate form, the U.S. Civil Operations and
Revolutionary Development Support (CORDS) program, organized around small civil-military provincial teams positioned throughout all 250 districts in South Vietnam, is heralded as a definitive bright spot in an otherwise dark U.S. experience. In fact, it has been suggested that a more comprehensive commitment to the program as a priority in Vietnam may have ensured U.S. victory in the conflict. Regardless, the notable success of the CORDS program is attributable in large part to its decentralization. Characterized by significant levels of local adaptation, senior CORDS leadership “specified only the chain of command, certain functional sections, and a presence at the district level, but left subordinates free to adjust the organization to the circumstances.” Such an approach, based in the empowerment of subordinate commanders to act within a broad set of operational guidelines, to determine how to accomplish the what and why specified by superior commanders, lies at the heart of mission command. While certainly not without its limitations, the historical precedent for the effectiveness of the concept in Phase IV operations is undeniable.

Contemporary Conflicts

History will also judge the lasting effectiveness of decentralized C2 strategies in contemporary conflicts, and yet a more detailed analysis of U.S. efforts to exercise mission command in OEF/OIF is warranted as a means of assessing the concept’s continued applicability to Phase IV operations. Three such efforts are examined in this pursuit: the Commander’s Emergency Response Program (CERP), the Provincial Reconstruction Team (PRT) construct, and the Village Stability Operations (VSO) program. Arguably, the more mixed success in the majority of these initiatives relative to their historical antecedents renders them invaluable in assessing the assertion that U.S. struggles with stability operations in OEF/OIF are due more to larger failures to set the aforementioned conditions for mission command than to any weakness in the strategy itself.

Commander’s Emergency Response Program. CERP, first initiated in Iraq and later in Afghanistan, was designed to provide tactical commanders direct access to discretionary endowments in support of postconflict reconstruction and development efforts. First funded by recovered Ba’athist Party cash stockpiles discovered in Baghdad during the 2003 invasion, the program sought a more flexible, adaptive, and timely solution to the challenges of Phase IV operations at the local level. Stated simply, the idea was to allow “soldiers who are patrolling the streets, and have a ground-level view of people’s needs, to make a quick impact without having to go through the bureaucratic details that government contracts usually require.” These impacts, though decided on and executed by subordinate leaders, were to be governed by larger objectives, constraints, and reporting mechanisms set by joint task force and geographic combatant commanders. Recognition of the program’s initial success led to the appropriation of U.S. funds in continued support of the initiative in Iraq, and later accounted for its adoption in Afghanistan. Remarkably, CERP grew to encompass more than 10 percent of Afghanistan’s gross domestic product by 2010, and inspired the development of a commander’s handbook titled Money as a Weapons System, published in April 2009.

Despite its popular success, however, CERP has been the subject of much criticism. Washington Post columnist Ariana Eun Jung Cha highlights concerns that the program provided too much autonomy to local commanders, who possessed little to no detailed knowledge regarding contracting or development operations, and that a relative lack of supervision generated a system susceptible to corruption. Foreign Policy columnists Andrew Wilder and Stuart Gordon similarly cite a lack of contextual and cultural understanding on the part of U.S. military commanders concerning the fundamental “zero-sum nature of Afghan society and politics,” with aid projects often “creating perceived winners and losers” and subsequently producing a decidedly de-stabilizing effect. And, in an Interagency Journal article, Timothy D. Gatlin suggests that CERP, like many military initiatives, is ultimately susceptible to a larger military culture in which short-term, largely quantitative measures of performance are prized over longer term, more qualitative measures of effectiveness. As a result, CERP initiatives, Gatlin argues, often failed to consider larger sustainability issues, and the subordinate commanders responsible for them often lacked adequate forces to ensure consistent supervision and security of reconstruction efforts.

Taken together, these criticisms highlight the credible limitations of decentralized C2 strategies in postconflict stability operations. However, suggesting that these shortcomings invalidate the concept of mission command in such contexts altogether ignores the significant successes enjoyed by the program. In merely 1 year in Iraq, for example, CERP-funded initiatives resulted in 999 water and sewage repair projects; 1,758 road, bridge, and similar infrastructure reconstruction ventures; 188 humanitarian relief distribution efforts; 742 projects aimed at facilitating local government standup; the refurbishment of over 400 schools; and the repatriation of countless Iraqis displaced by the conflict. More importantly, evidence suggests that such largely quantitative measures, at least in part, were successful in achieving the desired qualitative effect. “When well spent,” notes Mark S. Martins, CERP “funding convinced Iraqis of coalition commitment to their well being, increased the flow of intelligence to U.S. forces, and improved security through economic conditions.”

A closer examination of the criticisms also highlights ambiguous and often competing operational objectives. While perhaps not consciously stated or intended by superior commanders, an amalgamation of security, stability, economic development, and humanitarian assistance goals, each a distinct mission in its own right, undermined the clarity of intent so crucial to effective mission command. The improperly prioritized reward systems further exacerbated this phenomenon, as subordinate
commanders were frequently forced to choose between the needs of the local community and the favor of higher headquarters. Finally, the lack of adequate force strength with which to supervise and provide security for CERP initiatives reflects a failure to ensure that appropriate means to accomplish the mission were afforded to subordinate commanders, another key prerequisite of mission command.

**Provincial Reconstruction Teams.** Much like CERP, the PRT concept, first introduced by U.S. forces in the capital of Afghanistan’s Paktia Province, Gardez, in December 2002, was designed to confront the diversity inherent in the country’s distinctly provincial and tribal culture. Comprised of relatively small and highly autonomous civil-military teams, the overarching objectives of the PRT system were the extension of the Afghan government at the provincial level, security of ongoing interagency and nongovernmental organization operations, intelligence and information-gathering and dissemination, and the facilitation of minor reconstruction and development efforts. Individual teams were ultimately responsible to regional area coordinators, an executive steering committee, and the International Security Assistance Force headquarters,
which set broad operational objectives and constraints.\textsuperscript{54}

C2 strategies were characteristically loose, seen as consultative rather than directive, exhibiting a definitive preference for decentralization.\textsuperscript{55} Like CERP, the PRT program has been lauded for “great success in building support for the U.S.-led coalition and respect for the Afghan government. . . . [It has] played important roles in everything from election support to school-building to disarming to mediating factional conflicts.”\textsuperscript{56}

In recognition of these successes, in November 2005 the model was also adopted in Phase IV operations in Iraq.\textsuperscript{57} While divergent in structure and organization from its OEF counterpart (OIF PRTs were civilian led, not military-led OEF teams), the overall objectives of the program in Iraq remained relatively constant\textsuperscript{58} and clearly demonstrated the U.S. belief in, and commitment to, the decentralized execution of stability operations.

In spite of these notable accomplishments, McNerney notes that “PRTs always have been a bit of a muddle,” plagued by “inconsistent mission statements, unclear roles and responsibilities, ad hoc preparation, and most important, limited resources [that] have confused local partners and prevented PRTs from having a greater effect.”\textsuperscript{59} These sentiments are echoed by Mark Sedra, who adds that the strict and frequent turnover of PRT personnel rendered achieving unity of effort difficult,\textsuperscript{60} and by Touko Piiparinen, the lead political advisor to PRT Meymaneh in 2006, who notes that a complete lack of standardization in PRT structure often set the conditions for constant change within the PRT decisionmaking process.\textsuperscript{61} Former Foreign Service Officer Mark Dorman, in reference to OIF PRTs in particular, notes that teams were consistently established without regard for whether the province in question had truly shifted from conflict to stability,\textsuperscript{62} without clear objectives or authority,\textsuperscript{63} and with wholly inadequate logistical support, often lacking basic office supplies in what came to be commonly, albeit tragically, referred to as the “pencil problem.”\textsuperscript{64}

Such criticisms are undoubtedly alarming and well justified, yet again signal a failure not in the decentralization of C2 in stability contexts, or in the adoption of mission command itself, but rather an unequivocal failure to recognize, appreciate, and cultivate the conditions for its success. A failure to establish commander’s intent prohibited a unified and cohesive response to stabilization, characterized by “the impression that the PRTs were to be observing and facilitating everything—being all things to all people—but not actually
accomplishing anything vital to the political or military mission.”

65 The competing priorities of civilian and military leadership, and the same ambiguous assessment mechanisms that troubled CERP initiatives, further limited clarity of intent and prevented a common understanding among PRT leaders and their operational commanders.

66 For example, performance measures with regard to the Disbandment of Illegal Armed Groups, a common PRT mission, oscillated between the qualitative sociopolitical signals valued by civilian leadership and the quantity of weapons collected prioritized by military superiors.67 Finally, inadequate human and material means with which to accomplish the assigned mission both limited the program’s potential success and undermined the mutual trust so central to mission command.

In sum, each of these shortcomings inhibited the overall effectiveness of decentralized C2, not because it was unsuited to Phase IV operations but because it was never given a chance to work. In fact, it may be argued that in the absence of the aforementioned conditions, mission command was not, in fact, being exercised at all; rather, some amorphous or mutated form of C2 falling well outside the doctrinal spectrum was being employed. The resulting effect, as expressed from the perspective of Foreign Service Officers, was often that of being let go or abandoned, a mere “pin on a map” seen as politically favorable but lacking the true mission focus or commitment of senior leadership.68 Further evidence of these conclusions is provided by the fact that PRT performance was assessed to have improved significantly as the program’s objectives became clearer and focused; as sufficient personnel, equipment, and financial support were provided; and as tour lengths of PRT personnel were extended (allowing more time to build common understanding and trust).69 As a more specific example, James A. Russell argues that the issuance of Integrated Civil Military Campaign Plans by General Stanley McChrystal and Ambassador Karl Eikenberry in the summer of 2009, and by General David Petraeus and Ambassador Eikenberry in early 2011, were instrumental in clarifying objectives and priorities within the stabilization and reconstruction effort, “nest[ing] tactical operations by military units and supporting activities by civilian agencies with the operational and strategic levels of the war.”

67 Village Stability Operations. While the effectiveness of CERP and the PRT program was undoubtedly mixed, a third U.S. attempt at mission command, the VSO program, has met with decidedly more consistent success. Started in the fall of 2009, the program is led predominantly by U.S. special operations forces (SOF) in conjunction with limited civil affairs and military information support personnel. The overall goals were to facilitate organic village-level security capability through the development of Afghan Local Police (ALP) and, much like the PRT program, connect local community leaders to larger district and provincial governments.70 Exhibiting the essence of mission command, former VSO participant and SOF operator Rory Hanlin describes the program as “characterized by managing and completing a vast array of seemingly unrelated tasks that interact in complex unimaginable ways, all in a system of decentralized execution.”71 That such efforts have achieved notable progress in many areas of Afghanistan is well documented in terms of notable reductions in coalition and civilian casualties, security incidents, and enemy-initiated attacks, as well as a November 2011 national intelligence estimate that cited VSO as markedly more successful than other coalition initiatives.72 The 2012 and 2013 iterations of the Department of Defense Report on Progress Toward Security and Stability in Afghanistan similarly highlight the VSO and ALP programs as making considerable advancements in the stability of rural Afghanistan and its population.73

68 While admittedly of limited duration relative to CERP and the PRT program, the fact that VSO have thus far enjoyed more consistent success in the application of decentralized C2 strategies to Phase IV operations is quite clear. In fact, the seemingly stark contrast in results between the CERP/PRT and VSO initiatives begs the question: what made the ultimate difference? In large part, the disparity seems attributable to VSO’s more comprehensive satisfaction of the conditions and prerequisites for effective mission command.

While still significantly ambiguous, the relatively more narrow objectives set for VSO by senior operational leaders, namely the development of ALP forces and connection of community leaders to the larger district and provincial government, resulted in greater clarity and understanding of commander’s intent by subordinate units. Likewise, the highly specialized cultural and linguistic training of SOF relative to more conventional forces undoubtedly facilitated the deeper contextual understanding so critical to effective mission command—and so critically lacking within CERP.74 Such factors are also likely to have positively influenced the trust that operational leaders were willing to place in VSO unit commanders compared to their less specialized PRT counterparts, fulfilling another key condition for decentralized C2. The significantly more limited scope of VSO compared with CERP and PRT efforts, as well as the more reliable funding and personnel support provided to SOF, ensured means were adequate to conduct the mission assigned. Finally, the adoption of more reasonable and accurate assessment mechanisms for the VSO program, considered fluid and constantly evolving in response to local conditions, limited the disunity of effort that seemed to plague the CERP and PRT models, reinforcing shared understanding of what was to be accomplished and why, but leaving the how in the hands of subordinate commanders.

The limited critiques that have been offered regarding VSO rightly center upon the program’s long-term sustainability. Developing ALP in sufficient numbers to ensure Afghanistan’s continued stability is likely to stretch U.S. SOF capability to the limit, and continued reliance upon U.S. funding for the project is a credible challenge.75 Furthermore, while the specialized cultural and linguistic training possessed by SOF is undoubtedly a mission command multiplier, it is
impractical and far from financially feasible to expect the same level of training to be afforded on any large scale, though some would argue that U.S. ranks are “flush with highly-trained, highly-intelligent, and highly-capable Soldiers [who] would serve as ideal supplements to the VSO mission.” Likewise, it is increasingly politically difficult for the United States to limit the scope of its stability operations to those areas that force capability will allow—though lessons learned from operational art would suggest that limiting the scope would be a prudent course of action.

Conclusion and Recommendations
Ultimately, the challenges mentioned herein, while irrefutably significant, do little to dismiss the fact that mission command is both the best and arguably the only command and control construct capable of maximizing the success of postconflict stability operations in a global environment increasingly characterized by complexity and disorder. Furthermore, it is apparent that in the absence of the concept’s prerequisites—intent, understanding, trust, and means—success in Phase IV operations will continue to prove elusive and inconsistent. How, then, might operational commanders best create, develop, and sustain an environment conducive to the decentralized execution so critical to effective stability operations? While by no means all encompassing, several lessons may be deduced.

The first is that the intricacy and dynamism inherent in contemporary postconflict contexts are unlikely to diminish, and may in fact continue to increase in future conflicts. This reality will also undoubtedly increase the already substantial difficulty faced by senior leaders in clearly and concisely articulating operational objectives and a larger commander’s intent. Thus, senior leaders must grow comfortable in embracing several concurrent lines of effort, often with seemingly wide divergence along the stability operations spectrum, and in prioritizing them as clearly as possible for subordinate units. Security, counterinsurgency, humanitarian assistance, development, and other stability goals must be made as distinct as possible, and coupled with a clearly delineated precedence that allows subordinate commanders to quickly shift and adapt their missions as conditions change. Likewise, assessment mechanisms must be flexible and robust enough to assess largely qualitative effects, placing no undue pressure on subordinate commanders to adopt a strategy unsuited to the contextual nuances of the unique and perhaps completely opposite situation they might face compared with units only yards or miles away.

These are difficult challenges, and while certainly worthy of an operational commander’s best effort, the pursuit of the remaining preconditions for mission command (understanding, trust, and means) may prove more fruitful. In fact, research suggests that increasing capability in these areas may offset the deficiency in clarity of objectives associated with the ambiguity often inherent in Phase IV contexts. Increased levels of understanding or trust between superior and subordinate commanders, for example, may facilitate effective mission command even in the absence of clear intent.

As evidenced by the success of the VSO program, increases in linguistic or cultural training have the potential to improve stability operations outcomes, and these should continue to be a focus for both special operations and conventional forces to the maximum extent feasible. With respect to the challenges to any large-scale cultural awareness program, however, McNerney’s suggestions concerning the integration of conventional forces into VSO units, and vice versa, are worthy of further development. Ensuring training and exercises integrate and encourage collaboration of capabilities is also essential moving forward, and will undoubtedly enhance the common understanding so central to trust and effective mission command.

Finally, operational commanders must continue to ensure that adequate means are provided to subordinate commanders for the objectives assigned, or reduce the scope of those objectives accordingly. While seemingly obvious, and a basic principle of effective operational design, shortcomings in this area in OIF/OEF suggest that it is a lesson worth reemphasizing. The reality is that significantly more personnel and material resources are often required to execute stability operations than more traditional or visible Phase III operations; a failure to recognize this reality undermines not only the effectiveness of mission command strategies, but also more broadly the U.S. stability mission as a whole.

The success of decentralized command and control in postconflict stability operations is largely dependent upon the extent to which the preconditions for mission command are set and maintained by operational leaders, and not by any deficiency in its suitability to such contexts. In fact, contemporary Phase IV environments are simply too complex, too dynamic, and too localized to adopt any command and control strategy other than mission command. While an undoubtedly daunting challenge, the U.S. military’s doctrinal commitment to the construct is well founded, and every effort should be made to ensure its adoption, refinement, and perfection by forces engaged in current and future stability operations. Enduring success depends upon it.

Notes
3 Ibid., V-14.

27 McNerney, 43.
29 Ibid., 270–271.
30 Ibid., 288–289.
31 McNerney, 44.
33 McNerney, 44.
35 Nuzum, 56.
37 McNerney, 44.
40 Ibid., 11.
43 Eunjung Cha, 1.
46 Ibid., 45.
49 Johnson, Ramachandran, and Walz, 11.
50 Garlin, 45.
53 Ibid.
54 Piiparinen, 149.
55 Ibid.
56 McNerney, 33.
58 Ibid., 22.
59 McNerney, 33.
60 Sedra, 2.
61 Piiparinen, 149.
62 Dorman, 31–32.
63 Ibid., 23.
64 Ibid., 32.
65 McNerney, 36.
66 Ibid.; Piiparinen, 147.
67 Piiparinen, 147.
68 Dorman, 23.
69 McNerney, 38.
70 Russell, 71.
73 Shreckengast, 5.
75 Shreckengast, 8.
76 Hanlin, 9.
78 Shreckengast, 8.
79 Dempsey, 3.
80 Vogelaar and Kramer, 422.
81 McNerney, 34.