

Intelligence Analysis: Turning a Craft Into a Profession

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Abstract

Even though intelligence analysis—which possesses characteristics of both crafts and professions—is frequently referred to as a profession, in actuality it has been practiced more like a craft. As a result, it lacks many of the benefits of formal professions, such as structured personnel practices, and possesses no quality control mechanism to ensure the reliability of the individual analyst’s output. Turning intelligence analysis from a craft into a profession would provide the opportunity for evolutionary—and possibly even revolutionary—improvement in both individual and organizational performance due to the adoption of formal personnel practices and standardization of best practices across all intelligence agencies.

1. Craft, Profession, or Both?

Intelligence analysts think of themselves as professionals, but it is not clear what makes intelligence analysis a profession. Former Director of Central Intelligence Allen Dulles called the intelligence occupation a “craft” in his 1963 book “The Craft of Intelligence,” but whether that holds true for intelligence analysis is debatable. According to the Merriam Webster dictionary, a craft is “an occupation or trade requiring manual dexterity or artistic skill” whereas a profession is a field that requires “specialized knowledge and often long and intensive academic preparation.” (Merriam-Webster)

This definitional distinction between a craft and a profession may present a false dichotomy, however. In the information age when knowledge rather than manual dexterity or artistic skill forms the basis of many occupations, some occupations require both a practical skill set and academic preparation. In other words, they may possess characteristics of both crafts and professions.

For example, medicine possesses aspects of both crafts and professions in that it requires a substantial amount of academic training yet relies on the dexterity and skill of its

practitioners in addition to their knowledge. According to Dr. Jonathan Clemente—a practicing physician and expert in the history of medical intelligence—“while much of clinical medicine is firmly grounded in basic science research, there is a substantial practical component to medical practice which cannot be found written in any textbook, and is instead passed down from attending physicians to resident physicians to medical students. ... As a result, young medical students are often admonished that medicine is an ‘art and not science,’ and this is something that is ingrained in physicians from the beginning of medical school education.” (Clemente, 2005)

Intelligence analysis is similar to the medical profession in that it requires a combination of skills acquired through practical experiences and specialized knowledge acquired through academic training. In fact, as Dr. Clemente and I have argued elsewhere, intelligence analysis is very similar to medical diagnosis. (Marrin and Clemente, 2005) Although each field has a different substantive focus—intelligence agencies produce analysis and estimates regarding events in foreign countries to protect and advance the interests of the United States, while medicine produces diagnoses and prognoses to protect and advance the health of individuals—the similarities in processes used to analyze and interpret data are striking.

Practitioners in both fields use approximations of the scientific method – observation, hypothesis, experimentation, and conclusion – as a means to organize and interpret the information they have collected. In his book on the “Psychology of Intelligence Analysis,” former CIA officer Richards Heuer has observed that medical diagnosis can be used as an effective analogy for understanding how intelligence analysis works. (Heuer, 1999) In addition, Heuer’s “concept of the diagnosticity of evidence as presented in the discussion of (the application of an analytic method--Analysis of Competing Hypotheses--to intelligence analysis) ...came from the medical literature.” (Heuer, 2005).

Both intelligence analysts and physicians use technological tools to assist them in weeding through data and discov-

ering patterns, but these tools are less able to assist them in interpreting the information and deriving meaning and implications. In other words, both medical diagnosis and intelligence analysis require critical thinking and judgment to interpret the evidence that goes above and beyond what can be quantified or automated. Accordingly, the accuracy of intelligence analysis or medical diagnosis may rest in part on the knowledge, skills, and abilities of the practitioners. (Marrin and Clemente, 2005)

Yet despite the similarities between the two occupations and their possession of craft-like characteristics, medicine is a fully acknowledged profession but intelligence analysis is not. So what makes an occupation a profession rather than a craft?

In an era when almost all occupations rely on some form of specialized knowledge and academic preparation, the distinction between “craft” and “profession” now rests less on the dictionary definition than whether or not the occupation possesses formal practices. Some professions such as law and medicine possess structured practices that the others do not, including minimal graduate educational requirements, a selection process consisting of a formal testing program, a formal training program, and continuing professional development programs. In addition, these formal professions also possess mechanisms such as specialized journals for acquiring knowledge about best and worst practices, enabling cumulative learning and improvement over time.

Formal professions also rely on the autonomy and judgment of its certified practitioners, subject to standards to ensure performance competency and a code of ethics that are enforced by members of the occupation. Finally, formal professions have associations that define and certify the requirements necessary for entry into the profession and the standards of professional practice. (Bates, 1994) By way of contrast, occupations without such formal practices may be called professions but lack the formalized practices that legitimize the use of the term.

At first glance, the discussion of craft versus profession may appear to be academic, but there are a number of significant implications for personnel management and the accumulation of occupational knowledge stemming from this categorization. Each path—craft or profession—can lead to differing personnel practices. For example, traditional crafts emphasize skill development through training and experience while professions rely on a structured academic curriculum supplemented by an apprenticeship program or on-the-job training. The distinction between craft and profession can also lead to different methods for determining quality; crafts tend to rely on word of mouth based on proficiency, while professions rely on externally applied certification standards that individual practitioners must meet. There are even implications regarding the ability of the occupation to aggregate knowledge and learn over time. Crafts rely primarily on the skill of the individual practitioner and this does not change from generation to generation, while professions aggregate the knowledge of past practitioners

and relay it to prospective entrants via their pre-professional educational requirements.

Is intelligence analysis—which like medicine requires both a practical skill set and academic preparation—a craft, profession, or both?

2. Historic Craft-Based Practices

Intelligence analysis possesses some characteristics similar to those possessed by formal professions such as specialized knowledge and academic preparation, but for most of this century national security intelligence analysis has been practiced as a craft rather than a profession. As Jeffrey Cooper notes: “Intelligence remains a “craft culture” operating within a guild and apprenticeship system—in fact, self-consciously referring to “tradecraft” for example. Such a culture builds pragmatically on accreted practices that were successful in the past, lacks the strong formal epistemology of a true discipline, and is reliant on implicit transmission of often tacit expertise and domain knowledge to novices.” (Cooper, 2004)

When national security intelligence agencies were institutionalized after World War II, relatively few individuals practiced intelligence analysis compared to today, personnel practices were based on an apprentice model, and individual development was more ad hoc than structured. As Professor Wilhelm Agrell observes, the early period of intelligence during World War II “was followed by the “guilds,” the time of the skilled craftsmen in well-fenced, closed organizations.” (Agrell, 2002) Even today, intelligence analysts refer to “tradecraft,” or the doctrine and practices used to produce intelligence analysis. (MacEachin, 1994)

During the Cold War some aspects of professionalism crept into the intelligence analysis occupation. According to longtime CIA officer Jack Davis this was primarily due to the efforts of Sherman Kent whose legacy included an analytic code, the beginnings of an intelligence literature with the establishment of CIA’s intelligence journal “Studies in Intelligence,” and the creation of CIA’s Center for the Study of Intelligence. (Davis, 2002) In 1955, Kent also argued for the creation of a systematic intelligence literature that would address first principles and a definition of terms in order to foster the elevated debate that is necessary to advance knowledge in any field. (Kent, 1955) In addition, other efforts to advance knowledge of the intelligence analysis occupation were established such as the creation of the Defense Intelligence College, since renamed the Joint Military Intelligence College, and the formation of the Association of Former Intelligence Officers.

Yet despite these improvements in professional practices, intelligence analysis did not become a formal profession. As Wilhelm Agrell notes, in the 1970s intelligence analysis was “a kind of semi-profession, resembling an early form of organized skills like a medieval guild. Here the secrets of the craft were transferred from master to apprentice through a process of initiation and sharing of silent knowledge. The

craft was not developed but reproduced; its knowledge was static and the process cyclic.” (Agrell, 2002)

In contrast to the legal and medical professions, even today intelligence analysis does not have well-defined systemic formal knowledge such as a coherent doctrine or theory, does not involve high levels of individual autonomy due to involvement of management in approving the dissemination of most finished intelligence analysis, and does not have standards that are formulated or enforced by other members of the occupation. The various efforts to improve organizational performance and advance knowledge such as those advocated by Kent remained isolated from other efforts and the knowledge gained in one area has not been applied elsewhere.

Essentially, intelligence analysis as an occupation is only marginally more professional today than it was in 1955 when Sherman Kent first articulated the need for an intelligence literature as a foundation for an intelligence profession.

3. Negative Consequences

While there may be good historical reasons for explaining why intelligence analysis has not developed into a formal profession, such as its relatively small personnel base and lack of external scrutiny, the failure to professionalize has led to great variation in the competence and skill of individual analysts, uncertainty regarding the very duties of intelligence analysts, and an overall diminution in the role that intelligence analysis could play in decisionmaking.

The failure of intelligence analysis to become a formal profession has led to negative consequences for national security decisionmaking because consumers of intelligence cannot trust the reliability of the intelligence production processes. A key factor in the quality of the finished intelligence produced is the skill and ability of the intelligence analyst, yet no official standards exist to ensure the competency of individual analysts. Unlike the legal and medical professions, intelligence analysis as practiced is unregulated, unstandardized, and lacking in all but the most rudimentary aspects of a profession.

Some intelligence producers have established more rigorous standards and development programs than others, but in the end each agency creates its own standards for hiring and developing intelligence analysts. This inconsistency leads to widely varying analytic duties and quality of performance both within and between each intelligence-producing component. On one end of the scale, some analysts perform the role of information processor by sifting raw intelligence data for possible patterns and correlations, while on the other end of the scale senior analysts engage with national security decisionmakers to discuss on a high concept level the implications of various international events on US foreign policy. The lack of a single definition for intelligence analysis or a defined set of practices and procedures means that intelligence analysts do whatever it is that they are as-

signed to do, regardless of whether that entails lower-end tasks such as data processing or data correlation, or higher-end tasks such as expert evaluation and assessment.

In addition, with no check on analyst competence or analytic quality, intelligence consumers have no assurance that intelligence analysis is consistently reliable. They also have no assurance that the informal code of intelligence ethics--consisting, in essence, of both independence and objectivity--has been complied with. The end result is misunderstanding and mistrust by decisionmakers of the intelligence that is provided to them. Intelligence analysts have much to offer decisionmakers, but the failure to hold them accountable to formal professional standards prevents their services from being fully utilized.

Perhaps most importantly, however, the lack of a single professional focal point for the intelligence analysis occupation has led to a failure to gain cumulative knowledge and standardized application in the discipline. As a result, best practices have hit or miss application across intelligence producing agencies, and improvements in intelligence analysis process are implemented in scattershot fashion. Historically, efforts to improve the practices and management of intelligence analysis have been scattershot because they have been administered by each individual agency or department that practices intelligence analysis, and the lessons from their implementation have been largely lost both within the implementing institution and others who might learn from its experiences.

For example, CIA's organizational reforms and improvements frequently result from task force recommendations or consultations with outside experts. However, each time a change is made in structure or process, the wheel--consisting of tying existing practices to theoretical constructs of function and purpose--is re-created. Once the recommendations are made and the task force or consultancy disbanded, the lessons learned regarding the conversion of theory to practice dissipate. As a result, the field of intelligence management has been for the most part ahistorical with limited and non-cumulative knowledge of how its theory should be put into practice. (Marrin, 2000) As Paul Johnson—the director of CIA's Center for the Study of Intelligence--observed in early 2005, the intelligence community does not do an adequate job recording, documenting, analyzing, or distilling lessons from its own past experiences. (Johnson, 2005)

In essence, intelligence analysis and its management has been practiced more as a craft dependent on the skill of its individual practitioners than a profession that aggregates knowledge and is able to improve over time by teaching accumulated best practices to incoming entrants. If these problems resulting from lack of formal practices and standardization are to be overcome, greater efforts towards formal professionalization may be necessary.

4. Turning a Craft Into a Profession

Intelligence analysis may have predominantly craft-based practices, but it should be possible to turn it from a craft into a profession and thereby reap the benefits that accrue to other formal professions. The skill of the individual intelligence analyst will remain the centerpiece of intelligence production, just as the skill of the physician remains at the core of medical diagnosis and treatment, but the practices that shape the creation of the intelligence analyst and the methods he or she uses can be improved through the adoption of formal personnel practices, the standardization of best practices, and centralized knowledge accumulation efforts.

Increasing intelligence analysis professionalism through the adoption of professional practices such as a formalized selection process; training, education and development programs; performance standards; and a code of ethics would likely increase the competence of individual analysts and reliability of the analysis they produce, and this may lead to greater policymaker acceptance of the information and assessments they provide. In addition, the creation of a centralized focal point for the knowledge regarding best practices would enable intelligence analysis as an occupation to learn and improve over time as best practices are standardized throughout the intelligence community.

Unfortunately, while greater professionalism may provide a mechanism for improving the intelligence analysis occupation, other factors contribute to weaknesses in analytic competence. For example, limited resources, organizational policies that emphasize current intelligence over in-depth reports, and policymaker dissatisfaction with intelligence resulting from unrealistic expectations each lead to some diminution in the quality or utility of intelligence analysis. Nonetheless, greater professionalism can address some of these problems, and for that reason should be implemented.

One approach to professionalizing intelligence analysis might be to build an intelligence analysis profession from scratch by relying on the new Director of National Intelligence (DNI) to standardize the processes for intelligence analyst selection, hiring, training, and education across the intelligence community. The WMD Commission apparently supports this approach, for in its report it observes that “the creation of the DNI provides a unique opportunity to reconsider implementing some elements of Community training. The benefits will be enormous: it will teach common trade-craft standards (and) standardize teaching and evaluation” particularly through the proposed National Intelligence University. (WMD Commission, 2005). However, the downside of this approach is that it would likely be evolutionary by building on programs and practices already implemented in intelligence agencies, and would not provide much opportunity for revolutionary change.

A more radical push towards intelligence analysis professionalization might entail modeling professional aspects of intelligence analysis practices on one of the existing profes-

sions such as medicine. Harvard Business School Professor David Garvin has observed that best practices can be adapted from other fields and used as catalysts for creativity in application if not necessarily replication. (Garvin, 2005) In terms of intelligence analysis best practices, Dr. Clemente and I have previously argued that intelligence agencies can look to the medical profession for ideas to improve the accuracy of intelligence analysis and its incorporation into policymaking. Intelligence agencies can also look to the medical profession for ideas to increase intelligence analysis professionalism.

One benefit arising from modeling intelligence analysis professionalism on medicine is that it provides a mechanism for the integration of the various analytic sub-disciplines. There are many different kinds of intelligence analysts, but this variety does not preclude greater professionalism through common personnel practices and standards. Instead, it requires a more nuanced understanding of the similarities and differences between the various analytic disciplines. The medical profession is able to find common ground and bridge differences between many different medical specialties that have very different substantive knowledge bases by binding its different specialties together under the overall mission of improving the health of the patient. Since all intelligence analysts use similar techniques to achieve the same goal—providing information to improve decisionmaking—binding them together into a single profession should be achievable by using their common characteristics to build a core set of best practices that can be standardized across the entire intelligence community.

Yet greater professionalism does not have to require uniformity. The various intelligence analysis specialties may require different kinds of education, training, and development, but the medical profession again provides a model. The medical profession provides flexibility in the standards that apply to different medical specialties by establishing specialty boards that define the knowledge, skills and abilities required for that specialty. Where differences between intelligence analysis specialties are too great to be combined under a single common standard, intelligence analysis can follow the medical model by establishing similar boards or committees. In fact, a prototype has already been developed. In the late 1990s, CIA’s Council of Intelligence Occupations defined the knowledge, skills and abilities needed for each of eleven different “occupations” or specialties related to the production of intelligence analysis. Although the standards they developed were not adopted by the organization, their research provided more nuanced understanding of the education, training and development needed for each specialty. Similar differentiations both within and between organizations that produce intelligence analysis can be used as a source for specific standards and expectations that apply to each of the various analytic disciplines.

Modeling intelligence analysis professionalization on the medical profession might also lead to the creation of professional organizations and entities that do not yet exist in the

intelligence analysis context. For example, the role played by the American Bar Association in the legal profession and the American Medical Association in the medical profession has no equivalent in intelligence, yet such an association might provide a venue for knowledgeable practitioners to discuss best practices with the goal of improving both individual and institutional performance. Additional repositories or centers where knowledge regarding intelligence best practices could be stored and transmitted to the next generation of analysts might also replicate the role played by medical and law schools.

Regardless of the means chosen for implementation, turning intelligence analysis from craft-based to more formal professional practices should over time lead to greater consistency and reliability in intelligence production, and improvements in both individual and organizational performance. Intelligence agencies have endured examination after examination in the wake of multiple intelligence failures with little thought given to broader issues of professionalization. In addition to structural changes such as those recommended by the 9/11 Commission, effectively reforming the intelligence community will require changing the mindset and practices of intelligence practitioners so that they continue to focus on improving intelligence agency performance during and after structural changes are implemented. Turning intelligence analysis into a more formal profession will go far towards changing the culture of intelligence analysts and providing the mechanism for improving the performance of the entire intelligence analysis occupation far into the future.

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