Professional Intelligence Judgement Artistry: Some early observations

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Abstract

Intelligence analysis is critical national security and law enforcement function dependant on the intellectual capacity of individual analysts. The practice of intelligence is undertaken in an extremely complex environment often under a veil of secrecy, and where uncertain and deceptive information represents the norm. In order to develop as a profession appropriate constructs with which to explore and explain how analysts process intelligence, make decisions and reach judgements are needed. An improved understanding will offer opportunities to develop appropriate training and professional development for intelligence analysts. This paper introduces the construct of Professional Intelligence Judgement Artistry together with some very early findings to emerge from an initial series of interviews undertaken as part of a pilot study.

Keywords

Intelligence, analysis, professional artistry

INTRODUCTION

In the post 9/11 environment a rich body of knowledge has emerged as scholars from within and external to the intelligence profession have sought to define what intelligence is and what it is that intelligence analysts do (Cooper, 2005; George, 2004; Johnston, 2005; Lefebvre, 2004; Marrin, 2009; Marrin & Clemente, 2005; Russell, 2004). That body of literature has further grown as the intelligence community sought to understand why intelligence fails, what constitutes good analysis, the relationship between analysts, agencies and decision-makers and what represents analytical best practice (Cooper, 2005; Moore, Kirzan, & Moore, 2005; Swenson, 2003). Intelligence analysis is very much a human practice very much dependant on the intellectual capacity of individual analysts. Moreover the practice of intelligence is undertaken in an extremely complex environment often under a veil of secrecy, and where uncertain and deceptive information represents the norm. In order to develop as a profession appropriate constructs with which to explore and explain how analysts process intelligence, make decisions and reach judgements are needed. An improved understanding will offer opportunities to develop appropriate training and professional development for intelligence analysts. This paper introduces the construct of Professional Intelligence Judgement Artistry together with some very early findings to emerge from an initial series of interviews undertaken as part of a pilot study.

Background & Significance

The use of intelligence is not limited to national security and defence domains. Intelligence plays a significant factor in the compliance and enforcement roles of governments (Gill & Phythian, 2006). Intelligence is recognised as a key function of modern law enforcement as it enhances law enforcement effort. The perceived value of intelligence in law enforcement is demonstrated in the common use of the term 'intelligence led policing' in various parts of the world (Cope, 2004; Grieve, 2004, p. 25; Ratcliffe, 2004, p. 5).

Whilst the popular media characterizes intelligence as consisting of such things as spies and secret collection technology, the critical element of successful intelligence production is, and remains the intelligence analyst. This proposition is demonstrated by the fact that it is the analyst who initiates collection of information, and who processes, integrates and interprets that information. It is argued that it is the analyst who creates and disseminates intelligence products, generates context and provides insights all necessary for optimal decision making (Cooper, 2005; Lefebvre, 2004; Rieber, 2004). To date there has been very little research into the role of the law enforcement analyst. This research therefore will contribute to the body of knowledge by providing understanding of what constitutes the difference between average and outstanding law enforcement intelligence analysts.

Professional Artistry

Schon (1992) first introduced the concept of *professional artistry* as a construct that could explain the higher level competence of skilled professionals working in the murky complexity of real world problems where theory did not always provide the appropriate answer. Subsequently scholars across a range of disciplines have adapted and utilised the concept of professional artistry to formulate constructs in which to examine higher level competence in real world professional scenarios across a range of disciplines including education, health and management (Grainger, 2003; Paterson, 2003; Sadler-Smith & Smith, 2006). Paterson(2003) posited the construct *Professional Practice Judgment Artistry* as means of explaining the complexity of judgement and practice as it pertains to the domain of occupational therapy. Professional intelligence analysts are required to make complex judgments at the micro, macro and meta-levels that optimise decision making on the part of the client for particular circumstances and within a specific context

in a similar way to Paterson's occupational therapists. Analogous to Paterson's model, intelligence analysts process complex problems including moral and ethical issues, which may question values, beliefs and assumptions; the outcomes of which may impact on a specific individual through to national security scenarios that impact the entire community. On that basis it does appear that the concept of *professional artistry* provides an appropriate foundation for the construct Professional Intelligence Judgement Artistry.

THE STUDY

The purpose of this research is to examine the processes of intelligence analysis using a construct of Professional Intelligence Judgement Artistry (PIJA). How is PIJA demonstrated? What frameworks do analysts use to make decisions? What forces internal and external might contribute to or influence the analytical process? For the purpose of this study intelligence analysis has been limited to the domain of law enforcement intelligence in order to create a coherent context for the examination of analytical decision-making. However law enforcement has not been limited to policing but includes those government agencies that have compliance and regulatory functions and maintain an intelligence capability.

This study is utilising a qualitative research paradigm to both define and refine the construct PIJA. This approach allows the research to be conducted in the real world, examining the construct of PIJA in its full context (Bowen, 2005; Ehigie & Ehigie, 2005; Krauss, 2005). In the case of the PIJA construct, it is argued that its complexity necessitates the extraction of meaning for the purpose of understanding rather than proving. Moreover this research fits the 'naturalistic' ontology as described by Bowen (2005) in that it is being conducted in the natural setting, utilising qualitative methods, purposive sampling and inductive analysis. This approach is considered appropriate in the case of this research as it is exploratory research into the phenomenon of intelligence analysis.

There are significant differences between domains examined in previous research, Occupational Therapists are tertiary trained and recognised as professionals whom it may be argued have a common foundation in terms of understanding professional outcomes within their field. Furthermore they are regulated by governing bodies, require certification and represented by professional bodies as is the case across the wider medical domain and with education. A similar case it may be argued exists in the management domain (Grainger, 2003; Paterson, 2003; Sadler-Smith & Smith, 2006). Intelligence analysts however do not have to undertake formal education to prepare them for employment, there is significant variation in the employment of intelligence analysts and whilst there is some common foundation in terms of professional capability or understanding, there are quite significant variations across the profession. Evetts (2006) posits a view as to how to recognise or define professions suggesting that they may be categorised by virtue of the fact that they operate in the knowledge environment, focus on the uncertainties in risk societies and are ostensibly dealing with risk and risk assessment to support a client's management of uncertainty. Intelligence is and has historically been focused on determining risk exposure and reducing uncertainty. Rodgers (2006) and Marrin and Clemente (2005) in seeking to address the issue of intelligence as a profession argue that there are striking similarities between the profession of intelligence and that of medical and mental health practitioners in terms of the approach to diagnosis and analytical prediction. Therefore for the purpose of this study intelligence will be deemed a profession.

A pilot study comprising three interviews was conducted during September / October 2009. The three participants were selected for their breadth of experience across multiple law enforcement agencies. The analysts referred to hereafter as W1 through W3 are described below:

- W1 has been working as an analyst for six years primarily in the policing environment. W1 has an undergraduate degree in computer science and has completed a course work Masters of Information Security and Intelligence.
- W2 has been employed as an analyst for eight years now and has worked in policing, anti-corruption, the private sector and a compliance role in state government. W2 has completed an undergraduate degree in criminology. In addition to operational analytical roles W2 also has experience in the delivery of intelligence training within the law enforcement domain.
- W3 has been employed as an analyst for nineteen years and during this time has worked in state and federal agencies primarily within the law enforcement domain. W3 has completed a Graduate Diploma in Criminal Intelligence. In addition to the operational roles held by W3 he has been involved in the delivery of intelligence training within the law enforcement domain.

The interview process consisted of semi-structured interviews, each lasting approximately 50 minutes and addressed nine themes as shown in the table below. Each theme was explored in conversation with the subject and issues of interest teased out through a series of sub questions appropriate to the theme being explored at the time. All interviews were subsequently transcribed by the researcher. Initial analysis has consisted of identifying key concepts to emerge from the interviews.

Background, experience & history of the analyst	The concept of analysis	Decision & judgement in analysis

Art, science, craft of analysis	Expertise and analysis	The analyst, average and outstanding
Professional artistry	Ethics & analysis	General thoughts

DISCUSSION OF EARLY FINDINGS

Due to the very early stage of this research the discussion of responses to the themes will be limited primarily to some interesting insights pertinent to the context of professional artistry. In the first instance though it is worth looking briefly at what might be described as the serendipitous entry into the world of intelligence as all three analysts were very quick to highlight their accidental entry into the profession. Moreover all three analysts when describing their career actually focus on the serendipitous nature of their entry into the profession. Notwithstanding this accidental career choice all discuss their profession with an obvious passion. The statement by W1 below clearly demonstrates this aspect of accidental entry into the profession.

> "Well I fell into it by accident, to be honest, [ ] I didn't even know such a job existed when I was going through high school, Uni as a career path."

This accidental nature of entry into the profession has come as something of a surprise however its significance at this early stage is not certain. Its relevance may be more specific to the concept of intelligence as a profession rather than professional artistry, it is however an issue that will be explored further as the study progresses.

Experts, expertise and analysis

The concepts of the intelligence experts and analytical expertise were discussed with each participant. W1 suggested that the domain of intelligence was one in which experts cannot really exist whereas W3 was of the opinion that expertise was something quite narrow and contained within a specific context. Overall there was reluctance to use the label expert in regards specific intelligence analysts. Whereas on the issue of intelligence analysis both W2 and W3 focused on what they perceived to be an incongruity in that you analyse information in order to produce intelligence. However all three agreed that intelligence analysis was also about creating context out of voluminous data. Generally the participants' description of analysis as a process was consistent with the literature. Lefebvre (2004) describes the process of intelligence analysis as being one of evaluation and transformation of data into a product for the use of policy consumers who may more broadly be defined as being decision makers. Critically it involves "assessing the reliability and credibility of the data, and comparing it with the knowledge base available to the analyst, to separate fact from error and uncover deception" (Lefebvre, 2004, p. 236). Gill and Phythian (2006) suggest that analysis is a process of seeking knowledge and assigning certainty sufficient to allow decision makers to act on the intelligence provided. More generally analysis is recognised as being an intellectual process focused on identifying truths, making appropriate judgements and explaining the evidentiary basis of such (Atran, 2006; George, 2004; Herbert, 2006; Heuer, 1999; Moore, 2007; Moore et al., 2005). It was therefore expected that the study participants would also describe their own profession within a similar context and this proved to be the case. However a somewhat unexpected finding was the degree of superficiality of understanding of those various concepts as they relate to the profession of intelligence. It is possible that this reflects the fact that there is no core professional knowledge base for the profession and is a key point of difference with professions such as medicine, occupational therapy and education.

Self as an analyst

According to Schon one of the keys to higher level competence or excellence is the ability to reflect on one's own knowledge and experience (1992). It was therefore expected to some degree even in these exploratory interviews that participants would have in the course of their career reflected on what they know and what they do however responses seemed to suggest this had not really occurred. When queried, on their decision-making and judgement processes all three analysts struggled to find words to describe how they made decisions or formed judgements. Whilst all could describe a process when it came to framing their actual decision making and judgement they introduced terms such as experience and intuition. W1 and W2 described it as just something they have come to know and to some degree something they had not really given much thought to previously. Whereas W3 struggled to articulate it as clearly as he wanted yet at the same time did clearly demonstrate evidence of significant reflection on the issue. The Analysts were asked to describe or explain how concepts such as art, science and craft related to intelligence and in particular how it related to themselves as analysts. W1 struggled with this and tended to consider art and science in very concrete terms. This may be representative of his lack of experience or possibly a reflection of his employment in the tactical domain of intelligence. Having considered the issue of intelligence as an art, science or craft W2 when seeking to describe it was inclined to put it into the context of what made an outstanding analyst outstanding, W2 linked artistry to experience. Whereas W3 had some specific views as to how this related to the development of analysts and a strong view that you can't make an analyst unless they have certain basic aptitudes. Generally concepts of art and science as it related to analysis were understood at a relatively superficial level. However in the case of W3 there were some fairly clear distinctions as to where art and science fit in the analysis framework. In W3s case science was something that dealt

with technology applications to intelligence whereas art represented the human aspect on analysis. W3 suggested a link between art and aptitude and suggested that it was the art aspect that was necessary for higher level analysis. This is in keeping with the observations of Paterson in relation to excellence in Occupational Therapy(2003).

Separating average from outstanding

When asked to describe an outstanding analyst W2 and W3 both were able to quite clearly articulate many of the aspects that separated the outstanding analyst from the average whereas W1 struggled somewhat. W1 in fact seemed to have a more superficial understanding of what the differences may have been. That said W1 recognises that there is element of going beyond the requirement possibly anticipating intent of the intelligence client. With regard the concept of the average analyst all three were quite clear in their opinions that the average analyst is one whom has technical proficiency, capacity to complete the task within specified parameters, utilised a pro-forma or template approach to completion of the task at hand. This compared with the outstanding analyst, whom demonstrated insight, perception, curiosity and passion for the task. This is in keeping with Schon (1992, p. 51) who introduces what he refers to as 'indeterminate zones of practice – the situations of complexity, the elusive task of problem setting' and the role of artistry in dealing with this. This professional artistry reflects the tacit experiential knowledge practitioners acquire. Knowledge they just know yet struggle to articulate. Paterson, Wilcox and Higgs (2006) build on the work of Schon and introduce the concept of "judgement artistry" as a means of explaining how individual practitioners integrate the breadth of their experience and knowledge, within the context of their environment to deal with highly complex problems. Grainger (2001) also builds on Schon's work and expands the meaning of artistry to encompass how professionals translate knowledge and theories irrespective of the domain from which they are drawn. In all cases the argument is that there is more to professional competence or expertise than learned technical competency. Based on the outcomes of these early interviews it does appear that the constructs of professional artistry and judgement artistry may prove to be an appropriate framework in which to assess the process of intelligence analysis.

CONCLUSION

At this very early stage in the study with limited analysis of the interview data substantive conclusions as to what separates the average from the outstanding intelligence analyst cannot be stated. However even at this early stage there is evidence emerging that the means of identifying and understanding what separates the two states is the lens of *professional artistry*. Some scholars and the study participants tend to be in agreement that good analysts posses certain qualities regardless of the domain they operate in (Gazit, 1980; Heuer, 1999). Those qualities include demonstrated intellectual capacity, curiosity, a degree of scepticism, and attention to detail. Additional qualities noted by the study participants include, creativity, tenacity, foresight and contextual understanding. These qualities are in keeping with those identified by Paterson (2003) in her study of occupational therapists and by Grainger (2003) in her study of professional artistry in teaching.

What has emerged from these interviews is a sense that intelligence analysis is at once complex and an intellectually demanding task. In order to operate effectively analysts need strategies to be able to cope with voluminous amounts of disparate data and ability to contextualise the problems they face. Unlike the investigators whom, in essence deal with facts the analysts deal with speculation, supposition, facts and a high level of uncertainty. Outstanding analysts in many cases identify the problem before the problem is recognised as such whereas average analysts are more process driven.

REFERENCES

Atran, S. (2006). A Failure of Imagination (Intelligence, WMDs, and "Virtual Jihad"). *Studies in Conflict & Terrorism, 29*(3), 285-300.

Bowen, G. A. (2005). Preparing a Qualitative Research-Based Dissertation: Lessons Learned. *The Qualitative Report, 10*(2), 208-222.

Cooper, J. R. (2005). *Curing Analytic Pathologies: Pathways to Improved Intelligence Analysis*. Washington: Center for the Study of Intelligence.

Cope, N. (2004). Intelligence Led Policing or Policing Led Intelligence. *British Journal of Criminology, 44*(2), 188-203.

Ehigie, B. O., & Ehigie, R. I. (2005). Applying Qualitative Methods in Organizations: A Note for Industrial/Organizational Psychologists. *The Qualitative Report, 10*(3), 621-638.

Evetts, J. (2006). Short Note: The Sociology of Professional Groups New Directions. *Current Sociology, 54*(1), 133-143.

Gazit, S. (1980). Estimates and Fortune-Telling in Intelligence Work. *International Security, 4*(4), 36-56.

George, R. Z. (2004). Fixing the Problem of Analytical Mind-Sets: Alternative Analysis. *International Journal of Intelligence and CounterIntelligence, 17*, 385-404.

Gill, P., & Phythian, M. (2006). *Intelligence in an Insecure World*. Cambridge: Polity Press.

Grainger, S. (2001). Accessing Professional Artistry: The Importance of Cooperative Education and the Limitations of Classical Research. *Asia-Pacific Journal of Cooperative Education, 2*(1), 1-5.

Grainger, S. (2003). *Accessing the Professional Artistry of Teaching.* Griffith University, Brisbane.

Grieve, J. (2004). Developments in UK Criminal Intelligence. In J. Ratcliffe (Ed.), *Strategic Thinking in Criminal Intelligence* (pp. 25-36). Sydney: The Federation Press.

Herbert, M. (2006). The Intelligence Analyst as Epistemologist. *International Journal of Intelligence and CounterIntelligence, 19*(4), 666-684.

Heuer, R. J., Jr. (1999). *Psychology of Intelligence Analysis*. Washington: Center for the Study of Intelligence.

Johnston, R. (2005). *Analytic Culture in the US Intelligence Community: An Ethnographic Study*. Washignton: Center for the Study of Intelligence.

Krauss, S. E. (2005). Research Paradigms and Meaning Making: A Primer. *The Qualitative Report, 10*(4), 758-770.

Lefebvre, S. (2004). A Look at Intelligence Analysis. *International Journal of Intelligence and CounterIntelligence, 17*(2), 231-264.

Marrin, S. (2009). Training and Educating U.S. Intelligence Analysts. *International Journal of Intelligence and CounterIntelligence, 22*(1), 131 - 146.

Marrin, S., & Clemente, J. D. (2005). Improving Intelligence Analysis by Looking to the Medical Profession. *International Journal of Intelligence and CounterIntelligence, 18*(4), 707-729.

Moore, D. T. (2007). *Critical Thinking and Intelligence Analysis* (Vol. 14). Washington: NDIC Press.

Moore, D. T., Kirzan, L., & Moore, E. J. (2005). Evaluating Intelligence: A Competency-Based Model. *International Journal of Intelligence and CounterIntelligence, 18*, 204-220.

Paterson, M. (2003). *Professional Practice Judgement Artistry in Occupational Therapy*. University of Sydney, Sydney.

Paterson, M., Wilcox, S., & Higgs, J. (2006). Exploring dimensions of artistry in reflective practice. *Reflective Practice, 7*(4), 455-468.

Ratcliffe, J. H. (Ed.). (2004). *Strategic Thinking in Criminal Intelligence*. Sydney: The Federation Press.

Rieber, S. (2004). Intelligence Analysis and Judgmental Calibration. *International Journal of Intelligence and CounterIntelligence, 17*(1), 97-112.

Rodgers, R. S. (2006). Improving Analysis: Dealing with Information Processing Errors. *International Journal of Intelligence and CounterIntelligence, 19*(4), 622-641.

Russell, K. (2004). The Subjectivity of Intelligence Analysis and Implications for the U.S. National Security Strategy. *SAIS Review, XXIV*(1), 147-163.

Sadler-Smith, E., & Smith, P. J. (2006). Technical rationality and professional artistry in HRD practice. *Human Resource Development International, 9*(2), 271-281.

Schon, D. A. (1992). The crisis of professional knowledge and the pursuit of an epistemology of practice. *Journal of Interprofessional Care, 6*(1), 49 - 63.

Swenson, R. G. (Ed.). (2003). *Bringing Intelligence About Practitioners Reflect on Best Practices*. Washington: Joint Military Intelligence College.

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