## MSc(Econ) in the Department of International Politics Aberystwyth University September, 2012

This dissertation is being submitted in partial fulfillment of the requirements for the MSc(Econ) in Strategic Studies and Intelligence(Specialist) degree.

# <u>The problem of intelligence failure:</u> the case of the Yom Kippur war (1973)

Candidate name: Stanislav Nikolov Nokov

UCAS number: 080796084

## Declarations

The word length of this dissertation is: 14, 997 Signed: Stanislav Nikolov Nokov Date:...3/ 09/ 2012

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any other degree. Signed: Stanislav Nikolov Nokov Date...3/ 09/ 2012

This work is the result of my own investigations, except where otherwise stated. Where correction services have been used, the extent and nature of the correction is clearly marked in a footnote(s). Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended. Signed: Stanislav Nikolov Nokov Date ...3/ 09/ 2012

I hereby give consent for my work, if accepted, to be available for photocopying and for interlibrary loan, and for the title and summary to be made available to outside organisations. Signed: Stanislav Nikolov Nokov Date...3/09/2012

### Abstract

From the Pearl Harbor intelligence debacle of 1941 to the Iraqi Weapons of Mass Destruction intelligence fiasco of 2002, intelligence failures have been a widely documented and reoccurring phenomenon. Indeed, from a historical perspective, intelligence failures appear to be inevitable and unavoidable. They are indivisible part of the history of intelligence, and they still seem to haunt the presence. In concurrence with the mainstream academic opinion on the subject, by utilizing qualitative research method, concretely, relying on the Orthodox approach, and by examining various primary and secondary sources, this project argues that the reason why intelligence failures are inevitable are the multifarious, endemic, interrelated factors, barriers or pathologies, which being closely connected to the basic role of intelligence and the nature of information, pose negative effects on the whole intelligence cycle, hinder both the clarity and accuracy of the intelligence analytical process, and erode the warning-response dynamic. It is important to be noted that because these obstacles are indeed numerous, it would be the aim of this project to examine the nature and function of the fundamental, most important, and most damaging factors and barriers in respect to the intelligence, warning-response and decisionmaking processes. Specifically, it is the thesis of this paper to prove that the unavoidability of intelligence failures is due to the inherent pathologies and limitations of the human cognition, the endemic analytical problem of predictions from epistemological perspective, the mercurial time and space variables, the innate ambiguity of information and its excess nowadays, the danger of the politicization of the intelligence cycle and the sheer impracticability of the solutions, which are assumed to eliminate the aforementioned problems. The project will then move on to implement this theoretical framework in order to provide a consistent explanatory format for the Yom Kippur war intelligence failure of 1973. It appears plausible to assert that the thesis of the project is corroborated by the Yom Kippur war intelligence fiasco, as the failure was not provoked by insufficient information, highly successful Egyptian or Syrian deception, or Israeli intelligence officers and commanders being incompetent or inexperienced. Per contra, the roots of the Israeli Intelligence debacle are strikingly similar to the ones delineated and discussed by the theoretical framework of this project.

# Table of content

Introduction	page 6
Chapter 1: The human cognition and its physical limitations	-page 15
Chapter 2: The Epistemological problem of predictions	-page 29
Chapter 3: Fundamental obstacles to analytic accuracy	-page 35
Time and space variables	-page 35
• The problem of the inherent ambiguity of information ar	nd its
quantity nowadays	-page 39
The problem of politicization	page 43
The elusiveness of solutions	page 49
Chapter 4: The Yom Kippur intelligence failure of 1973	page 53
Conclusion	page 70

## Acknowledgements

*First and foremost, I would like to thank my family for their endless moral support and encouragement.* 

Secondly, I am truly thankful to Doctor Claudia Hillebrand and Doctor Gerry Hughes for their priceless advice and patience towards me and my project. This dissertation would not have been possible without their guidance.

Last but not least, I would like to show my gratitude to Professor Len Scott, for his modules provided me with excellent theoretical knowledge, which helped me understand the fascinating and misty academic field of intelligence.

## Introduction

The great Sun Tzu in his magnum opus, Art of War, posits: "Know the enemy and know yourself, and in a hundred battles you will never be in peril."<sup>1</sup> However, the history of intelligence has demonstrated that knowing yourself and the enemy is an elusive, misleading and difficult task. Clausewitz in his On War, in chapter "Information in War", himself recognized the inherent difficulty in this: "If we consider the actual basis for this information [every piece of information concerning the enemy and his country], how unreliable and transient it is, we soon realize that war is a flimsy structure that can easily collapse and bury us in its ruins."<sup>2</sup> Following this line of reasoning, Michael Handel has made a similar observation: "In the past, it has often both explicitly and implicitly been assumed that intelligence work can be pursued by professionals, detached experts working within an objective environment, who would be capable of presenting the truth, as they best determine it, to decision-makers. The policy makers in this scenario will of course recognize the quality and relevance of the data in the best interest of their community. This purely rational decision-making model and belief in the viability of a 'strictly professional intelligence process' is nothing but an idealized normative function. Like Clausewitz's 'War' in practice, the real world of intelligence is a rife with political friction and contradictions, an environment in which uncertainty is the only certain thing."<sup>3</sup> Indeed, centuries have passed since Sun Tzu's and von Clausewitz's works were written,

<sup>&</sup>lt;sup>1</sup> Tzu, S. Art of War, translated by John Minford (London; New York : Penguin Books, 2002), p. 84.

<sup>&</sup>lt;sup>2</sup> Clausewitz, C. *On War*, edited and translated by Michael Howard and Peter Paret. (Princeton : Princeton University Press, 1989), p. 116.

<sup>&</sup>lt;sup>3</sup> Handel, M. "Intelligence and the Problem of Strategic Surprise", in *Paradoxes of Strategic Intelligence: essays in honor of Michael I. Handel*, edited by Richard K. Betts and Thomas G. Mahnken. (Portland, OR ; London: Frank Cass, 2003), p. 8.

nonetheless, the history of intelligence ascertains that, "this state of affairs is the norm rather than the exception," because neither the nature of the intelligence profession, nor the essence of information has changed in any fundamental way. Despite the technological revolution over the past two centuries, the nature of intelligence remains unchanged. Henceforth, "uncertainty remains as prominent factor as ever."<sup>4</sup> Therefore, Betts's generalizations that, "Powerful nation are not immune to calamity," and "Military disasters befall some states, no matter how informed their leaders are, "<sup>5</sup>seem indeed striking with their analytical validity.

*Ergo,* the reason why uncertainty is still a prominent factor and the nature of intelligence remains unalterable is the number of "inherent enemies" of intelligence, "which grow out of the human condition and the dynamics of the intelligence function."<sup>6</sup>

It appears analytically plausible to theorize that the regularity in the occurrences of intelligence failures, where an intelligence failure equals, "the inability of one or more parts of the intelligence process- collection, evaluation and analysis, production, dissemination to produce timely, accurate intelligence on an issues or event of importance to national interest,"<sup>7</sup> is maintained by multifarious, endemic and very often, self-reinforcing, analytical obstacles, which hinder or distort the analytical accuracy and clarity of the intelligence process, and erode the warning-response process. As Jackson has noted, it is feasible "...to consider the permanent challenges to effective intelligence...in terms of interdependent categories of limitations linked

<sup>&</sup>lt;sup>4</sup> Jackson, P. "On uncertainty and the limits of intelligence", in *The Oxford Handbook of National Security Intelligence* (Oxford ; New York : Oxford University Press, 2010), p. 453.

<sup>&</sup>lt;sup>5</sup> Betts, R. "Analysis, War, and Decision: why intelligence failures are inevitable", in *Intelligence and National Security: the secret world of spies: an anthology*, edited with introductions by Loch K. Johnson, James J. Wirtz. (Oxford: Oxford University Press, 2008), p. 122.

<sup>&</sup>lt;sup>6</sup> Betts, R. *Enemies of Intelligence: knowledge and power in American national security* (New York : Columbia University Press, 2007), p. 12.

<sup>&</sup>lt;sup>7</sup> Lowenthal, M., M. "The Burdensome Concept of Intelligence Failure", in *Intelligence: policy and process,* edited by Maurer, A. C., Tunstall, M. D., Keagle, J. M. (Boulder : Westview Press, 1985), p. 51.

directly to the nature of intelligence as element of politics."<sup>8</sup> From this perspective, it is appears logical to foster the deduction that, "intelligence failures are rarely unidimensional in scope."<sup>9</sup> *Per contra,* as Bar-Joseph and Jack Levy have systematized, "most intelligence failures are the product of the interaction of multiple factors at different levels. These relationships between factors are complex and context dependent...."<sup>10</sup>*Ita vero,* the "enemies of intelligence" are numerous; however, this project will analyze the ones, which are considered most fundamentally important and most damaging to the clarity of the intelligence, policy-making and the warning-response processes.

The first and fundamental barrier is the human nature, specifically, the inherent pathologies and limitations of the human cognition. As Betts declares, "Among the inherent enemies of intelligence are the physical limitations of the cognition process."<sup>11</sup> Following this line of thought, according to Michael Handel, "…intelligence work, despite its access to electronic monitoring equipment, high-powered computers and satellites…is still based upon a human factor." Henceforth, intelligence work fundamentally reflects human nature.<sup>12</sup> And human nature, concretely, the human cognition, is constrained, because the physiology of the human perception, memory and brain, "even at best apprehend information in ways that are limited and distorted."<sup>13</sup> Henceforth, at the core of the inevitability of failure are "the limits of the

<sup>&</sup>lt;sup>8</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 454.

<sup>&</sup>lt;sup>9</sup> Lefebvre, St. "A Look at Intelligence Analysis", *International Journal of Intelligence and Counter-Intelligence*, vol.17, no. 2, (2004), p. 233.

<sup>&</sup>lt;sup>10</sup> Bar-Joseph, U., Levy, J. S. "Conscious Action and Intelligence Failure", *Political Science Quarterly*, Vol. 124, No. 3, (2009), p. 476.

<sup>&</sup>lt;sup>11</sup> Betts, R. Enemies of intelligence: knowledge and power in American national security, p. 12.

<sup>&</sup>lt;sup>12</sup> Handel, M. "Intelligence and the Problem of Strategic Surprise", p. 7.

<sup>&</sup>lt;sup>13</sup> Betts, R. *Enemies of intelligence : knowledge and power in American national security,* p. 12; Heuer, R. J. *Psychology of Intelligence Analysis* (Washington, D.C.: Center for the Study of Intelligence, Central Intelligence Agency, 1999); Jackson, P. " On uncertainty and the limits of intelligence", p. 457.

human cognition that constrain our ability to anticipate the unexpected or novel, especially if the future fails to match our existing analytical concepts."<sup>14</sup>

The second obstacle concerns the cerebral nature of the intelligence work, namely, predicting future events or the behavior of respective actors. "A forecast," as Doran postulates, " is a prediction based on knowledge of past behavior,"<sup>15</sup> and many intelligence analysts, as Stephen Marrin ascertains: "... use intuitive pattern and trend analysis- consisting of the identification of repeated behavior over time and increases or decreases in that behavior- to uncover changes in some aspects of international behavior that could have national security implications."<sup>16</sup> However, from epistemological perspective, as David Hume criticizes this *modus operandi*, "In reality, all arguments from experience are founded on the similarity which we discover among natural objects, and by which we are induced to expect effects similar to those which we have found to follow from such objects."<sup>17</sup> Henceforth, what is analytically problematic is that, "all inferences from experience are effects of customs, not of reasoning." In effect, this "renders our experience useful to use," and establishes the anticipation of "...similar train of events with those which have appeared in the past."<sup>18</sup>

From another perspective, time and space also represent fundamental barriers to analytical accuracy. As Austin has postulated, "the world is a fluid, unpredictable, dynamic place."<sup>19</sup> Ergo,

<sup>&</sup>lt;sup>14</sup> Wirtz, J. "Theory of Surprise", in *Paradoxes of Strategic Intelligence: essays in honor of Michael I. Handel*, edited by Richard K. Betts and Thomas G. Mahnken. (Portland, OR; London: Frank Cass, 2003), p. 101.

<sup>&</sup>lt;sup>15</sup> Doran, Ch. "Why Forecasts Fail: the limits and potential of forecasting", *International Studies Review*, vol. 1, no.2 (1999), p. 11.

<sup>&</sup>lt;sup>16</sup> Marrin, St. "Homeland Security and the Analysis of Foreign Intelligence", paper written for the *Markle Foundation Task Force on National Security and the Information Age*, July 15<sup>th</sup>, 2002, p. 8. <sup>17</sup> http://socserv.mcmaster.ca/econ/ugcm/3ll3/hume/enquiry.pdf

 <sup>&</sup>lt;sup>18</sup> http://socserv.mcmaster.ca/econ/ugcm/3ll3/hume/enquiry.pdf

<sup>&</sup>lt;sup>19</sup> Austin, J. "The Psychological Dimension of Intelligence Activities", in *Intelligence: Policy and Process*, edited by Alfred C. Maurer, Marion D. Tunstall, and James M. Keagle. (Boulder: Westview Press, 1985), p. 200.

according to Jackson, "the problems of time and space impose inescapable limitations on decision of all kind,"<sup>20</sup> because "very often both data and policy outpace analysis.<sup>21</sup> Haste, therefore, is "the common source of compromise in the quality of intelligence."<sup>22</sup> The inherent ambiguity of information, which stems "just as often from an excess as a lack of information,"<sup>23</sup>and its excess nowadays<sup>24</sup> are also essential factors which reveal the ambivalent nature of information and the implication that it poses to the clarity of the analytical process. As the Schlesinger report asserted, "In a world of perfect information, there would be no uncertainties about the present and future intentions, capabilities, and activities of foreign powers. Information, however, is bound to be imperfect for the most part."<sup>25</sup> From another perspective, politicization as well poses a significant threat to the accuracy of the intelligence cycle, as the possibility that intelligence information will be distorted by ideological bias from "top-down" or" bottom-up" is present at every stage of the intelligence process.<sup>26</sup> Lastly, when there is a problem with the intelligence process, a great majority of officials would hold the conviction that what is needed is to "shake the system up", "set it right", and other failures

<sup>23</sup> Betts, R. Enemies of intelligence: knowledge and power in American national security, p. 30.

<sup>25</sup> A Review of the Intelligence Community, March 10, 1971, (the Schlesinger Report), p. 10.

<sup>26</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 459.

<sup>&</sup>lt;sup>20</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 454.

<sup>&</sup>lt;sup>21</sup> Betts, R. "Analysis, War, and Decision: why intelligence failures are inevitable", p. 125.

<sup>&</sup>lt;sup>22</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 454; Grabo, C., M. Anticipating Surprise: analysis for strategic warning (Lanham: University Press of America, 2004), pp. 109-12; Betts, R. "The Politicization of Intelligence: costs and benefits", in *Paradoxes of Strategic Intelligence: essays in honor of Michael I. Handel*, edited by Richard K. Betts and Thomas G. Mahnken. (Portland, OR; London: Frank Cass, 2003), p. 63; Jervis, R. "Reports, Politics and Intelligence Failures: the case of Iraq", *The Journal of Strategic Studies*, Vol. 29, No. 1, (February, 2006), pp. 14-15.

<sup>&</sup>lt;sup>24</sup> The Silberman-Robb Commission, "WMD intelligence failure", in *Intelligence and National Security: the secret world of spies: an anthology*, edited with introductions by Loch K. Johnson, James J. Wirtz. (Oxford: Oxford University Press, 2008), p. 465; *A Review of the Intelligence Community*, March 10, 1971, (the Schlesinger Report), p. 10; David, C. M. *Wilderness of Mirrors* (New York: Random House, 1980), pp. 76-90; Dupont, A. "Intelligence for the Twenty-First Century", *Intelligence and National Security*, vol. 18, no. 4. (2003), pp. 17-19.

would be prevented. As Betts posits, "This is illusory. Intelligence can be improved marginally, but not radically."<sup>27</sup>

As a result, as Handel has averred, "the route from collection to decision is punctuated" by these endemic, analytical barriers.<sup>28</sup> Correlatively therefore, it seems indeed plausible to generalize that intelligence failures "are rarely a problem of collection, but generally of interpretation."<sup>29</sup> Consequently, it appears analytically verisimilar to formulate the systematization that in the present as well as in the future both intelligence professionals and leaders will continue to operate in "an environment of uncertainty, where the levels of uncertainty are liable to increase in direct proportionality to the importance of issues at stake."<sup>30</sup>

Indeed, the majority of scholars and students of the problem of intelligence failures appear to support the aforementioned thesis .Nonetheless, it is worth noting that there is a number of scholars that do not concur with the mainstream academic view and argue that intelligence debacles are avoidable, as they are a problem of collection. According to Ariel Levite, poor collection triggers a process that fosters the intelligence failure.<sup>31</sup> Likewise, David Kahn's chapter "United States views of Germany and Japan in 1941" in Earnest May's "Knowing One's Enemies: intelligence assessment before the Two World Wars" states that, "not one intercept,

<sup>&</sup>lt;sup>27</sup> Betts, R. Enemies of intelligence: knowledge and power in American national security, p. 20.

<sup>&</sup>lt;sup>28</sup> Handel, M. "Intelligence and the Problem of Strategic Surprise", p. 8.

<sup>&</sup>lt;sup>29</sup> Brady, Chr. "Intelligence failures: plus ca change..." *Intelligence and National Security*, vol. 8, no. 4 (1993), pp. 86-87; Kuhns, W. "Intelligence Failures: Forecasting and the Lessons of Epistemology', in *Paradoxes of Strategic Intelligence: Essays in Honor of Michael I. Handel*, edited by Betts, R. and Thomas G. Mahnken (London: Frank Cass 2003), p. 81.

<sup>&</sup>lt;sup>30</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 454.

<sup>&</sup>lt;sup>31</sup> Levite, A. Intelligence and Strategic Surprises (New York: Columbia University Press, 1987).

not one datum of intelligence ever said anything about an attack on Pearl Harbor or other possession."<sup>32</sup> Similarly, Alex Hybel also theorizes and supports the position that intelligence failures can be caused by insufficient information.<sup>33</sup> On the other hand, Sundri Khalsa has developed a computerized methodology, which provides indications and warnings, and thus, helps counter-terrorist analysts gather, manage and preoritize information. By utilizing this computer program which, *inter alia*, tracks and displays the task of each analyst, aids analysts in identifying relevant information, publishes an intelligence collection plan and sorts collected information, Khalsa argues that intelligence debacles can be avoided.<sup>34</sup>

Essentially therefore, it would be the principal aim of this project to prove clearly that the dependent variable in this case-the problem of intelligence failure, is inevitable and unavoidable, despite the structured or non-structured, intuitive methods which intelligence analysts frequently use to manage the problem of uncertainty.<sup>35</sup> In order to achieve and evince this, the project would employ an atomistic approach, which would allow each one of the aforementioned barriers, or independent variables, to be analyzed and studied.<sup>36</sup> This is the reason why a causal-theoretical framework would be developed in the first part of the project, which by examining the essence and functions of the factors in question, would demonstrate their unavoidable, permanent and negative effects towards the intelligence, warning-response

<sup>&</sup>lt;sup>32</sup> Kahn, D. "United States views of Germany and Japan in 1941", in *Knowing One's Enemies: intelligence assessment before the Two World Wars*, edited by Ernest R. May (Princeton, N.J.; Guildford: Princeton University Press, 1984), p. 500.

 <sup>&</sup>lt;sup>33</sup> Hybel, A., R. *The logic of Surprise in International Conflict* (Lexington: Lexington books, 1986), p. 100.
 <sup>34</sup> <u>http://www.sumobrain.com/patents/wipo/System-method-providing-terrorism-intelligence/WO2008002332.html</u>

 <sup>&</sup>lt;sup>35</sup> Folker, R. D. "Intelligence Analysis in Theater Joint Intelligence Centers: An Experiment in Applying Structured Methods", Occasional Paper, no. 7, (Washington, D.C.: Joint Military Intelligence College, January, 2000), pp. 6-10.
 <sup>36</sup> Shively, W. *The Craft of Political Research* (Upper Saddle River, N.J ; London : Prentice Hall, 1998), p. 13.

and policy-formulating processes. This causal-theoretical framework would then be employed in order to provide concise and consistent explanatory format, concerning the intelligence failure of Yom Kippur in 1973. It must be noted that the case of Yom Kippur was chosen to be analyzed, because in contrast to classic case-studies such as Pearl Harbor (1941), the Israelis knew the Arab attack plans, military deployments, and the intention to launch a war. Moreover, unlike the failure of Barbarossa (1941), where a skillful German deception was present, the Syrian and Egyptian deception plans were rather primitive.<sup>37</sup> Yom Kippur is also an excellent example to test the validity of the thesis, because of the fact that the people involved in this debacle were very experienced intelligence officers, and hardly any conspiracy theories such as the ones surrounding Pearl Harbor or Barbarossa, exist.<sup>38</sup>

Methodologically, it is important to be noted that this project will employ a composite qualitative method of research, which will borrow heavily from the Orthodox approach, and would rely both on primary and secondary sources. Given the dichotomy between the Orthodox and the Revisionist approaches on the subject of intelligence failures, the Orthodox approach has been chosen to be employed, because of its analytical consistency with and relevance to the thesis of the project. As Betts summarizes the Orthodox perspective: "while many sources of surprise lie in the attacker's skills in deception...Orthodox studies emphasize the victim's mistakes- how interactions of organizations, psychology, and inherent ambiguities of information create pathologies in the process of absorbing and reacting to indicators." <sup>39</sup> It

<sup>&</sup>lt;sup>37</sup> Bar-Joseph, U. *The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources* (New York: State University of New York Press, 2005), p. 2.

<sup>&</sup>lt;sup>38</sup> *Ibid,* pp. 3-4.

<sup>&</sup>lt;sup>39</sup> Betts, R. "Surprise, Scholasticism, and Strategy: A Review of Ariel Levite's Intelligence and Strategic Surprises", *International Studies Quarterly*, vol. 33, no.3 (September, 1989), p. 330.

must be noted also that, as the pillars of grounded theory suggest, *a priori* the analysis of the Yom Kippur intelligence failure envelopes, the majority of theoretical segments and arguments would be tested against historical data in order to test their validity.<sup>40</sup>

Henceforth, the reminder of this project will be organized in four chapters. The first chapter will incorporate the relevant literature and research, conducted in the fields of experimental psychology in order to examine the most essential, endemic fallibilities of the human cognition. The second chapter will utilize David Hume's rationale to discuss and problematize from epistemological perspective the process of making predictions by employing the method of induction and past experience. The third chapter will combine several essential factors and will analyze the ramifications to the intelligence cycle, induced by the time and space dynamics, the problem of politicization, the inherent ambiguity of information and its excess nowadays, and the difficulty of reforming intelligence agencies. The last section will explain the intelligence failures behind the Yom Kippur War. Due to the format of this project, a historiographical approach providing an extensive summary of the event will not be done. The case-study is well-know, thus, no lengthy introductions would take place.

<sup>&</sup>lt;sup>40</sup> Glaser, G. G., Straus, L. A. *The Discovery of Grounded Theory: strategies for Qualitative Research*. (Chicago: Aldine Publishing Company, 1967), p. 6; Denscombe, M. *The Good Research Guide: for small-scale social research projects* (Maidenhead : Open University Press, 2007), p. 215.

## Chapter 1

## The human cognition and its physical limitations

According to Fischer, "the ideal type of intelligence analyst would be a person who would consciously accept information of any kind, accurately assess its quality without any prejudices or biases, and capable of differentiating the important information from the 'noise' or a possible deception." Unfortunately, Fisher's ideal analyst model is without empirical referent.<sup>41</sup> The reason for this lies in Sir Francis Bacon's words that, "...the mind... is far from being a flat, equal and clear mirror that receives and reflects the rays without mixture, but is rather...an uneven mirror which impacts its own properties to different objects...and distorts and disfigures them."<sup>42</sup> Indeed, therefore, "Objectivity", as Michael Herman points out, "is itself an elusive ideal."<sup>43</sup> An additional reason lies in Betts's assertion that, "knowledge does not speak for itself."<sup>44</sup> Henceforth, as James Austin has systematized, "The mere collection of facts cannot provide answers to the most important questions. Only the piecing together of facts can do that. Such piecing together is at its heart reasoning, and reasoning presupposes psychology."<sup>45</sup> From psychological perspective, nonetheless, "there are evident restrictions in our ability to

<sup>&</sup>lt;sup>41</sup> Fischer, B. "Perception, Intelligence Errors and the Cuban Missile Crisis", in *Intelligence and the Cuban Missile Crisis*, edited by Blight, J and Welch, D. (London; Portland, OR: Frank Cass, 1998), p. 151.

<sup>&</sup>lt;sup>42</sup> Sir Francis Bacon quoted in Campbell, D. T. "Systematic Error on the Part of Human Links in Communication Systems", *Information and Control*, vol. 1, no. 4. (1958), p. 338.

<sup>&</sup>lt;sup>43</sup> Herman, M. "11 September: Legitimizing intelligence?", *International Relations*, vol. 16, no. 2 (August, 2002), p. 230.

<sup>&</sup>lt;sup>44</sup> Betts, R. *Enemies of intelligence: knowledge and power in American national security*, p. 12.

<sup>&</sup>lt;sup>45</sup> Austin, J. "The Psychological Dimension of Intelligence Activities", p. 201.

comprehend the social world."<sup>46</sup> *Ergo*, at the core of the inevitability of failures is "the limits of the human cognition that constrain our ability to anticipate the unexpected or novel, especially if the future fails to match our existing analytical concepts."<sup>47</sup>

It is important to be understood that the academic discipline of psychology has not been able to provide a consensus on a single theory that could explain human behavior, especially the behavior of individuals, involved into the intelligence profession. Henceforth, there is an ongoing debate among Personality Theories, <sup>48</sup> Theories of Social Psychology and Cognitive Theories, concerning which approach holds most analytical validity.<sup>49</sup> Because the purpose of this project is to explain the behavior of intelligence analysts and policy-formulators, the author believes that Cognitive theories seem most suitable in explaining the psychological problems of intelligence work, because they emphasize the internal processes of perception and reasoning and presume that all individuals reason by means of systematic mental processes. At the same time, most Cognitive theories focus on the effects of situational context on individual reasoning.<sup>50</sup>

<sup>&</sup>lt;sup>46</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 457; Betts, R. *Enemies of intelligence: knowledge and power in American national security*, p. 12; Heuer, R. J. *Psychology of intelligence analysis* (Washington, D.C.: Center for the Study of Intelligence, Central Intelligence Agency, 1999).

<sup>&</sup>lt;sup>47</sup> Wirtz, J. "Theory of Surprise", p.101.

 <sup>&</sup>lt;sup>48</sup> Mischel, W. *Personality and Assessment* (New York: Wiley and Sons, 1968); Mischel, W. "Toward a Cognitive Social Learning Reconceptualization of Personality", *Psychological Review*, vol. 80, no.4, (July, 1973), pp. 252-283.
 <sup>49</sup> Austin, J. "The psychological dimension of intelligence activities", p. 202.

<sup>&</sup>lt;sup>50</sup> Loc. cit.

#### The necessity and perils of theory-driven thinking

According to a large body of psychologists, human beings most often verify information by engaging in theory-driven reasoning. Theory-driven processing is a method of interpreting data on the basis of *a priori* acquired beliefs or knowledge. The process commences with a general assumption, which functions as a logical filter and a prism for interpreting new information. According to cognitive psychologists, the reason why human beings engage in theory-driven reasoning can be explained by the necessity of people to preserve mental energy, and the fact that this method requires less mental effort,<sup>51</sup> as under routine conditions, "memory mechanisms reinforce particular channels in the brain."<sup>52</sup> Accordingly, for the purpose of understanding the complex human environment, the brain develops a matrix of concepts, preconceptions, assumptions, logical expectations and consequences, whose relationship to one another enables the brain to "impose order to its external environment."<sup>53</sup> As Jervis has noted, "intelligent decision-making in any sphere is impossible unless significant amounts of information are assimilated to pre-existing beliefs. Expectations or perceptual sets represent standing estimates of what the world is and therefore, of what the person is likely to be confronted within everyday life."<sup>54</sup> As a result, the belief-systems actually condition and determine how the respective human being comprehends and perceives his or her own

<sup>&</sup>lt;sup>51</sup> Fischer, B. *op. cit.*, p. 151.

<sup>&</sup>lt;sup>52</sup> Fischer, B. *op. cit.*, p. 152; Betts, R. *Enemies of intelligence: knowledge and power in American national security*, p. 59.

<sup>&</sup>lt;sup>53</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 457.

<sup>&</sup>lt;sup>54</sup> Jervis, R. *Perception and Misperception in International Politics* (Princeton, N.J.; Chichester: Princeton University Press, 1976), p. 146.

external environment. *Ergo*, it is analytically plausible to theorize that the function of theorydriven thinking is a form of "reductive coding."<sup>55</sup>

Following this line of reasoning, a study, developed for the US Army Research Institute and the US Army Intelligence and Security Command, concluded that "intelligence is conceptuallydriven" activity, which means that, "What is critical is not just the data collected, but also what is added to those data in interpreting them via conceptual models in the analyst's store of knowledge,"<sup>56</sup> as "the data that is received by analysts, is filtered, selected and evaluated usually according to memory-shared conceptual models of types of real-world objects or events, thought to have generated the data being interpreted."<sup>57</sup> As Heuer asserts, "once people have started thinking about a problem one way, the same mental pathways or circuits get activated and strengthened each time they think about it. This facilitates retrieval of information."<sup>58</sup>

However, what is problematic is that theory-driven processing influences the way in which ambiguous information is comprehended. Concretely, very often ambivalent data is interpreted in a manner that supports certain prior knowledge.<sup>59</sup> Mark Lowenthal provides a very good example: "Given a choice between appearing jaded or naïve on a given subject, the average intelligence professional will choose to appear jaded...Few situations are treated as being truly

<sup>&</sup>lt;sup>55</sup> Campbell, T. D. "Systematic Error on the Part of Human Links in Communication Systems", *Information and Control*, vol.1, no. 4 (1958), p. 337.

<sup>&</sup>lt;sup>56</sup> Katter, R. V., Montgomery, C., A., Thompson, J., R. "Human Processes in Intelligence Analysis: phase 1: overview", *Research Report 1237* (Woodland Hills, CA: Operating Systems Inc. December, 1979), pp. 1-10.
<sup>57</sup>Ibid, pp. 3-5.

<sup>&</sup>lt;sup>58</sup> Heuer, R. J. *op. cit.*, p. 21.

<sup>&</sup>lt;sup>59</sup> Fischer, B. *op. cit.*, p. 153; Fiske, S. Taylor, Sh. *Social Cognition* (New York : McGraw-Hill, 1991), pp. 257-265.

new."<sup>60</sup> Similarly, in another study subjects were divided into two groups and shown a series of slides. The slides of the first group included positive subliminal words such as "brave" and "adventurous. " The slides of the second group included negative subliminal words such as "reckless" and "dangerous." The groups then were shown pictures of people shooting rapids in a canoe, and asked to assess the scenario. The subjects that had been exposed to negative subliminal phrases were far more likely to assess the scenario in negative manner and to conclude that the canoeists were acting irresponsibly, whereas subjects who had been exposed to the positive subliminal phrases were more likely to assess the scenario positively- in their view "the canoeists were having fun."<sup>61</sup> Therefore, this kind of processing may undermine the ability to reorganize the information mentally so to generate alternative perspective or interpretation of the data,<sup>62</sup> because the body of concepts and theories that set the framework for research constitutes a paradigm and the paradigm sets limits on what explanations are acceptable, and helps determine which phenomena are important and which are to be ignored.<sup>63</sup>

Furthermore, another implication which may hinder the accuracy of the intelligence analysis is the tendency that, "...the more familiar a phenomenon is the more quickly it will be recognized. Less evidence is needed for a person to recognize a common object than an unusual one. Rare objects are mistaken for usual ones. And expected things may be seen when actually nothing is

<sup>&</sup>lt;sup>60</sup> Lowenthal, M. "Tribal Tongues: intelligence consumer, intelligence producers", *Washington Quarterly*, vol. 15, no. 1 (Winter, 1992), p. 166.

<sup>&</sup>lt;sup>61</sup> Higgins, T., Pholes, W., Jones, C. "Category Accessibility and Impression Formation", *Journal of Experimental Social Psychology*, vol. 13, no. 2 (March, 1997), pp. 141-54.

<sup>&</sup>lt;sup>62</sup> Fischer, B. *op. cit.*, p. 153; Heuer, R. J. *op. cit.*, p. 21.

<sup>&</sup>lt;sup>63</sup> Jervis, R. *Perception and Misperception in international politics*, pp. 156; Toulmin, St. *Foresight and Understanding* (New York: Harper and Row, 1961), p. 95; Kuhn, Th. *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962), p. 52.

being shown."<sup>64</sup> To illustrate this, in one experiment a person is shown two balloons, one of which is being inflated and the other is being deflated. However, the observer sees the balloons as staying the same sized, explaining the perceived change in size as being caused by motion towards or away from the observer. The most reasonable explanation of this visual phenomenon seems to be that the observer unconsciously related to the stimulus pattern some sort of weighted average of the past correlations between the stimulus and the identity of the object. The observer sees the balloons moving because it is rare indeed to see two stationary objects at the same distance, one growing larger and the other smaller. "Almost always, in everyday life when we see two identical or nearly identical objects change relative size, they are in motion relation to each other."<sup>65</sup>

What is more, another ramification from theory-driven processing is that people can observe exactly the same behavior, yet interpret it in a completely different ways, as people with different belief may attach different meaning to the same information.<sup>66</sup> Franz From provides a good example-one young lady was walking and "saw Professor X, whom she dislikes, walk on the pavement in front of her and in the same direction as she was going, and she thought: 'This man does walk in a very theatrical and pompous fashion; he clearly thinks very highly of himself.' When she got a little closer to the man, she saw that it was not at all Professor X, but her beloved teacher, Doctor Y, whom she thought was not rated accordingly to his desserts because of his humility. And now, walking behind Doctor Y, she thought: 'This man's whole

<sup>&</sup>lt;sup>64</sup> Jervis, R. *Perception and Misperception in International Politics*, p. 147.

 <sup>&</sup>lt;sup>65</sup> Goldiamong, Isr., Hawkins, W. "Vexierversuch: The log relationship between word-frequency and recognition obtained in the absence of stimulus words", *Journal of Experimental Psychology*, vol. 56, no. 6, (1958) pp. 457-63; Ittelson, W. H., Kilpatrick, F. P. "Experiments in Perception", *Scientific American*, vol.185, no.2, (1951), pp. 52-54.
 <sup>66</sup> Fischer, B. *op. cit.*, p. 153; Heuer, R. J. *op. cit.*, p. 21

appearance shows his humility, his walk is so straight forward and humble."The same person had made two considerably different impressions on her.<sup>67</sup>

Ultimately, however, this theory-driven processing is inevitable part of theory-building. As Kelly argues, "man looks at his world through transparent patterns or templates, which he creates and then attempts to fit over the realities of which the world is composed. The fit is not always very good. Yet, without such patterns the world appears to be such an undifferentiated homogeneity that man is unable to make any sense of it. Even a poor fit is more helpful than nothing at all."<sup>68</sup> Similarly, Heuer states: "People have no conceivable way of coping with the volume of stimuli that impinge upon their senses, or with the volume and complexity of the data they have to analyze, without some kind of simplifying preconceptions about what to expect, what is important, and what is related to what."<sup>69</sup>

<sup>&</sup>lt;sup>67</sup>From, Fr. *Perception of Other People,* translated by Kvan, E., Maher, Br. (New York: Columbia University Press, 1971), pp. 36-7.

<sup>&</sup>lt;sup>68</sup> Kelly, G. A. *A Theory of Personality* (New York: Norton, 1968), p. 28.

<sup>&</sup>lt;sup>69</sup> Heuer, R. J. *op. cit.*, p. 10.

#### Hypothesis-confirmation bias

Kenneth Waltz has asserted that, "our minds cannot record and make something of all the many things that in some sense we see. We are, therefore, inclined to see what we are looking for, to find what our sense of the causes of things leads to believe are significant."<sup>70</sup> This "human tendency," as Evans has noted, "to notice and to look for information that confirms one's beliefs, and to ignore, not look for, or undervalue the relevance of information that contradicts it, is the most known bias."<sup>71</sup> Henceforth, once certain systems of beliefs and conceptions have been established through theory-driven reasoning, they are maintained and reinforced through "the tendency of individuals to select evidence that supports rather than refutes a given hypothesis"<sup>72</sup>

For example, "one group of subjects was shown a series of numbers and the other a series of letters. Both groups were then exposed to the ambiguous stimulus of a symbol 13, or a "broken B." Those who had previously looked at numbers saw the number 13. On the other hand, those who had previously seen letters saw a "B."<sup>73</sup> The results of the experiment concur with Fischer's observation, that individuals not only will pay more attention to evidence that confirms their conceptions, but they will also demonstrate an inclination to actively seek out such

<sup>&</sup>lt;sup>70</sup> Waltz, K. N. *Theory of International Politics* (London: McGraw-Hill, 1979), p. 20.

 <sup>&</sup>lt;sup>71</sup> Evans, J. T. *Bias in Human Reasoning: Causes and Consequences* (London: Lawrence Erlbaum Associates, 1989),
 41.

<sup>&</sup>lt;sup>72</sup> Johnson. R. *Analytic Culture in the US Intelligence Community: an ethnographic study* (Center for Study of Intelligence, Central Intelligence Agency, Washington, D.C., 2005), p. 21.

<sup>&</sup>lt;sup>73</sup> Bruner, J., Minturn, A., L. "Perceptual Identification and Perceptual Organization", *Journal of General Psychology*, vol. 53, no. 1, (1955), pp. 21-28; Hall, K., L. "Perceiving and Having a Series of Figures", *Quarterly Journal of Experimental Psychology*, vol. 2, no. 4, (1950), pp. 153-62.

information, which in effect will verify and consolidate a person's initial core-beliefs.<sup>74</sup> In another experiment, subjects watched 2 people play a competitive game. One player took his moves rapidly and decisively, whiles the other- slowly and deliberately. When the former won, he was seen more as a quick thinker than impulsive, more intuitive than careless. The opposite was true when he lost. When the latter won, "he was perceived… as more deliberate than sluggish, and more attentive than uncomprehending. The opposite impressions were formed when he lost. Apparently, without being aware, the subjects were striving to achieve consistency with their established assumptions."<sup>75</sup> Henceforth, as Karl Popper has postulated, "it is easy to obtain confirmation, or verifications, for nearly every theory- if we look for confirmation."<sup>76</sup>

According to Jackson, "The minds of analysts are unexceptional in this regard. They are also inclined to search for, and seize upon, cognitive consonance which will confirm existing beliefs and desires, and hence reinforce them." <sup>77</sup> This, nevertheless, may pose certain serious dangers for the accuracy of the intelligence process. For example, in a recent study, conducted after 9/11 by Rob Johnson, analysts were asked to provide an account of the work processes they employed to produce answers to questions, explain occurrences and make forecasts. What is problematic for intelligence accuracy is that the process they described commenced with an inquiry of the previous analytical products, developed by their agency. Evidently, this was being done for the purpose of establishing an analytical baseline from which analysts begin

<sup>&</sup>lt;sup>74</sup> Fischer, B. *op. cit.*, p. 153.

<sup>&</sup>lt;sup>75</sup> Jones, R., Welsh, J. "Ability Attribution and Impression Formation in a Strategic Game: A limiting case of the primacy effect.", *Journal of Personality and Social Psychology*, vol. 20, no. 2, (1971), p. 171.

 <sup>&</sup>lt;sup>76</sup> Popper, K. *Conjectures and Refutations: the growth of scientific knowledge* (London: Routledge, 1996), p. 36.
 <sup>77</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 457.

constructing and developing their own analysis. Similarly, as one analyst testifies:" When a request comes in from a consumer to answer some question, the first thing to do is to read up on the analytic line- check the previous publications and sort through the current traffic. I have looked at our previous products, and I have got a good idea of the pattern; so, when I sort through the traffic, I know what I am trying to find."<sup>78</sup> Heuer provides a similar example:"experienced analysts do not try to connect dots on a tabula rasa, especially when there is a wealth of data that can be sorted in various ways; instead of a picture emerging from putting all the pieces together, analysts typically form a picture first and then select the pieces to fit it."<sup>79</sup>

<sup>&</sup>lt;sup>78</sup> Johnson. R. *op. cit.*, p. 43.

<sup>&</sup>lt;sup>79</sup> Heuer, R. J. op. cit., p. 62.

#### Cognitive dissonance and Lay-epistemic theory

In his magnum opus, Theory of Cognitive Dissonance, Leon Fistinger made the observation that once an individual has established certain systems of beliefs, he or she will strive "toward consistency within himself," and would try to maintain consonance between what the individual "knows or believes and what he does."<sup>80</sup> However, as Fistinger writes, "very few things are all black or all white; very few situations are clear-cut enough so opinions or behaviors are not so some extent a mixture of contradictions."<sup>81</sup> The existence of such psychologically uncomfortable disequilibrium within the cognition of an individual,"...will motivate the person to try to reduce the dissonance and achieve consonance."<sup>82</sup> Furthermore, "when dissonance is present, in addition to trying to reduce it, the person will actively avoid situations and information which would likely increase the dissonance."<sup>83</sup> To illustrate this it is worth pondering upon Fistinger's "hypothetical smoker" analogy. Namely, when a smoker is confronted with the fact that smoking is very unhealthy, he or she would either have to change this dangerous habit, or to adjust the information, which is producing the dissonance. Most often the latter is undertaken. Specifically, "the hypothetical smoker may find that the process of giving up smoking is too painful for him to endure. He might try to find facts and opinions of other to support the view that smoking is not harmful. He might even remain in the position where he continues to smoke and is aware that smoking is unhealthy."<sup>84</sup> Henceforth, "cognitive dissonance can be seen as antecedent condition which leads to activity orientated towards

<sup>&</sup>lt;sup>80</sup> Fistinger, L. A *Theory of Cognitive Dissonance* (London : Tavistock Publications, 1962), p. 1.

<sup>&</sup>lt;sup>81</sup> *Ibid*., p. 5.

<sup>&</sup>lt;sup>82</sup> *Ibid,* p. 3.

<sup>&</sup>lt;sup>83</sup> Loc. cit.

<sup>&</sup>lt;sup>84</sup> Fistinger, L. A. Theory of Cognitive Dissonance, p. 6.

dissonance reduction just as hunger leads to activity orientated towards hunger reduction. It is very difficult motivation, nonetheless powerful. "85 Osgood and Tannenbaum's study on psychological congruity appears to validate Fistinger's logic. Namely, Osgood and Tannenbaum documented a study of opinions and attitudes in respect of the principle of consonance. They have theorized that, "changes in evaluation are always in direction of increased congruity with the existing frame and reference."<sup>86</sup> In their study, incongruity or dissonance is produced by the knowledge that a person or other source of information which a subject regards positively/ negatively supports an opinion which the subject regards on the opposite - negatively/ positively. They demonstrated that under such circumstances, a tendency exist to change either the evaluation of the opinion involved or the evaluation of the source in a direction which would decrease the inconsistency within the individual. Therefore, "if the source was positively evaluated and the opinion-negatively, the subject may end up reacting less positively to the source and more positively to the opinion.<sup>87</sup> "The important point", as Fistinger writes, "is that there is a pressure to produce consonant relation among cognitions and to avoid, and reduce dissonance."88

Similarly, when the chemist, Otto Hahn found lighter elements and not heavier ones, after bombardment of the Uranium nucleus, he admitted being, "extremely reluctant to announce as a new discovery a result that did not conform to existing ideas." He could not accept an associate's claim that the only explanation could be fission because, "this conclusion violated all

<sup>&</sup>lt;sup>85</sup> *Ibid.,* p. 3.

 <sup>&</sup>lt;sup>86</sup> Osgood, C. E., Tannenbaum, P. "The Principle of Congruity and the Prediction of Attitude Change" *Psychological Review*, vol. 62, no.1, (1955), p. 43.
 <sup>87</sup> *Ibid.*, p. 42-55.

<sup>&</sup>lt;sup>88</sup> Fistinger, L. *op. cit.*, p. 9.

previous experiences in the field of physics."<sup>89</sup> In a like manner, the astronomers Lalande decided not to further investigate the planet Neptune because his observations were opposing the prevailing theories of that time.<sup>90</sup> Another example is a meeting between General Galland and Goering, where the former reported to the latter that several American fighter planes, accompanying bomber squadrons, had been shot down over Aachen. When Goering was informed, he refused to believe Galland and responded: "Come now, Galland, let me tell you something. I am an experienced fighter pilot myself. I know what is possible. But I know what is not, too. "<sup>91</sup>

Very closely related to the phenomenon of cognitive dissonance is Lay-epistemic theory. Fistinger himself has postulated that when dissonance is eliminated, and the cognitive elements are in consonance with the systems of beliefs, a "freezing effect" would occur.<sup>92</sup> According to one of the greatest advocate and proponent of Lay-epistemic theory and the concept of the Epistemic process, Arie Kruglanski, the Epistemic Process starts with a question that the individual has on a certain topic of interest, in order to find an appropriate answer, he or she generates an number of hypothesis and test their validity through collection and analysis of relevant information. As aforementioned, the testing of the validity of certain hypothesis would be effected by the theory-driven reasoning, the hypothesis-confirmation bias and the cognitive dissonance. Henceforth, when concluded that a logical consistency between the available

 <sup>&</sup>lt;sup>89</sup> Quoted in Gilman, W. "The Road to the Bomb", *New York Times Book Review*, January 8, 1967, p. 38.
 <sup>90</sup>Polanyi, M. "The Unaccountable Element in Science", in *Knowing and Being*, essays, edited by Polanyi, M., Grene, M. (London: Routhledge and Kegan Paul, 1969), p. 114; Bruner, J., Goodnow, J., Austin, G. A *Study of Thinking* (New York; Wiley, 1956), p. 105.

<sup>&</sup>lt;sup>91</sup> Speer, Al. *Inside the Third Reich: memoirs*, Translated from the German by Winston, R., Winston, C. (London: Weidenfeld & Nicolson, 1970), p. 344.

<sup>&</sup>lt;sup>92</sup> Fistinger, L. A. *op. cit.*, p. 34.

information and a specific hypothesis has been reached, the human tendency is to stop looking for additional answers. This ends the Epistemic process-a situation termed by Kruglanski as "epistemic freezing."<sup>93</sup> "Once a given conception has been 'frozen', denial and reinterpretation of inconsistent information in terms that match one's prior conception, have been observed, as well."<sup>94</sup> Following this line of thinking, the epistemic process and the "freezing" of a respective estimation, can easily lead to Pollyana syndrome, which is characterized by over-confidence in the validity of one's own abilities and assumptions.<sup>95</sup>

<sup>&</sup>lt;sup>93</sup> Kruglanski, A., Webster, D., M. "Motivated Closing of the Mind: seizing and freezing", *Psychological Review*, vol. 102, no. 3, (1996), pp. 263-83; Kruglanski, A, Webster, D., M. "Individual Differences in Need for Cognitive Closure", *Journal of Personality and Social Psychology*, vol. 67, no. 6, (1994), pp. 1049-62; Bar-Joseph, U., Kruglanski, A. W. "Intelligence Failure and Need for Cognitive Closure: On the Psychology of the Yom Kippur Surprise", *Political Psychology*, Vol. 24, No. 1, (March, 2003), p. 81.

<sup>&</sup>lt;sup>94</sup> Bar-Joseph, U., Kruglanski, A. W. "Intelligence Failure and Need for Cognitive Closure: On the Psychology of the Yom Kippur Surprise", p. 82.

<sup>&</sup>lt;sup>95</sup> Laqueur, W. *The Uses and Limits of Intelligence* (New Brunswick, N.J., U.S.A : Transaction Publishers, 1993), p. 280.

## Chapter 2

## The Epistemological problem of predictions

According to Doran, "A forecast is a prediction based on knowledge of past behavior,"<sup>96</sup> and in the opinion of George N. Sibley, "the nature of political action requires an ability to forecast future events."<sup>97</sup> In the field of intelligence analysis, this task is done by engaging either in structured, systemic or in nonstructured, intuitive approaches. Due to the facts that intelligence analysis has qualitative nature, and as such, it , deals with an infinite number of variables that are impossible to operationalize because they cannot be adequately quantified or fully collected", and "because in many cases the variables are so complex, countless, and incomplete, attempting to analyze them using scientific methods is pseudo-science," a great deal of intelligence analysts would engage in inductive approach, "in which powers of pattern recognition are enhanced and intuition is elevated." <sup>98</sup> According to Gary Klein, specialist in pattern recognition, systemic approaches "in practice ... are often disappointing. They do not work under time pressure because they take too long. Even when there is enough time, they require much work and lack flexibility for handling rapidly changing field conditions."99 Therefore, the operational rationale behind employing nonstructured approaches dictates that since intelligence analysis is based on instict, education, and experience, engaging in such

<sup>&</sup>lt;sup>96</sup> Doran, Ch. "Why Forecasts Fail: the limits and potential of forecasting", *International Studies Review*, vol. 1, no.2, (1999), p. 11.

<sup>&</sup>lt;sup>97</sup> Sibley, G. N. "The Indian Nuclear Test: a case study in political hindsight bias", WWS case study, 3/02, *Woodrow Wilson School*, August 7<sup>th</sup>, 2002, p. 3.

 <sup>&</sup>lt;sup>98</sup> Folker, R. D. "Intelligence Analysis in Theater Joint Intelligence Centers: An Experiment in Applying Structured Methods", Occasional Paper, no. 7, (Washington, D.C.: Joint Military Intelligence College, January, 2000), p. 6.
 <sup>99</sup> Klein, G. "Strategies of Decisionmaking." *Military Review*, vol. 69, no. 5, (May, 1989), p. 56.

inductive and intuitive methods may lead to more usefull and creative analysis.<sup>100</sup> Stephen Marrin corroborates this logic, as he writes that analysts "...use intuitive pattern and trend analysis- consisting of the identification of repeated behavior over time and increases or decreases in that behavior- to uncover changes in some aspects of international behavior that could have national security implications."<sup>101</sup>Mark Kauppi has termed this approach-the "timehonored element of intelligence analysis."<sup>102</sup>

*Qua definitionem*, moving from the particular to the general and moving from the past to the future are the two most common forms of inductive reasoning. <sup>103</sup> Therefore, taking into account Rescher's assumption that, "every rational prediction is an induction,"<sup>104</sup> it is plausible to assume that very often intelligence professional utilize the method of induction when fostering predictions. However, as this chapter will demonstrate, from epistemological perspective, predictions has an inherent fallacy, as the method of induction is itself analytically problematic, and thus, is one of the fundamental causes of intelligence failures.

Indicative of the induction process and its inherent problem are the following brief examples. A number of intelligence analysts are provided with evidence from IMINT, proving that a respective state is manifesting certain indications at its nuclear test range. In the past,

<sup>&</sup>lt;sup>100</sup> Klein, G. "Strategies of decisionmaking.", p. 7; Czerwinski, T. *Coping with the Bounds: Speculations in Nonlinearity in Military Affairs* (Washington: National Defense University, 1998), pp. 138-9.

<sup>&</sup>lt;sup>101</sup> Marrin, St. "Homeland Security and the Analysis of Foreign Intelligence", paper written for the *Markle Foundation Task Force on National Security and the Information age*, July 15<sup>th</sup>, 2002, p. 8.

<sup>&</sup>lt;sup>102</sup> Kauppi, M. K. "Counter-Terrorism Analysis", *Defense Intelligence Journal*, vol. 11, no.1, (Winter, 2002), p. 47.

<sup>&</sup>lt;sup>103</sup> Russell, B. *History of Western Philosophy, and its Connection with Political and Social circumstances from the Earliest Times to the Present Day* (London: Allen and Unwin, 1946.), p. 199.

<sup>&</sup>lt;sup>104</sup> Rescher, N. "Prediction", in *The Oxford Companion to Philosophy*, edited by Hondereich, T. (Oxford, Oxford University Press, 1995), p. 772.

whenever those certain indicators were present in the respective state, a nuclear test was to follow shortly. *Ergo*, there is a very high probability that the analyst, studying this particular occurrence, may conclude inductively that the respective state is again aiming at testing a nuclear weapon. The second example is equally important- a number of divisions of a country X's army are observed to possess new artillery weapon. Similarly, inductively, it can be inferred that the remaining division of the army of state X, or at least those sharing the same front, are to be equipped with the new artillery weapon.<sup>105</sup> However, this is not necessarily correct.

In order to understand the analytical problem of induction and predictions from epistemological perspective, it is worth pondering upon David Hume's question:"What is the foundation of all our reasonings and conclusions concerning the relation between cause and effect?" As Hume has written, "It may be replied in one word, experience.<sup>"106</sup> It is precisely experience that makes induction, as a scientific method, analytically indefensible, because "all reasoning concerning the matter of facts seems to be founded on relation of Cause and Effect," "where that causes and effects are discoverable, not by reason but by experience."<sup>107</sup> It is also necessary to reflect on Hume's other important question: "What is the foundation of all conclusions from experience?" Essentially, Hume has theorized: "... all our experimental conclusions proceed upon the supposition that the future will be conformable to the past. To endeavor, therefore, the proof of this last supposition by probable arguments, or arguments regarding existence, must be evidently going in a circle, and taking that for

<sup>&</sup>lt;sup>105</sup> Kuhns, W. "Intelligence Failures: forecasting and the lessons of Epistemology", p. 85.

<sup>&</sup>lt;sup>106</sup> <u>http://socserv.mcmaster.ca/econ/ugcm/3ll3/hume/enquiry.pdf</u>

<sup>&</sup>lt;sup>107</sup> http://socserv.mcmaster.ca/econ/ugcm/3ll3/hume/enquiry.pdf

granted..." Henceforth, "From causes which appear similar we expect similar effects. This is the sum of all our experimental conclusions." <sup>108</sup>

This is the conceptual cornerstone of the epistemological problem of predictions, because there is no logical reason to presuppose that a regularity exists which causes past events to reoccur again in the future in repeating cycle. As Hume ascertains, "In reality, all arguments from experience are founded on the similarity which we discover among natural objects, and by which we are induced to expect effects similar to those which we have found to follow from such objects."<sup>109</sup> Henceforth, "all inferences from experience are effects of customs, not of reasoning ...Custom, then, is the great guide of human life. It is that principle alone which renders our experience useful to use, and makes us expect, for the future a similar train of events with those which have appeared in the past."<sup>110</sup>

In a like manner, Charles Dolan suggests that, predictions in which, "the past is prologue, and forecasting amount to linear extrapolations of the past trend into the future" ultimately fail, because no technique has been developed that allows the forecaster to predict prior to the event itself when a non linearity will occur.<sup>111</sup> Or as John Lukacs has systematized, "historical causality is not mechanical mostly because of free will. Also, what happens is not separable from what people think happens."<sup>112</sup>

Exemplary of the problem of using induction for forecasting is a report made in 1983 by a group of senior advisors to the Director of Central Intelligence. The group was to evaluate and assess

<sup>&</sup>lt;sup>108</sup> <u>http://socserv.mcmaster.ca/econ/ugcm/3ll3/hume/enquiry.pdf</u>

<sup>&</sup>lt;sup>109</sup> <u>http://socserv.mcmaster.ca/econ/ugcm/3ll3/hume/enquiry.pdf</u>

<sup>&</sup>lt;sup>110</sup> <u>http://socserv.mcmaster.ca/econ/ugcm/3ll3/hume/enquiry.pdf</u>

 $<sup>^{111}</sup>$  Doran, Ch. "Why Forecasts fail: the limits and potential of forecasting", p. 11.

<sup>&</sup>lt;sup>112</sup> Lukacs, J. At the End of an Age (New York: Yale University Press, 2002), p. 187.

the quality of intelligence judgment preceding significant historical failures. The conclusions of the group illustrated well the weakness of induction, as they observed that in the estimates that failed, *inter alia* the Sino-Soviet Split, the development of the Alpha submarine, the Qadhafi takeover in Lybia, the OPEC oil increase, the revolutionary transformation of Ethiopia, the Soviet invasion of Afghanistan or the destruction of the Shah's Iran, there were a number of recurrent common factors which, in retrospect seemed critical to the quality of the analysis. The basic problem in each was to recognize qualitative change and to deal with situations in which trend continuity and precedent were of marginal, if not counter-productive, value.<sup>113</sup>

Nevertheless, according to Rescher, "the key role of prediction in human affairs inheres in our stake in the future, for without some degree of cognitive control over the future, we humans could not exist as the intelligent creatures we are."<sup>114</sup> Nonetheless, Rescher's conceptualization of the inevitable and indivisible role of predictions from human affairs is exactly what constitutes the harsh lesson from Epistemology- intelligence forecasts are close to science, but they do not guarantee certainty. As Kuhns argues, "the uniformity of procedures, the reference to laws and norms...the principle of empiricism, which dictates that only observation and experiment can decide the acceptance or rejection" of a respective claim, presuppose respect and reverence.<sup>115</sup> However, "even with phenomena governed by deterministic equations such as classical physics, there is still room for wholly unpredictable

<sup>&</sup>lt;sup>113</sup> Armstrong, W., Leonhart, W., McCaffrey, W., Rotherberg, H. "The Hazard of Single-Outcome Forecasting", *Studies of intelligence*, vol. 28, no. 3, (1984), p. 241.

<sup>&</sup>lt;sup>114</sup> Rescher, N. " Prediction", p. 772.

<sup>&</sup>lt;sup>115</sup> Kuhns, W. "Intelligence Failures: forecasting and the lessons of Epistemology", p. 84.

outcomes in certain circumstances."<sup>116</sup> Henceforth, it does seem feasible that analytical failures in general are inevitable,<sup>117</sup> because there is no way in which predictions can be known in advance whether they are affirmative or negative, which in itself implies that there is no way in which intelligence failures can be prevented. They are simply inevitable and can be conceptualized as a function of the uncertain manner in which knowledge is gained<sup>118</sup> in "a chaotic world where nothing can be securely predicted because all apparent patterns are at best transitory stabilities."<sup>119</sup> As Nicholas Rescher has remarked:"In nature, we have volatility and chance (stochastic phenomena); in human affairs-innovation and chance (free will). Chaos is a phenomenon that straddles both domains."<sup>120</sup>

<sup>&</sup>lt;sup>116</sup>Rescher, N. *Predicting the Future: an introduction to the theory of forecasting* (New York: State University of New YorkPress, 1998), p. 143.

<sup>&</sup>lt;sup>117</sup> Kuhns, W. "Intelligence Failures: forecasting and the lessons of Epistemology", p. 97.

<sup>&</sup>lt;sup>118</sup> *Ibid.*, pp. 89-93.

<sup>&</sup>lt;sup>119</sup> Rescher, N. " Prediction", p. 772.

<sup>&</sup>lt;sup>120</sup>Ibid., p. 752.

## Chapter 3

### Fundamental obstacles to the analytical accuracy

## Time and space variables

As Austin has generalized, "the world is a fluid, unpredictable, dynamic place."<sup>121</sup> *Ergo*, as Jackson has argued, "the problems of time and space impose inescapable limitations on decision of all kind." Specifically, the need to gather accurate and relevant information, analyze it, and then integrate it into decision while it is still useful, has always been one of the most difficult challenges in all aspects of human life. The central reason for this is that the social world is fluid rather than static. This means that the situation described by any intelligence report is liable to change before the relevant information can be analyzed and integrated into decision-making process.<sup>122</sup> This logic appears to be corroborated by Richard Betts, who himself has recognized that often "... both data and policy outpace analysis." As a result, "the ideal process of staffing and consultation falls behind the press of events and careful estimates cannot be digested in time."<sup>123</sup> This is particularly well illustrated by one historic episode. Namely, as Winston Churchill recalled of the hectic days of spring of 1940: "the Defense Committee of the War Cabinet sat almost every day to discuss reports of the Military Coordination Committee and those of the Chiefs of Staff; and their conclusions or divergences

<sup>&</sup>lt;sup>121</sup> Austin, J. "The Psychological Dimension of Intelligence Activities", p. 200.

<sup>&</sup>lt;sup>122</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 454.

<sup>&</sup>lt;sup>123</sup> Betts, R. "Analysis, War, and Decision: why intelligence failures are inevitable", p. 125.

were again referred to frequent cabinets. All had to be explained or re-explained; and by the time this process was completed; the whole scene had often changed."<sup>124</sup> Henceforth, indeed, as Jackson writes, "In this sense most intelligence information is "time bound" and it is usefulness depends upon the speed at which it can be transmitted and analyzed. <sup>125</sup> Following this line of reasoning, a body of both scholars has observed that, "the most common source of compromise in the quality of intelligence is haste."<sup>126</sup>

According to Jacksons, "this limitation has always applied more to information on short- and

medium-term intentions and capabilities than to long-range strategic assessment."127

Consequently, the frequent changes in the time and space variables can be theorized to

consequently reinforce a tendency to focus on "current intelligence" at the expense of

contextual analysis and medium- to long-range forecasting,"128 which "leaves analysts with little

time, but also little inclination or ability to look beyond recent cables."129

In effect, the requirement for speed presupposes a high probability that very frequently it will lead to oversimplification and ill-judgments concerning complex matters. This problem is

 <sup>&</sup>lt;sup>124</sup> Churchill quoted in Betts, R. "Analysis, War, and Decision: why intelligence failures are inevitable", p. 125.
 <sup>125</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 454; Van Creveld, M. *L Command in War* (Cambridge, Mass.; London : Harvard University Press, 1985), pp. 19-21.

<sup>&</sup>lt;sup>126</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 454; Grabo, C.,M. *Anticipating Surprise: analysis for strategic warning* (Lanham: University Press of America, 2004), pp. 109-12; Betts, R. " The Politicization of Intelligence: costs and benefits", p. 63; Jervis, R. "Reports, Politics and Intelligence Failures: the case of Iraq", *The Journal of Strategic Studies*, Vol. 29, No. 1, (February, 2006), pp. 14-15.

<sup>&</sup>lt;sup>127</sup> Jackson, P. " On uncertainty and the limits of intelligence", p. 454.

<sup>&</sup>lt;sup>128</sup> Loc. cit.

<sup>&</sup>lt;sup>129</sup> Jervis, R. "Reports, Politics and Intelligence Failures: the case of Iraq", p. 46; Karalekas, A. "History of the Central Intelligence Agency", in *The Central Intelligence Agency: History and Documents*, edited by Leary, W. (Tuscaloosa: Univ. of Alabama Press 1984), p.100; Devlin, J. F., Jervis, R. "Analysis of NFAC's Performance on Iran's Domestic Crisis, Mid-1977–November 1978", declassified as CIA-RDP86B00269R001100110003-4, June 15, 1979, pp. 126-134; Australian Government, Flood, Ph. Report of the Inquiry into Australian Agencies, Canberra, July 2004,( The Flood Report) p. 69.

particularly acute nowadays.<sup>130</sup> For example, as Jervis suggests, part of the reason why the October 2002, National Intelligence Estimate (NIE), which stated that Iraq is continuing with its Weapons of Mass Destruction program,<sup>131</sup> was wrong is because "it was produced with great haste."<sup>132</sup> Furthermore, the WMD Commission report reveals a similarity between the October, 2002 NIE and the format of the Presidential Daily Briefings (PDBs). Namely, the WMD Commission "…reviewed a number of articles from the President's Daily Brief relating to Iraq's WMD programs… We [the WMD Commission] found some flaws that were inherent in the format of the PDBs—a series of short "articles" often based on current intelligence reporting that are presented to the President each morning. Their brevity leaves little room for doubts or nuance—and their 'headlines' designed to grab the reader's attention leave no room at all. Also, a daily drumbeat of reports on the same topic gives an impression of confirming evidence, even when the reports all come from the same source."<sup>133</sup>

The same problem and its implications have been observed also by the Church Committee: "Responding to the growing demand of information of current concern by policy-makers for more coverage on more topics, the Directorate of intelligence has of necessity resorted to a "current events" approach to much of its research. There is less interest in and fewer resources have been devoted to in-depth analysis of problems with long-range importance to policymakers. The Directorate has had to devote considerable resources in order to keep up on the day-to day basis with events as they happen. To some extent, analysts feel they must compete

<sup>&</sup>lt;sup>130</sup> Jackson, P. " On uncertainty and the limits of intelligence", p. 455.

<sup>&</sup>lt;sup>131</sup> http://www.fas.org/irp/cia/product/iraq-wmd-nie.pdf

<sup>&</sup>lt;sup>132</sup> Jervis, R. "Reports, Politics and Intelligence Failures: the case of Iraq", p. 15.

<sup>&</sup>lt;sup>133</sup> Report to the President of the United States, The Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction, 31 March 2005, p. 50.

for timeliness with the considerable amount of raw reporting which reaches consumers. According to some observers, this syndrome has had an unfavorable impact on the quality of crisis warning and the recognition of longer term trends. The 'current' event approach syndrome has fostered the problem of 'incremental analysis', the tendency to focus myopically on the latest piece of information without systematic consideration of an accumulated body of integrated evidence. Analysts in their haste to compile the day's traffic, tend to lose sight of underlying factors and relationships." <sup>134</sup> For example, "the 1966 Cunningham Report points out that the CIA's sinologists were so immersed in the large volume of daily Foreign Broadcast Information Service, which monitors foreign open source media, and other source reports on Communist China in the early 1960s, that they failed to consider adequately the broader question of a slowly developing Soviet-Sino dispute."<sup>135</sup>

To conclude, "the formidable difficulties inherent in estimating short-term intentions will remain a central cause of intelligence failures. They are the product of the inescapable dynamics of time and space."<sup>136</sup>

 <sup>&</sup>lt;sup>134</sup> US Senate, Select Committee to Study Governmental Operation with respect to Intelligence activities, *Final Report, book 1: Foreign and Military intelligence*, 94<sup>th</sup> Congress, 2<sup>nd</sup> Sess. 1976, pp. 272-273.
 <sup>135</sup>*Ibid*, p. 273.

<sup>&</sup>lt;sup>136</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 455.

# The problem of the inherent ambiguity of information and its quantity nowadays

As the Schlesinger report asserted, "In a world of perfect information, there would be no uncertainties about the present and future intentions, capabilities, and activities of foreign powers. Information, however, is bound to be imperfect for the most part."<sup>137</sup> On the grounds of the Schlesinger report, therefore, "estimating," as Sherman Kent argues, "is what you do when you do not know." Nonetheless, as Kent put it, "it is inherent in a great many situations that after reading the estimate, you will still not know."<sup>138</sup> The reason for this is that "the truth' is not completely evident, although all the facts have been gathered and are known.<sup>139</sup> This delineates and demonstrates one of the most crucial impediments to the accuracy of the intelligence process- the inherent ambiguity and ambivalence of the collected information, which stems "just as often from an excess as a lack of information."<sup>140</sup> The implications which arise from this obstacles can be perceived as interconnected with and reinforcing the first category of cognitive impediments- the psychological pathologies inherent in human nature. From this perspective, Richard Jervis has established that, "the greater the ambiguity, the greater the impact of preconceptions," effecting both analysts and policy-makers.<sup>141</sup> Similarly, Betts theorizes that, "When the problem is an environment that lacks clarity, an overload of

<sup>&</sup>lt;sup>137</sup> A Review of the Intelligence Community (The Schlesinger Report), March 10, 1971, p. 10.

<sup>&</sup>lt;sup>138</sup> Kent, Sh. "Estimates and Influence", *Studies in Intelligence*, vol.12, no.3, (1968), p. 17.

<sup>&</sup>lt;sup>139</sup> De Rivera, J. *The Psychological Dimension of Foreign Policy* (Columbus: Charles E Merrill publishing Company, 1968), p. 58.

<sup>&</sup>lt;sup>140</sup> Betts, R. *Enemies of intelligence: knowledge and power in American national security*, p. 30.

<sup>&</sup>lt;sup>141</sup> Jervis, R. *The Logic of Images in International Relations* (Princeton: Princeton University Press, 1970), p. 132; Jervis, R. *Perception and Misperception in International Politics*, pp. 117-201.

conflicting data... ambiguity abets instinct and allows intuition to drive analysis."<sup>142</sup> "Consequently", as the Schlesinger report has documented, "the intelligence community can at best reduce the uncertainties and construct plausible hypotheses about these factors on the basis of what continues to be partial and often conflicting evidence."<sup>143</sup>

However, as the Schlesinger and the Church reports have predicated, there is a theoretically problematic assumption that by increasing the collection capabilities of a respective agency, and thus, amassing greater quantities of information, ambiguity would be decreased and analysis would be improved.<sup>144</sup> "This assumption," as Laqueur has contended, "is itself naïve, for it presents an oversimplified picture of how intelligence works."<sup>145</sup> Therefore, following Jervis's ascertainment that, "Information is not necessarily informative,"<sup>146</sup> it appears possible to ponder upon Austin's "dilemma of information" and its implications. Concretely, "if one cuts back on the amount of information collected, significant facts are more likely to be missed." On the other hand, in order to reduce ambiguity and uncertainty, it is a common practice to seek more information in order to fill the gaps in the analysis. Nevertheless, when larger amounts of evidence are collected, it is inevitable that, because "noise" surrounds "signals", more ambiguity and confusion would also be picked up. *Ergo*, there is a very high probability that this practice would increase the cost of and the ambiguity in a respective analysis. Henceforth, the more collection of evidence increases, the higher probability that the result may be hindering

<sup>&</sup>lt;sup>142</sup> Betts, R. "Analysis, War, and Decision: why intelligence failures are inevitable", p. 126.

<sup>&</sup>lt;sup>143</sup> A Review of the Intelligence Community, March 10, 1971, (The Schlesinger Report) p. 10.

<sup>&</sup>lt;sup>144</sup> A Review of the Intelligence Community, March 10, 1971, (The Schlesinger Report), p. 11; US Senate, Select Committee to Study Governmental Operation with respect to Intelligence activities, *Final Report, book 1: Foreign and Military intelligence*, 94<sup>th</sup> Congress, 2<sup>nd</sup> Sess. 1976, pp. 272-75; Austin, J. "The Psychological Dimension of Intelligence Activities", p. 202.

<sup>&</sup>lt;sup>145</sup> Laqueur, W. *op. cit.,* p. 269.

<sup>&</sup>lt;sup>146</sup> Jervis, R. *Perception and Misperception in International Politics*, p. 245.

the accuracy of the analysis. Ultimately, "we may actually end up increasing rather than decreasing uncertainty."<sup>147</sup> Essentially, the endemic problem is reflected in the Church report's conclusion: "The problem is that increased collection will not always produce better analysis."<sup>148</sup>

Nowadays, the excess of information appears to have exacerbated the problem of the inherent ambivalence of information, and thus, has further hindered the clarity of the intelligence analysis. As the WMD report indicates, "Numerous studies have demonstrated that today analysts are overloaded with information. A study published in 1994 revealed that analysts on average had to scan 200 to 300 documents in two hours each day, just to discover reports worth writing about."<sup>149</sup> Moreover, as the WMD report suggests, if it is assumed that "relevant information has doubled for most analytic accounts over the past ten years...and if analysts are expected not just to pick reports to write about, but more importantly to 'connect the dots,' among variables and documents, the typical analyst would need a full workday just to perform the basic function of monitoring new data."<sup>150</sup> Likewise, the Schlesinger report has observed that, "despite the richness of the data made available by modern methods of collections...it is not at all clear that our [American] hypotheses about foreign intentions, capabilities and

<sup>&</sup>lt;sup>147</sup> Austin, J. "The Psychological Dimension of Intelligence Activities", pp. 203-4.

<sup>&</sup>lt;sup>148</sup> A Review of the Intelligence Community, March 10, 1971, (The Schlesinger Report), p. 11; US Senate, Select Committee to Study Governmental Operation with respect to Intelligence activities, *Final Report, book 1: Foreign and Military intelligence*, 94<sup>th</sup> Congress, 2<sup>nd</sup> Sess. 1976, pp. 268-69

<sup>&</sup>lt;sup>149</sup> Quoted in The Silberman-Robb Commission, "WMD intelligence failure", *in Intelligence and National Security: the secret world of spies: an anthology*, edited with introductions by Loch K. Johnson, James J. Wirtz. (Oxford: Oxford University Press, 2008), p. 401.

<sup>&</sup>lt;sup>150</sup> The Silberman-Robb Commission, "WMD intelligence failure", p. 465.

activities have improved commensurately in scope and quality as more data comes in the from modern collection methods."<sup>151</sup>

Illustrative of the problem of ambiguity and excess of information is the case of CIA's tap into the underground cables in Berlin during Operation Gold. In 1954, the CIA tapped 3 cables used by the Soviet Military Intelligence in Berlin. Each cable had 172 circuits and each circuit had a minimum of 18 channels. A total of 9, 288 channels were monitored. The amount of information was enormous, which made hardly manageable to sift through the miles of tape before the space and time variables affect the intelligence product and the intelligence became outdated."The CIA had succeeded in a collection operation only to fall victim to its own success."<sup>152</sup>

To conclude, as Dupont has observed, the result is that in the Twenty-First century intelligence services operate in a world of more ambiguity and ambivalence of information.<sup>153</sup>

<sup>&</sup>lt;sup>151</sup> A Review of the Intelligence Community, March 10, 1971, (The Schlesinger Report), p. 10.

<sup>&</sup>lt;sup>152</sup> David, C. M. Wilderness of Mirrors( New York: Random House, 1980), pp. 76-90

<sup>&</sup>lt;sup>153</sup> Dupont, A. "Intelligence for the Twenty-First Century", *Intelligence and National Security*, vol. 18, no. 4, (2003), pp. 17-19.

# The problem of politicization

As Jackson has noted, "the identification and interpretation of threats is essentially a political activity." <sup>154</sup> However, "Politicization," as Betts has observed," is a complicated phenomenon," as "it can be bad or good."<sup>155</sup> The controversial nature of this factor has generated wide debates. As Betts has noted, "Much confusion and rancor about what constitutes politicization flows from different models of how the intelligence process should relate to policymaking. These might be considered the 'Kent' and 'Gates' models."<sup>156</sup> The "Kent" Model, named after Sherman Kent, is a paradigm, which posits that the relationship between intelligence personnel and policy-formulators must be one of great caution, because of the danger of intelligence professional integrity of the former.<sup>157</sup> The "Gates" model is located on the other spectrum of the debate. The concept, named after Robert Gates, emphasizes that in order for intelligence to be more useful, intelligence professionals are be closer to policy-formulating circles in order to engage more productively in the concerns of the latter.<sup>158</sup>

Despite both models and the norm that policy interests, preferences, or decisions must never determine intelligence judgments,<sup>159</sup> in reality "the possibility that intelligence information will be distorted by ideological bias is present at every stage of the intelligence process. From the

<sup>&</sup>lt;sup>154</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 459.

<sup>&</sup>lt;sup>155</sup> Betts, R. "Politicization of Intelligence: costs and benefits", p. 67.

<sup>&</sup>lt;sup>156</sup> *Ibid*, p. 61.

<sup>&</sup>lt;sup>157</sup> Kent, Sh. *Strategic Intelligence for American World Policy* (Princeton: Princeton University Press, 1949), pp. 195-201.

<sup>&</sup>lt;sup>158</sup> Gardiner, K. L. "Dealing with Intelligence-Policy Disconnects," *Studies in Intelligence*, vol. 33, no. 2, (Summer, 1989), pp. 2-8; Betts, R. "Politicization of Intelligence: costs and benefits", p. 61.

<sup>&</sup>lt;sup>159</sup> Betts, R. "Politicization of Intelligence: costs and benefits", p. 60.

outset, political assumptions determine what is considered a threat and what is not. This, in turn, conditions what information is gathered and what is deemed important."<sup>160</sup> Ergo, "In one sense intelligence cannot live with politicization but policy cannot live without it."<sup>161</sup>Yet, being, "...a phenomenon that can flow down or up,"<sup>162</sup> politicization is one of "the worst thing that can happen to intelligence."<sup>163</sup>

#### "Top-down" politicization

The "top-down" model of politicization is the product of the dynamic relationship between intelligence producers and decision-making consumers. This phenomenon is often understood as pressure by the latter on the former to produce estimates that conform to pre-existing beliefs.<sup>164</sup> The magnitude of the pressure may range from "blatant and crude" to "subtle and artful."<sup>165</sup> What is generally agreed upon is that, as one CIA analyst revealed, "politicization is like fog. Though you cannot hold it in your hands, or nail it to a wall, but it does exist, it is real, and it does affect people."<sup>166</sup> More importantly, this type of "politicization is to some degree inevitable," <sup>167</sup> because "For issues of high importance and controversy, any relevant analysis will be politically charged, because it will point at least implicitly to a conclusion about policy."

<sup>&</sup>lt;sup>160</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 459.

<sup>&</sup>lt;sup>161</sup> Betts, R. "Politicization of Intelligence: costs and benefits", p. 60.

<sup>&</sup>lt;sup>162</sup>*Ibid*, p. 67.

<sup>&</sup>lt;sup>163</sup> Betts, R. "Politicization of Intelligence: costs and benefits", p. 59.

<sup>&</sup>lt;sup>164</sup> Jackson, P. " On uncertainty and the limits of intelligence", p. 459.

<sup>&</sup>lt;sup>165</sup> Betts, R. "Politicization of Intelligence: costs and benefits, p. 59.

<sup>&</sup>lt;sup>166</sup> Quoted in Gentry, J. *Lost Promise: How CIA Analysis Misserves the Nation* (Blue Ridge Summit, Pennsylvania, U.S.A.: Univ Pr of Amer, 1993), p. 243.

<sup>&</sup>lt;sup>167</sup> Betts, R. "Politicization of Intelligence: costs and benefits, p. 59.

In other words, "The more intelligence matters, the more politicized it will appear to some faction in a policy debate."<sup>168</sup>

Particularly illustrative in this respect is the 1967 Vietnam War dispute concerning the estimate of Communist military strength in South Vietnam, or as Richard Helms has termed it, "the Vietnam numbers game."<sup>169</sup> Specifically, CIA was arguing for higher numbers in the order of battle (O/B) estimate and the Military Assistance Command, Vietnam (MACV) for lower numbers.<sup>170</sup> Many perceived the MACV's estimate as intellectually corrupt, and motivated by the political need to convince the audiences that "the end comes into view."<sup>171</sup> Military personnel involved in the negotiations concerning the order of battle estimate confessed privately that the order of battle figure should be higher, but that there had been a command decision to keep the number below 300,000,<sup>172</sup> because as a cable from General Creighton Abrams to the Chairman of the Joint Chiefs of Staff, Earle Wheeler suggests, "We have been projecting an image of success over the recent months," and the press would draw an erroneous and gloomy conclusion....All those who have an incorrect view of the war will be reinforced."<sup>173</sup> The distorting dynamic of politicization is further revealed by Rober Komer, the highest civilian in the MACV, who is said to have concluded that, "there must not be any quantifying of the enemy's irregular forces, on the grounds that doing so 'would produce a

<sup>&</sup>lt;sup>168</sup> Betts, R. "Politicization of Intelligence: costs and benefits", p. 75.

<sup>&</sup>lt;sup>169</sup> Ford, H. P. *CIA and the Vietnam Policymakers: Three episodes, 1962-1968*(Central Intelligence Agency and Center for the Study of Intelligence: Diane Publishing, 1998), p. 92. <sup>170</sup> *Ibid.*, pp. 91-92.

<sup>&</sup>lt;sup>171</sup> Betts, R. "Politicization of Intelligence: costs and benefits", p. 66; <u>http://www.helium.com/items/1441471-the-history-of-us-involvement-in-the-vietnam-war</u>

<sup>&</sup>lt;sup>172</sup> Colonel Gains Hawkins, George Allen, and George Carver quoted in, Ford, H. P. *CIA and the Vietnam Policymakers: Three episodes, 1962-1968*, p. 91, pp. 93-94.

<sup>&</sup>lt;sup>173</sup> Quoted in Betts, R. "Politicization of Intelligence: costs and benefits", p. 67.

politically unacceptable total over 400,000."<sup>174</sup> Further, George Allen quotes Komer as saying: "You guys [CIA] simply have to back off. Whatever the true O/B figure is, is beside the point."<sup>175</sup>

Equally importantly is that nowadays, Born and Johnson have asserted that, "an excessive politicization of intelligence services may be partially a product of the recent democratization of intelligence oversight. The greater the role for parliaments and their oversight committees in reviewing intelligence activities may have resulted in an increase in the political and public pressures on these agencies. Democratically elected governments can no longer simply refuse to comment on intelligence issues, governments are now more forced to use complex media strategies to turn over the parliaments and the media to their cause."<sup>176</sup>

#### "Bottom-up" politicization or the "intelligence-to-please" syndrome

Analytical distortion can often arise from a desire among intelligence officials to increase their influence, or at least to avoid marginalization, by producing estimates that complement existing policy orientations. To challenge either political or institutional orthodoxies is to run the risk of becoming ostracized, which can have negative effect on the career of analysts or intelligence managers.<sup>177</sup> Similarly, Uri Bar-Joseph and Jack Levy assert that, "Intelligence officers might consciously adjust their estimate because they believe that the failure to provide 'intelligence

<sup>&</sup>lt;sup>174</sup> Quoted in Ford, H. P. *CIA and the Vietnam Policymakers: Three episodes, 1962-1968*(Central Intelligence Agency and Center for the Study of Intelligence: Diane Publishing, 1998), p. 94.

<sup>&</sup>lt;sup>175</sup> Ford, H. P. CIA and the Vietnam Policymakers: Three episodes, 1962-1968, p. 97.

<sup>&</sup>lt;sup>176</sup> Born, H., Johnson, L. "Balancing and Operational Efficiency and Democratic legitimacy", *in Who is Watching the Spies? : establishing intelligence service accountability,* edited by Hans Born, Loch K. Johnson, Ian Leigh (Washington, D.C. : Potomac ; Poole : Chris Lloyd, 2005), p. 228.

<sup>&</sup>lt;sup>177</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 459.

to please' might result in their loss of job, the denial of future promotion opportunity, or the loss of influence on the future policy decisions."<sup>178</sup>

For example, a CIA task force in the 1990s found that over half of the analysts believed that shaping an intelligence assessment to conform to a view that the analyst believed was held by a manager "occurs often than enough to be a concern."<sup>179</sup> John Gentry, a CIA intelligence analyst, also arrived at a similar conclusion with respect to the CIA's Directorate of Intelligence. He argues that since management and review was in the hands of senior supervisors, they could enforce the inclusion of their preferences in analyses. As a result, many analysts tried to please their bosses by writing what they thought their bosses would like to see, and began focusing on quantity rather than quality of production... Shallow analysis and packaging therefore, became more important than sound analytical judgment.<sup>180</sup> Another very indicative example is connected with the Chinese intervention in the Korean War of 1950. Despite numerous indications of Chinese intentions, including military deployments, presence of Chinese soldiers south of the Yalu River, General Douglas McArthur's intelligence chief, Major-General, Charles Willoughby assessed that the China would not intervene.<sup>181</sup> However, Lieutenant-Colonel, John Chiles, Chief of Operations, who fought in Korea, stated: "MacArthur did not want the Chinese

<sup>&</sup>lt;sup>178</sup> Bar-Joseph, U., Levy, J. "Conscious Action and Intelligence Failure," *Political Science Quarterly*, Vol.124, No. 3, (2009), p. 471.

<sup>&</sup>lt;sup>179</sup> Gates, R. "Guarding against Politicization" *Studies in intelligence: Journal of the American Intelligence Professional*, vol. 36, (Spring, 1997), p. 6.

<sup>&</sup>lt;sup>180</sup> Gentry J. "Intelligence analyst/ manager relations at the CIA", *Intelligence and National Security*, vol. 10, no. 4, (1995), pp 133-146.

<sup>&</sup>lt;sup>181</sup> Bar-Joseph, U., Levy, J. "Conscious Action and Intelligence Failure", p. 471.

to enter the war in Korea. Anything McArthur wanted, Willoughby produced intelligence for...in this case Willoughby falsified the intelligence reports."<sup>182</sup>

To conclude, "the various manifestations of politicization in the policy process all flow from the basic fact that intelligence is fundamentally a political activity. Consequently, they cannot be eradicated. Requiring either producers or consumers to step outside their individual ideological perspective would be to demand that they approach intelligence without a frame of reference required to comprehend it."<sup>183</sup> As Robert Jervis says, "intelligence is also easier to keep pure when it is irrelevant."<sup>184</sup>

<sup>&</sup>lt;sup>182</sup> Halberstam, D. *The Coldest Winter: American and the Korean War* (New York; Hyperion, 2007), p. 378.
<sup>183</sup> Jackson, P. " On uncertainty and the limits of intelligence", p. 461.

<sup>&</sup>lt;sup>184</sup> Jervis, R. "What's Wrong with the Intelligence Process?" *International Journal of Intelligence and Counterintelligence*, vol. 1, no. 1, (1986), p.39.

## The elusiveness of solutions185

When the inevitable occurs, and "the intelligence system stumbles badly," in order to prevent future intelligence disasters, a majority of officials would "shake the system up," "set it right," operating on the grounds that if the cause of the failure is understood, the problem would be fixed. <sup>186</sup> "This," as Betts posits, "is illusory," as "Intelligence can be improved marginally, but not radically." Furthermore, this illusion can also be very dangerous if it inspires overconfidence that systemic reforms are to significantly increase the predictability of threats.<sup>187</sup> Therefore, organizational solutions to intelligence failures share three common, central problems: "first, the great majority of procedural changes that address specific pathologies introduce or emphasize in effect other pathologies. Secondly, alterations of the analytic process of an intelligence body are highly unlikely to fully transcend the constraints of ambiguity and ambivalence. Finally, more technologically complex information systems cannot fully compensate for the psychological predispositions, perceptual idiosyncrasies or the time constraint. Because virtually all information is analyzed, assessed and put together by human beings, solutions are bound to be limited in effectiveness, as they cannot alter the human though process and other permanent limitations such as time and space, excess and ambiguity of information."<sup>188</sup> The validity of this logic will be tested against the two most common solutions.

<sup>&</sup>lt;sup>185</sup> Betts, R. "Analysis, War, and Decision: why intelligence failures are inevitable", p. 127.

<sup>&</sup>lt;sup>186</sup> Betts, R. *Enemies of intelligence: knowledge and power in American national security*, p. 1.

<sup>&</sup>lt;sup>187</sup> *Ibid.,* p. 20.

<sup>&</sup>lt;sup>188</sup> Betts, R. "Analysis, War, and Decision: why intelligence failures are inevitable", p. 132; Kent, Sh. "Estimates and Influence", *Studies in Intelligence*, vol.12, no.3, (1968), p. 17; Smith, A. " On the Accuracy of the National Intelligence Estimates", *Studies in Intelligence*, vol. 13, no. 3, (1969), p. 25; The Silberman-Robb Commission,

#### Worst-Case analysis

Worst-case scenario, or in other word, the Cassandra Syndrome, is very often manifested as a common response to relatively recent intelligence failure and a traumatic surprise. Theoretically, it is suggested that in order to reduce uncertainty concerning enemy's intentions, one engages in worst-case analysis, which will assess intelligence through the prism of the worst-case available interpretations. Of course, if there is an actual disaster, this method is always justifiable. Nonetheless, standardizing this approach for day-to-day procedure makes it organizationally dysfunctional and dangerous.<sup>189</sup>

The price for the implementation and operationalization of this reform is almost always unacceptably high, as the reform introduces certain other counter-productive pathologies such as excessive defense spending. This is not only economically problematic for the respective state, but it is also very dangerous because increased defense spending almost always lead similar increases in defense budgets of the respective neighboring states. Given that uncertainty is irresolvable, and taking into consideration the Stag Hunt Analogy<sup>190</sup> and the Security Dilemma,<sup>191</sup> it is easy to see how worst-case scenario can actually provoke unnecessary escalation, which may include pre-emption. Henceforth, it may prove as a destabilizing factor. Above all, the greatest problem that this approach introduces is the routinization. Namely, as

<sup>189</sup> Betts, R. "Analysis, War, and Decision: why intelligence failures are inevitable", pp. 127-8.

<sup>&</sup>quot;WMD intelligence failure", p. 465; Jervis, R. The Logic of Images in International Relations, p. 132; Jervis, R. Perception and Misperception in International Politics, pp. 117-201.

<sup>&</sup>lt;sup>190</sup> Waltz, K. Man, *the State, and War: a theoretical analysis* (New York : Columbia University Press, 1959), p.168; Rousseau, J. J. *A Discourse on Inequality* (Harmondsworth: Penguin, 1984), p.238.

<sup>&</sup>lt;sup>191</sup> Booth, K., Wheeler, N. *The Security Dilemma: fear, cooperation, and trust in world politics* (Basingstoke: Palgrave Macmillan, 2008).

Betts has observed, "routinization corrodes sensitivity. Every day that an expected threat does not materialize further dulls receptivity to the reality of danger."<sup>192</sup> *Ergo*, this approach exacerbates the "cry-wolf syndrome,"<sup>193</sup> which in turn most likely will lead to alert-fatigue.<sup>194</sup> As Betts suggests, if every time whenever an iota of doubt arises, "someone rings the bell in White House, leaders will start putting cotton in their ears."<sup>195</sup> From another perspective, "for analysts, this syndrome creates an incentive to make deliberately vague estimates to avoid the professional censure and personal ridicule involved in offering clear, but inaccurate analyses. In effect, the intellectual challenges involved in predicting the opponent's behavior can be daunting."<sup>196</sup> Hence, by"seeking to cover all contingencies, worst-case analysis loses focus and salience; by providing theoretical guide for everything, it provides a practical guide for very little."<sup>197</sup>

#### Multiple advocacy

Many scholars and practitioners consider verisimilar the assumption that failures often occur, because of the dismissal or inattention of decision-makers towards unpopular, not mainstream views. In order to alleviate the probability of such a mistake, Alexander George proposes

<sup>&</sup>lt;sup>192</sup> Betts, R. *Enemies of intelligence: knowledge and power in American national security*, p. 37.

<sup>&</sup>lt;sup>193</sup> Betts, R. "Analysis, War, and Decision: why intelligence failures are inevitable", pp. 127-8; Booth, K. *Strategy and Ethnocentrism* (New York: Holmes and Meier, 1979), pp. 123-24.

<sup>&</sup>lt;sup>194</sup> Schelling, Th. *The Strategy of Conflict* (Massachusetts, Harvard University Press, 1980), p. 245.

<sup>&</sup>lt;sup>195</sup> Betts, R. *Surprise Attack: lessons in defense planning* (Washington, DC: Brookings Institute Press, 1982), p. 290.

<sup>&</sup>lt;sup>196</sup> Wirtz, J. *The Tet Offensive: intelligence failure in War* (Ithaca NY: Cornell University Press, 1991), p. 5.

<sup>&</sup>lt;sup>197</sup> Betts, R. "Analysis, War, and Decision: why intelligence failures are inevitable", p. 129.

institutionalizing a balanced, open and managed process of debate, so that no relevant information or assessment will be marginalized or ostracized.<sup>198</sup>

The problem with this approach is that by maximizing the available perspectives, there is a considerable possibility that multiple advocacy can simply highlight the ambiguity and ambivalence in the process of evaluation. Henceforth, this approach may reinforce erroneous arguments, because essentially this method provides all multifarious perspective with an "aura of empirical respectability." In effect, this would increase the ambivalence of information, which is problematic, because the impact of preconceptions is directly proportional to the increase of ambivalence of information.<sup>199</sup> On the other hand, this approach provokes implications for the process of decision-making, as well. Concretely, this approach allows a leader to choose which ever accords with his predisposition. What is more, since a high chance exists that the approach would increase ambivalence, if leaders are indecisive; multiple advocacy in effect is promoting conservatism and paralysis of the executive.<sup>200</sup>

<sup>&</sup>lt;sup>198</sup> George, L. A. "The Case for Multiple Advocacy in Making Foreign Policy", *The American Political Science Review*, vol.66, no.3, (September, 1972), pp. 751-785.

<sup>&</sup>lt;sup>199</sup> Jervis, R. *The Logic of Images in International Relations*, p. 132; Jervis, R. *Perception and Misperception in International Politics*, pp. 117-201.

<sup>&</sup>lt;sup>200</sup> Betts, R. "Analysis, War, and Decision: why intelligence failures are inevitable", p. 126.

# Chapter 4

# The Yom Kippur intelligence failure of 1973

"For me, the week between 1 October and 6 October, in the Southern Command, was the most normal week. *I did not see anything irregular.*" From the testimony of Lieutenant-General David Elazar, Israeli Defense Force Chief of Staff, in front of the Agranat investigation Commission.<sup>201</sup>

#### Introduction

The sudden attack of the Egyptian and Syrian armies and their occupation of the "Bar-Lev" defense line along the Suez Canal and large portion of the Golan Heights posed the most serious threat to Israeli existence since the 1948 war. In the words of Defense Minister Moshe Dayan in the morning of October 7, "the Third Temple was in danger..."<sup>202</sup> The temporary Arab military success was the direct result of Israeli military intelligence's (AMAN) failure to provide the political and military echelons with high-quality strategic warning of the impeding attack, a warning which according to Israeli Military Doctrine was expected to

<sup>&</sup>lt;sup>201</sup> Quoted in Bar-Joseph, R. "Intelligence Failure and the need for Cognitive Closure: the case of Yom Kippur", *in Paradoxes of Strategic Intelligence : essays in honor of Michael I. Handel*, edited by Betts, R., K., Mahnken, T., G. (Portland, OR ; London: Frank Cass, 2003), p. 159.

<sup>&</sup>lt;sup>202</sup> Moshe Dayan quoted in Bar-Joseph, U. *The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources* (New York: State University of New York Press, 2005)p. 1.

be given at least 48 hours before the beginning of the war in order for the Israeli Reserve Forces to be mobilized and deployed.<sup>203</sup>

In the literature, the Yom Kippur intelligence debacle has provoked a wide debate on its causes. On the one hand, Ben-Zvi, Richard Betts and Ephraim Kahana assert that the source of the failure was the inclination among senior Israeli commanders to place more importance on strategic assumptions, epitomized in the Concept, than to information from the tactical level which indicated the imminence of war.<sup>204</sup> On the other hand, Avi Shlaim, Arie Kruglanski and Bar-Joseph have focused on explaining the intelligence failure by a number of organization and psychological obstacles.<sup>205</sup> Two veterans AMAN officers pushed forward the argument that the psychological milieu, in which the estimation process was taking place, may also be an important factor. Zvi Lamir found that the failure was the outcome of Israelis misconceiving themselves and their military and political image. Yoel Ben-Porat maintained that pretension and arrogance on behalf of the senior officers in AMAN also played a major part in why the intelligence blunder occurred.<sup>206</sup>

Because, theoretically, intelligence failure in itself is a multifactorial phenomenon, provoked by the function of numerous, interrelated and unavoidable dynamics,<sup>207</sup> from an analytical

<sup>205</sup> Shlaim, A. "Failures in National Intelligence Estimates: the case of Yom Kippur war", *World Politics*, vol. 28, (1976), pp. 348-80;Bar-Joseph, U., Kruglanski, A., W. "Intelligence Failure and Need for Cognitive Closure: On the Psychology of the Yom Kippur Surprise", *Political Psychology*, Vol. 24, No. 1, (Mar., 2003), pp. 75-99.
 <sup>206</sup> Quoted in Bar-Joseph, U. *The Watchman fell asleep: The Surprise of Yom Kippur and Its Sources*, p. 5.

<sup>&</sup>lt;sup>203</sup>*Ibid.,* p. 2

<sup>&</sup>lt;sup>204</sup> Ben- Zvi, Abr." Hindsight and Foresight: a conceptual framework for the analysis of surprise attacks", World Politics, vol. 28, (1976), pp. 381-395; Ben-Zvi, Abr. "Threat Perception and Surprise: in search of the intervening variables", in Conflict in World Politics: Advances in the study of crisis, war and peace, edited by Harvey, F. R., Mor, B., D. (New York: St Martin's press, 1998), pp. 141-271; Betts, R. Surprise attack : lessons for defense planning, p. 68-69; Kahana, E. "Early Warning versus Concept: the case of Yom Kippur 1973", in Intelligence and National Security: the secret world of spies: an anthology, edited with introductions by Loch K. Johnson, James J. Wirtz. (Oxford : Oxford University Press, 2008), p. 177.

<sup>&</sup>lt;sup>207</sup> Bar-Joseph, U., Levy, J. S. "Conscious Action and Intelligence Failure", p. 476.

perspective, the aforementioned explanatory formats are mutually supportive. Henceforth, it is not analytically consistent with the evidence and accounts to regard the Yom Kippur intelligence fiasco as the outcome of lack of information. Per contra, as Richard Betts posits: "In the Autumn of 1973, monitoring assets performed admirably, yet detection of Arab preparation was not translated into sufficient warning."<sup>208</sup> Therefore, since Yom Kippur intelligence failure was not the product of insufficient information, it is much more analytically plausible to conceive the failure as the result of the existence of a number of endemic factors, which exerted negative effects on the clarity and accuracy of the intelligence and the warningresponse processes. Namely, the failure was triggered by the inherent and inevitable pathologies of information and human cognition, which disrupt the individual's ability to perceive reality accurately, the endemic obstacles in the warning-response process that erode the victim's receptivity to warnings and obstruct the flow of relevant information, and the problematic relationship between senior intelligence officers and senior policy-makers, where the former manifested a tendency to interfere with the political process, and the latter demonstrated an inclination to concur with the intelligence assessment, which may have created monolithic views on the likelihood of war and correctness of estimates.<sup>209</sup> However, as Bar-Joseph has observed, "The general explanations that have been suggested so far help to understand the causes for the 1973 intelligence fiasco do not suffice to bridge the gap between the exceptional quality of the war information that Israel had prior to the war and the low quality of AMAN's warning." Therefore, the lacuna, needed to bridge the gap is another type of explanation, which focuses on the structure and the personal characteristics of Israel's

<sup>&</sup>lt;sup>208</sup> Betts, R. *Surprise Attack: lessons for defense planning*, p. 69.

<sup>&</sup>lt;sup>209</sup> Bar-Joseph, U. *The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources*, p. 2.

top analysts in 1973"<sup>210</sup>- the Director of AMAN (DMI), Major-General, Eli Zeira, and the head of Egyptian Affairs section, Lt.-Col. Yona Bandman, who were the main people responsible for providing policy-makers with a distorted intelligence picture. It must be noted that this paper will analyze only the effects of Zeira's actions.

Furthermore, according to Bar-Joseph, in Zeira's case, "the bias toward a reassuring estimate was a motivated one. As a result of this behavior, the decisions taken by Defense Minister, Moshe Dayan and the Chief of Staff, David Elazar did not reflect the graveness of the situation and did not meet even the minimal Israeli Defense Force (IDF) deployment plans for a possibility of war."<sup>211</sup> *Ergo*, the intelligence failure is neither the result of insufficient information, nor of high-quality deception; as most scholars have concurred, at the root of the 1973 fiasco are certain pathologies, which were found in similar cases as well,<sup>212</sup> and which, as Wohstetter has observed, effect "...honest, dedicated and intelligent men."<sup>213</sup> It must be noted that this chapter will heavily borrow from Uri-Bar Joseph's works on the subject, because in his analyses he used previously undisclosed authentic primary sources such as documents both from intelligence reports and protocols from discussions, and interviews, which Bar-Joseph has conducted with officers, involved in the failure. Henceforth, the documents reveal what AMAN's estimates were, while the interviews show the *ratio decidendi* behind them.<sup>214</sup>

<sup>&</sup>lt;sup>210</sup>*Ibid.*, p. 6.

<sup>&</sup>lt;sup>211</sup> Bar-Joseph, U. *The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources*, p. 6; p. 248.

<sup>&</sup>lt;sup>212</sup> Bar-Joseph, U. "Intelligence Failures and the Need for Cognitive Closure: the case of Yom Kippur", p. 172.

 <sup>&</sup>lt;sup>213</sup> Wohlstetter, R. *Pearl Harbor: warning and decision* (Stanford, Calif. : Stanford University Press, 1962), p. 397.
 <sup>214</sup> Bar-Joseph, U. *The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources*, p. 7.

#### The theory-driven rationale behind the Concept and its inclinations

The Concept, a term coined by the Agranat Commission, was a framework which imposed order and significance for incoming intelligence pieces concerning the likelihood of war.<sup>215</sup> According to the Agranat Commission, "at the root of Israel's intelligence failure was 'the persistent adherence of intelligence officers to what they termed as 'the conception."<sup>216</sup> The reasons for this is that, first of all, the Concept was a continuation of past operational logic from late 1968, advocated by the Chief of the General Staff, Maj. Gen. Ezer Weitzman, and Brig. Gen. Benny Peled of the Israeli Air Force (IAF), which predicted continuation in the future conduct of Egypt and Syria, as observed in 1968, because of their military inferiority.<sup>217</sup> Secondly, the Concept was a clear example of mirror-imaging, or "the process of estimating a respective situation or decision from one's own cultural or national perspective."<sup>218</sup> Specifically, Egypt was estimated not to risk war with Israel unless the former attains the ability to destroy the Israeli chief airfields either by long-range Sukhoi bombers or by Scud missiles. Thereby, neutralizing Israel's greatest advantage over the Arab state- its military aviation. Secondly, Syria, being the military weaker in relation to Egypt, would not embark on full scale attack against Israel unless it is done simultaneously with Egypt- action which would compensate its military inferiority.<sup>219</sup> The rationale that Egyptian decision to embark on war would be determined by its rationalization that it is in a militarily and strategically inferior position, inspired confidence in Israeli policy-

<sup>&</sup>lt;sup>215</sup> Bar-Joseph, U. *The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources*, p. 45.

<sup>&</sup>lt;sup>216</sup> The Agranat Report quoted in Bar-Joseph, U. *The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources*, p. 45.

<sup>&</sup>lt;sup>217</sup> Bar-Joseph, U. The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources, pp. 45-48.

<sup>&</sup>lt;sup>218</sup> Shulsky, A. N., Schmitt, G. J. *Silent Warfare : understanding the world of intelligence* (Washington, D.C. : Brassey's, 2002), pp. 65-67.

<sup>&</sup>lt;sup>219</sup> Kahana, E. "Early Warning versus Concept: the case of Yom Kippur 1973", p. 177; Bar-Joseph, U. *The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources*, pp. 45-51.

makers.<sup>220</sup> Two months before the war, Moshe Dayan stated that: "The over-all balance of power is in our favor and this fact is overwhelmingly decisive in the face of all other considerations and prevents the immediate renewal of war."<sup>221</sup> He and some of the other senior commanders and decision-makers appear to have fallen victims to their own policy, which insisted that Arabs would not dare attack Israel.<sup>222</sup>

However, as Heuer notes, "Failure to understand that others perceive their national interests differently from the way we perceive those interests is a constant source of problems in intelligence analysis."<sup>223</sup> Very often, when foreign behavior is regarded as aberrant and out of the norm, "this indicates that analysts have projected their own national and cultural values and conceptual frameworks onto the foreign leaders and societies, rather than understanding the logic of the situation as it appears to them."<sup>224</sup> It is clear now that since coming to power in late 1970, Syrian President Asad had strived for a coordinated Egyptian-Syrian military initiative to regain the Golan and Sinai, and in October, 1973 President Sadat intended to go to war with or without surprise.<sup>225</sup> The problem of mirror-imaging is further evident from Sadat's testimony that, "Israeli military successes had created a false picture. Contrary to popular conception, they were not invincible and we were not inept. I had to win back honor and prestige for my people-not only in Egypt but throughout the Arab world. It would be necessary to inflict losses

<sup>&</sup>lt;sup>220</sup> Betts, R. *Surprise Attack: lessons for defense planning*, p. 70.

<sup>&</sup>lt;sup>221</sup> Quoted in Ben- Zvi, Abr." Hindsight and Foresight: a conceptual framework for the analysis of surprise attacks", *World Politics*, vol. 28, (1976), p. 387.

<sup>&</sup>lt;sup>222</sup> Slater, R. Warrior Statesman : the life of Moshe Dayan (London : Robson, 1991), p. 344.

<sup>&</sup>lt;sup>223</sup> Heuer, R. J. *op. cit.*, p. 70.

<sup>&</sup>lt;sup>224</sup>*Ibid.,* p. 33.

<sup>&</sup>lt;sup>225</sup> Bar-Joseph, U. *The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources*, p. 25; p. 33.

on Israel. The myth that they were unbeatable had grown, but I knew the reality: Israel is a small country, little able to suffer a significant loss of soldiers, property, and equipment."<sup>226</sup> Furthermore, according to the Agranat Commission, the concept was the highest in the ranking of pitfalls that have awaited Israeli analysts.<sup>227</sup> This can be attributed to the fact that whenever both strategic and tactical assumptions of actualities converge, an immediate threat will be perceived, leading the observing state to take precautionary measures. However, when discrepancies are detected between tactical indicators and strategic assumptions, the latter most likely prevail.<sup>228</sup> For example, during the week preceding the Yom Kippur War, Israeli intelligence officers in the Southern and Northern Commands accumulated a broad complex of credible information indicating tactical actualities. For example, on the morning of October 5, on the Syrian front, medium artillery was brought forward. Sizable quantities of armor attached to infantry divisions were moved up to the front lines. Simultaneously, the tanks of the armor reserve closed in. Fighter-bombers moved to forward fields. On the Egyptian Front, artillery was pouring into the front and the Egyptian Army was clearly shifting of a type bridging equipment never seen before up to the water's edge. Those tactical maneuvers indicated readiness for an offensive, thus there was no doubt that technically and operationally the Arab armies were ready to strike.<sup>229</sup> As the Agranat Committee noted, "On the eve of the war, a vast body of data had been accumulated, indicating an unprecedented deployment of enemy troops along the front. Nevertheless, on the eve of war, the accumulated data did not affect the strategic

<sup>&</sup>lt;sup>226</sup> El-Sadat, A. *In Search of Identity* (London : Collins, 1978), pp. 232-233.

<sup>&</sup>lt;sup>227</sup> Quoted in Kahana, E. "Early Warning versus Concept: the case of Yom Kippur 1973", p. 176.

<sup>&</sup>lt;sup>228</sup> Ben- Zvi, Abr." Hindsight and Foresight: a conceptual framework for the analysis of surprise attacks", *World Politics*, vol. 28, (1976), p. 387; p. 394.

<sup>&</sup>lt;sup>229</sup> *Ibid.,* pp. 393-395.

thinking of Israel's decision makers."<sup>230</sup> The reason why this occurred is that, as Richard Betts has noted, "Strategic premises smothered tactical indicators."<sup>231</sup> Or as Ephraim Kahana put it, "concepts, when they become dominant paradigms of thinking, acquire an inherent strength."<sup>232</sup> *Ergo*, the most basic reason for the Yom Kippur intelligence disaster lies in the overpowering political and military pre-conceptions of Israeli officials. Particularly indicative in this respect is a report, written by Yona Bandman, which demonstrates the overpowering effects of strategic conception over tactical indicators:"Though the actual taking up of emergency position on the Canal appears to contain indications testifying to an offensive initiative, according to our best evaluation, no change has occurred in the Egyptian assessment of the balance of power between their forces and the IDF. Therefore, the probability that Egyptians intent to resume hostilities is low."<sup>233</sup>

#### **Confirmation bias**

Distortion of intelligence analysis because of confirmation bias can be observed when Syrians began, at a relatively early stage, to reinforce their ground forces. The summation of the weekly report of AMAN's Research Department for the first week of September, reported that on the 3rd of the month, the level of readiness of Syrian air and land forces was increased and that the

<sup>&</sup>lt;sup>230</sup> Quoted in Ben- Zvi, Abr." Hindsight and Foresight: a conceptual framework for the analysis of surprise attacks", *World Politics*, vol. 28, (1976), p. 394.

<sup>&</sup>lt;sup>231</sup> Betts, R. *Surprise Attack: lessons for defense planning*, p. 69.

<sup>&</sup>lt;sup>232</sup> Kahana, E. "Early Warning versus Concept: the case of Yom Kippur 1973, p. 188; Kuhns, Th. *The Structure of Scientific Revolutions* (Chicago ; London : University of Chicago Press, 1962), p. 49.

<sup>&</sup>lt;sup>233</sup> Quoted in Betts, R. *Surprise Attack: lessons for defense planning*, p. 76.

front line had been reinforced with a considerable number of intermediate-range artillery batteries. A few days later, AMAN reported that on the night between September 7 and 8, the level of readiness of the Syrian Air Force was raised to a higher standard, and reconnaissance flight, taken on September 11, showed that the Syrians continued reinforcing their front line units. Despite this evident Syrian escalation in battle readiness, AMAN's explanations for these moves were relatively calming. At first, the front line's reinforcement was connected to preparations for terrorist activity, and the raised state of alert was explained by the scheduled visit of President Asad to Algeria. Thus, when the IDF senior commanders met on September, 9 to discuss the Syrian deployments, DMI Zeira estimated that the reinforcement of the front line toward the fall, a period during which forces were normally reduced, was occurring since Syrian training exercises had started later than usual that year. Further gradual Syrian preparations, reinforcements and readiness were explained by Zeira against the backdrop of an incident of September 13 between IAF and Syrian Air Force, which resulted in the loss of several Syrian Mig-21 fighters.<sup>234</sup>

In a like manner, on September 30<sup>th</sup>, despite the emergency Egyptian activity along the canal or the advancement to the front of vast quantities of live ammunition, not fitting the pattern of a routine exercise such as Tahrir-47, the head of the Research Department, Arie Shalev, explained this unusual military activity by a fear of the IDF.<sup>235</sup>

 <sup>&</sup>lt;sup>234</sup> Bar-Joseph, U. The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources, pp., 82-3.
 <sup>235</sup> Ibid., p. 98.

#### Cognitive dissonance

A typical example of the probable impact of cognitive dissonance is the fact that when Lieutenant Simon-Tov wrote reports between October 1 and 3, stating that Egyptian maneuvers are inconsistent with the explanation that they are part of exercise Tahrir-47, hence, they are probably camouflage for an attach, his reports were stopped from moving higher than Southern Command because they contradicted the view of the Headquarters.<sup>236</sup> Another instance which is indicative of the effect of cognitive dissonance is the interpretation that AMAN's intelligence experts gave to the sudden Soviet evacuation that started on October 4. They offered three explanations— two that concurred with the dominant logic and a third that suggested that the Soviets were aware that Egypt and Syria planned to attack Israel. At the discussion in Dayan's office on morning of October 4, senior officers found the first two explanations to be invalid. Indeed, as Sadat has written, "In reality, we could not have initiated an assault while the Soviet advisors remained in country. I needed freedom of action to face the Israelis without the limitations direct superpower involvement imposed."<sup>237</sup>

Nonetheless, DMI Zeira continued maintaining the validity of the first two interpretations by adding another component- the Soviets may think that the Egyptians and the Syrians intend to attack, but they do so "since they do not know the Arabs well."<sup>238</sup> In the case of the Head of Branch 6, the impact of cognitive dissonance continued to be felt even after the war. When asked why he ignored the information that said that Egypt's military preparations were for war

<sup>&</sup>lt;sup>236</sup> Betts, R. *Surprise Attack: lessons for defense planning*, p. 75.

<sup>&</sup>lt;sup>237</sup> El-Sadat, A. *In Search of Identity* (London : Collins, 1978), p. 234.

<sup>&</sup>lt;sup>238</sup> Zeira summarized in Bar-Joseph, U. *The Watchman fell asleep: The Surprise of Yom Kippur and Its Sources*, p.247.

rather than an exercise, Bandman explained that he did not attach much value to junior field sources that saw preparations for an exercise as preparations for war.<sup>239</sup>

# Factors eroding the warning-response process

#### The Cry-wolf syndrome

According to Bar-Joseph, "the cry-wolf syndrome had a devastating effect on Israel's war readiness."<sup>240</sup> The erosion of the warning-response process is derived from the fact that three times prior to the war—at the end of 1971, at the end of 1972, and in the spring of 1973—it appeared as if Egypt may start a war. Accordingly, the respective measures to meet such a possibility were taken, nevertheless, war did not occur. As Sadat himself claims, at the end of 1971, "The year of decision" and in late 1972, he had no intention to initiate hostilities.<sup>241</sup> In contrast, in the spring of 1973 there was, probably, a genuine intention to go to war, which did not materialize because of Syria's insufficient war readiness.<sup>242</sup> From this perspective, the three events reduced Israel's war awareness, as AMAN related the outcome of each of these three instances to an Egyptian bluff that failed to reach its target. When in reality war was impending at the end of the summer, the tendency of AMAN's chief analysts to assess the warnings

<sup>&</sup>lt;sup>239</sup> *Ibid.,* pp. 247.

<sup>&</sup>lt;sup>240</sup> Betts, R. Surprise Attack : lessons for defense planning, p. 70; Bar-Joseph, U. The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources, p. 237; Dayan, M. Story of My Life (London : Weidenfeld and Nicolson, 1976), p. 375.

<sup>&</sup>lt;sup>241</sup> El-Sadat, A. *In Search of Identity* (London : Collins, 1978), p. 235.

<sup>&</sup>lt;sup>242</sup> Ma'oz, M. Asad: the Sphinx of Damascus : a political biography (New York : Grove Weidenfeld, 1988), pp. 85-86.

through the prism of the three previous events was already fixed. And the analysts who maintained earlier that Egypt was going for war started doubting the validity of their assessment. In the fall of 1973 they were already nicknamed "alarmists" and they were in a weaker position to challenge the dominant conception.

The cry-wolf syndrome also affected the civilian and military policy-makers. Prime-Minister Golda Meir, due to the alarms of May and June, confessed her "mind was put to rest about the question of sufficiently early warnings."<sup>243</sup> Similarly, Dayan, who in May 1973 ordered the IDF to prepare for war in the second half of the summer, radically changed his mind, when war did not erupt in the weeks that followed. Hence, in July, he forecasted that war was not likely to erupt in the coming decade.<sup>244</sup>

Furthermore, because the earlier warnings did not materialize, the syndrome also hindered the effectiveness of certain high-value HUMINT Sources. Bar-Joseph, after conducting interviews with Aharon Levran, a high-ranking AMAN officer during the war, Zvi Zamir, the head of the Mossad, asserts that Israel top HUMINT sources- King Hussein and Dr. Ashraf Marwan, became nervous, indecisive and demonstrated reservations in alerting their handlers and delivering information concerning the likelihood of war since their warnings did not materialize.<sup>245</sup>

<sup>&</sup>lt;sup>243</sup> Meir, G. *My Life* (New York: Putham, 1975), p. 420; Betts, R. *Surprise attack : lessons for defense planning*, p. 74.

<sup>&</sup>lt;sup>244</sup> Bar-Joseph, U. *The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources*, p. 73; p. 77.

<sup>&</sup>lt;sup>245</sup> Bar-Joseph, U. *The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources*, p. 237; p. 5.

# AMAN's monopoly of national intelligence estimates and the dangers of politicization

AMAN was the sole intelligence agency, which had dominance concerning estimates, because Mossad and the Israeli Foreign Office did not possess analytical organs. In principle, analysts of the Research Department were the only ones who received top-secret information. Henceforth, their assessments were automatically regarded as analytically superior in comparison to the others from within Israeli intelligence community. This, nevertheless, fostered a negative dynamic of dependency, as the Chief of Staff and policy-formulators were completely dependent on AMAN's estimates, expertise and knowledge. This, on the other hand, consolidated the monolithic perception of the correctness of AMAN's estimates. Consequently, the result of this dynamic was that just before the war occurred, there was not a single person or agency that could present an alternative to AMAN's dominant estimates. <sup>246</sup> It appears that politicization has also affected AMAN's analytical process. Concretely, Zeira regarded discussion as something unnecessary. According to Bar-Joseph, he used to humiliate officers who, according to his opinion, came unprepared for meetings. At least once, he was heard to say that those officers who estimated in spring 1973 that war was likely should not expect promotion. Thus, Zeira reinforced his estimates and prevented constructive dialogue from occurring, thereby, discouraging open and frank debate.<sup>247</sup>

<sup>&</sup>lt;sup>246</sup> *Ibid.*, p. 242.

<sup>&</sup>lt;sup>247</sup> Bar-Joseph, U. "Intelligence Failures and the Need for Cognitive Closure: the case of Yom Kippur", p. 175.

Rivalry within Israeli intelligence community and within AMAN's Research Department

The fact that the Mossad was responsible for handling HUMINT contributed to the inclination of certain AMAN officers to de-emphasize the value of the intelligence, received from these sources, which *ipso facto*, was highly significant, because most of the information about the intention to launch war was derived from these sources. <sup>248</sup>

Furthermore, there are indications that the Mossad's Chief, Zvi Zamir, did not attend some of the most crucial discussions, such as the one at the Prime Minister's office on October 3, because of AMAN's interest in maintaining its monopoly in the domain of national intelligence estimates.

Within AMAN's Research Department, it seems plausible to assert that there was rivalry between the dominant group, which believed in the validity of the "Concept", consisting of the department's head, his two deputies, the head of the basic division, and the heads of Branches 3 and 6, and the group that consider war as probable, which consisted of the heads of Branches 2, 5, and 7, as well as some other officers. According to Bar-Joseph, some officers from the latter group sensed a threat to their personal status. Moreover, they also claimed that they were purposefully distanced from the estimation process and did not receive certain relevant pieces of information. <sup>249</sup> For example, the head of the Egyptian political section, Albert Sudai, demonstrated willingness on a number of occasions to attend a discussion with DMI Zeira, in

<sup>&</sup>lt;sup>248</sup> Bar-Joseph, U. *The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources*, p. 241.

<sup>&</sup>lt;sup>249</sup> Bar-Joseph, U. *The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources*, pp. 241-42.

order to present his view that war was imminent. Despite him being promised that he would be invited, he, nevertheless, discovered that the discussion took place without his participation. Similarly, the head of Branch 2, one of the more prominent "alarmists" was never invited to any of the central discussions about the likelihood of war.<sup>250</sup>

This certainly hampered the ability of the Research Department to conduct an objective

assessment process.<sup>251</sup>

 <sup>&</sup>lt;sup>250</sup> Bar-Joseph, U. The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources, p. 243.
 <sup>251</sup> Ibid., p. 242

## The Human Factor

According to Bar-Joseph, "The combination of an extremely self-assured DMI who perceived himself more as a policy-maker than an information and assessment provider contributed greatly towards Israel's intelligence failure.<sup>252</sup> Following this line of reasoning, "it was the professional interference of DMI Zeira with the intelligence cycle on the eve of the war was probably the most devastating factor that prevented Israel from being ready."<sup>253</sup>

#### Zeira

Zeira's decision to lie to his superiors concerning the activation of the special means of collection, designed to provide clear indications for war in case preparation for it was under way, is the clearest example of his negative interference in the intelligence process. According to Elazar's assistant, Avner Shalev, and the commander of SIGINT Unit 848, Lieutenant-Colonel, Shabtai Brill on October 1 or 2, Zeira told Dayan and Elazar, "Everything is quiet."<sup>254</sup> Henceforth, the DMI prevented Israel from receiving further indications the coming war, and, *ad interim*, distorted the intelligence picture as perceived by Dayan and Elazar. Because Dayan and Elazar were aware of the capability of those means, they were confident that indeed if war was to occur, these means would have produced indications. Thus, Zeira intentionally misled them into believing that the chance of war was smaller than it really was,<sup>255</sup> and further consolidating

<sup>&</sup>lt;sup>252</sup> *Ibid.*, pp. 248-9

<sup>&</sup>lt;sup>253</sup> Bar-Joseph, U. "Intelligence Failures and the Need for Cognitive Closure: the case of Yom Kippur", p. 172.

 <sup>&</sup>lt;sup>254</sup> Bar-Joseph, U. *The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources*, p. 272.
 <sup>255</sup> *Ibid.*, p. 149.

their confidence that the conception was valid.<sup>256</sup> Elazar said that the DMI's answer "confused me even more, since I knew their [the special means] capability and if there was no war information from them, it was a sign that all was in order. Now it is clear to me that I was not told the truth." In 1993, the then-Chief of Staff, Maj. Gen. Ehud Barak, confirmed that AMAN did not use all its means of collection until the last minute.<sup>257</sup>

Another example of Zeira's negative intervention in the intelligence cycle is the fact that he unnecessarily delayed critical warnings from reaching his superiors. Concretely, he decided on Friday afternoon to avoid dispatching the message that confirmed that the cause of the Soviet evacuation was that Syria and Egypt had informed the Kremlin that they intended to launch war. Explaining the decision to delay this information, he told the Aganat Commission:" I saw no reason to alert the Chief of Staff at 11:00 pm to tell him that there is such a message and to add what we wrote later, that the source was not out most reliable one and that there were mistakes...this is how I felt that night, and I assume that the chief of Staff felt similarly." In addition, Zeira was aware of the discussions earlier on the 5th of October, when the Chief of Staff had stated repeatedly that after putting the regular army on highest alert, all he needed was one more war indicator to request the mobilization of the reserve army. Ergo, by holding the warning from Elazar, Zeira took a Chief of Staff decision which was beyond his professional authority.<sup>258</sup>

<sup>&</sup>lt;sup>256</sup> *Ibid.*, p. 148.

 <sup>&</sup>lt;sup>257</sup> Bar-Joseph, U. *The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources*, p. 249.
 <sup>258</sup> Loc. cit; Bar-Joseph, U. "Intelligence Failures and the Need for Cognitive Closure: the case of Yom Kippur", p. 177.

# Conclusion

It seems prudent to finalize this project with an account from Evan Wright, an embedded journalist. On the 27<sup>th</sup> of March, 2003, soldiers of the first reconnaissance Battalion of the USA Marine Corps were encamped on the edge of an abandoned airfield near Qalat Sukhar in eastcentral Iraq. A perimeter observation team, having identified a string of lights in the distance, reported the possible presence of an Iragi force, which may threaten the Battalion's position. In accordance with the US military doctrine, an air strike was called. "During the next few hours, attack jets dropped nearly 10, 000 pounds of bombs on the suspected position." However, there was no enemy; the Marines misperceived the lights of a distant city for those of an enemy convoy. What is important is that "...under clear skies, in open terrain with almost no vegetation, the Marines do not have a clue what is out there beyond the perimeter...Its is not that the technology is bad or its operators incompetent, but the "fog of war" persists on even the clearest of nights."<sup>259</sup> The numerous cases of intelligence failures throughout history, inter alia, Pearl Harbor (1941), the Nazi invasion of the Soviet Union (1941), the North Korean invasion of their Southern countrymen(1950), the Chinese intervention in the Korean War(1950), The Tet Offensive, (1968), 9/11 and many others, seem to corroborate this claim.

Essentially, if Christopher Layne's observation that: "History is just one damn thing after another,"<sup>260</sup> and Hegel's postulate that: "The world history is the world court"<sup>261</sup> are taken into

<sup>&</sup>lt;sup>259</sup> Wright, E. *Generation Kill: living dangerously on the road to Baghdad with the ultra-violent Marines of Bravo Company* (Bantam Press: London, 2004), pp. 235-236.

<sup>&</sup>lt;sup>260</sup> Layne, Chr. "Kant or Cant: the myth of the Democratic Peace", *International Security*, Vol. 19, No. 2, (Fall, 1994), p. 10.

consideration, then it appears analytically plausible to formulate and systematize a number of important concluding observations. First and foremost, as Lefebvre has noted, "intelligence is imperfect."<sup>262</sup>As the Butler report remarks, intelligence has not been perfect, it cannot be perfect, and probably it would remain imperfect.<sup>263</sup> Further, as the history of intelligence and the Yom Kippur case clearly demonstrate, it is not analytically verisimilar to regard variables such as the geographic location of a respective actor, its power, international status or prestige, or its internal politico-ideological make-up as bearing pre-deterministic characters in the occurrence of intelligence failures. Simply put, intelligence failures "are real; they have happened and they will happen again."<sup>264</sup>

This paper has argued that the reason for this are the various, "inherent", interrelated,

analytical barriers, which hinder the analytical accuracy and clarity of the intelligence process. It

is precisely those unavoidable, unalterable "enemies of intelligence" which maintain the

irreducibility of uncertainty as analytical determinant and ensure the inevitability of failures

over time.<sup>265</sup>

From a psychological perspective, failures are unavoidable because the weakest link in intelligence is human nature.<sup>266</sup> In other words, as one Roman proverb stipulates, *"Errare humanum est."* It is human to err precisely because the human cognitive process is

<sup>&</sup>lt;sup>261</sup> Quoted in Carr, E., H. *The Twenty Years' Crisis, 1919-1939* : an introduction to the study of international relation (London : Macmillan, 1939), p. 51.

<sup>&</sup>lt;sup>262</sup> Lefebvre, St. "A Look at Intelligence Analysis", *International Journal of Intelligence and Counter-Intelligence*, vol.17, no. 2, (2004), p. 232.

<sup>&</sup>lt;sup>263</sup>*Review of intelligence on Weapons of Mass Destruction*, a Report of a Committee of Privy Counsellors to the House of Commons, 14<sup>th</sup> July, 2004 (the Butler Report), p. 14.

<sup>&</sup>lt;sup>264</sup> Lowenthal, M., M. "The Burdensome Concept of Intelligence Failure", in *Intelligence: policy and process*, edited by Maurer, A. C., Tunstall, M. D., Keagle, J. M. (Boulder : Westview Press, 1985), p. 43.

<sup>&</sup>lt;sup>265</sup> Betts, R. *Enemies of intelligence: knowledge and power in American national security*, p. 12; Jackson, P. " On uncertainty and the limits of intelligence", p.454.

<sup>&</sup>lt;sup>266</sup> Handel, M. "War, Strategy, and Intelligence(London : Cass, 1989), p. 34.

physiologically limited and constrained,<sup>267</sup> as the human memory, brain and perception even at their best apprehend information in ways that are limited and subjective.<sup>268</sup>

The discipline of psychology has demonstrated that people engage far more often in theorydriven reasoning when comprehending information, which filters the incoming data through the prism of pre-existing beliefs and expectations, and conditions subjectively the reality of the respective person. <sup>269</sup> "Mind-sets", as R. J. Heuer notes, "are neither good, nor bad; they are unavoidable." <sup>270</sup> Moreover, since various biases and flaws, such as confirmation bias and cognitive dissonance, have deep roots in the human cognition, they cannot be changed or abolished. Therefore, as Betts has stated"...cognition cannot be abolished, it is in one sense just another word for model or paradigm, a construct used to simplify reality, which any thinker needs to cope with the complexity."<sup>271</sup> As Nietzsche has written, "The world seems logical to us because we have made it logical."<sup>272</sup> Henceforth, at the core of the inevitability of failure, is "the limits of the human cognition that constrain our ability to anticipate the unexpected or novel, especially if the future fails to match our existing analytical concepts."<sup>273</sup>

From another perspective, "the key role of prediction in human affairs inheres in our stake in the future, for without some degree of cognitive control over the future, we humans could not

<sup>&</sup>lt;sup>267</sup> Betts, R. *Enemies of intelligence: knowledge and power in American national security*, p. 12.

<sup>&</sup>lt;sup>268</sup> Betts, R. *Enemies of intelligence: knowledge and power in American national security*, p. 12; Jackson, P. " On uncertainty and the limits of intelligence", p. 457.

 <sup>&</sup>lt;sup>269</sup> Fischer, B. op. cit., p. 152; Betts, R. *Enemies of intelligence: knowledge and power in American national security*,
 p. 59.; Jackson, P. " On uncertainty and the limits of intelligence", p. 457; Jervis, R. *Perception and Misperception in International Politics* (Princeton, N.J.; Chichester: Princeton University Press, 1976), p. 146.
 <sup>270</sup> Heuer, R. J. *op. cit.*, p. 10.

<sup>&</sup>lt;sup>271</sup> Betts, R. *Enemies of intelligence: knowledge and power in American national security*, p. 46.

<sup>&</sup>lt;sup>272</sup> <u>http://evans-experientialism.freewebspace.com/nietzsche\_wtp03.htm</u>

<sup>&</sup>lt;sup>273</sup> Wirtz, J. " Theory of Surprise", p. 101.

exist as the intelligent creatures we are.<sup>"274</sup> Similarly, George N. Sibley has stated that, "the nature of political action requires an ability to forecast future events.<sup>"275</sup> In the field of intelligence analysis, fostering a prognosis is done by engaging either in structured, systemic or in nonstructured, intuitive approaches. However, due to the fact that intelligence analysis has qualitative nature, and it " deals with an infinite number of variables that are impossible to operationalize because they cannot be adequately quantified or fully collected", a great deal of intelligence analysts would engage in inductive approach, "in which powers of pattern recognition are enhanced, intuition is elevated, and identification of repeated behavior over time and increases or decreases in that behavior are taken into account. <sup>276</sup> Henceforth, "A forecast is a prediction based on knowledge of past behavior."<sup>277</sup>

However, from epistemological perspective, predictions have an inherent analytical fallacy precisely because they are based on past behavior. As Hume problematizes, "In reality, all arguments from experience are founded on the similarity which we discover among natural objects, and by which we are induced to expect effects similar to those which we have found to follow from such objects."<sup>278</sup> *Ergo*, "all inferences from experience are effects of customs, not of reasoning ... It is that principle alone which renders our experience useful to use, and makes

<sup>&</sup>lt;sup>274</sup> Rescher, N. " Prediction", p. 772.

<sup>&</sup>lt;sup>275</sup> Sibley, G. N. "The Indian Nuclear Test: a case study in political hindsight bias", WWS case study, 3/02, *Woodrow Wilson School*, August 7, 2002, p. 3.

<sup>&</sup>lt;sup>276</sup> Folker, R. D. "Intelligence Analysis in Theater Joint Intelligence Centers: An Experiment in Applying Structured Methods", Occasional Paper, no. 7(Washington, D.C.: Joint Military Intelligence College, January, 2000), p. 6; Marrin, St. "Homeland security and the analysis of foreign intelligence", paper written for the *Markle Foundation Task Force on National Security and the Information age*, July 15, 2002, p. 8.

<sup>&</sup>lt;sup>277</sup> Doran, Ch. "Why Forecasts fail: the limits and potential of forecasting", *International Studies Review*, vol. 1, no.2 (1999), p. 11.

<sup>&</sup>lt;sup>278</sup> http://socserv.mcmaster.ca/econ/ugcm/3ll3/hume/enquiry.pdf

us expect, for the future a similar train of events with those which have appeared in the past."<sup>279</sup>

From another perspective, the ever changing variables of time and space also represent a very important obstacle to analytical accuracy and clarity, as "the world is a fluid, unpredictable, dynamic place,"<sup>280</sup> thus, very often both data and policy outpace analysis.<sup>281</sup> "In this sense," as Jackson has remarked," most intelligence information is 'time bound' and it is usefulness depends upon the speed at which it can be transmitted and analyzed.<sup>282</sup> Henceforth, "the most common source of compromise in the quality of intelligence is haste."<sup>283</sup>

What is more, as the Schlesinger report asserted, "In a world of perfect information, there

would be no uncertainties about the present and future intentions, capabilities, and activities of

foreign powers. Information, however, is bound to be imperfect for the most part." 284

Therefore, the inherent ambiguity of information and the excess of information nowadays is

also a key analytical factor which hinders the clarity of the intelligence process.

Politicization as well poses an omnipresent and significant threat to the accuracy of the

intelligence cycle, as the possibility that intelligence information will be distorted by ideological

bias from "top-down" or" bottom-up", is present at every stage of the intelligence process.<sup>285</sup>

Finally, many officials operate with the misperception that if they "shake the system up", "set it

<sup>&</sup>lt;sup>279</sup> <u>http://socserv.mcmaster.ca/econ/ugcm/3ll3/hume/enquiry.pdf</u>

<sup>&</sup>lt;sup>280</sup> Austin, J. "The Psychological Dimension of Intelligence Activities", p. 200.

<sup>&</sup>lt;sup>281</sup> Betts, R. "Analysis, War, and Decision: why intelligence failures are inevitable, p. 125.

<sup>&</sup>lt;sup>282</sup> Jackson, P. " On uncertainty and the limits of intelligence", p. 454; Van Creveld, M. *L Command in War* 

<sup>(</sup>Cambridge, Mass. ; London : Harvard University Press, 1985), pp. 19-21.

<sup>&</sup>lt;sup>283</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 454; Grabo, C.,M. *Anticipating Surprise: analysis for strategic warning* (Lanham: University Press of America, 2004), pp. 109-12; Betts, R. " The Politicization of Intelligence: costs and benefits", p. 63; Jervis, R. "Reports, Politics and Intelligence Failures: the case of Iraq", pp. 14-15.

<sup>&</sup>lt;sup>284</sup> A Review of the Intelligence Community, March 10, 1971, (the Schlesinger report), p. 10.

<sup>&</sup>lt;sup>285</sup> Jackson, P. "On uncertainty and the limits of intelligence", p. 459.

right", they will fix the intelligence system, and other disasters would be prevented. Nevertheless, "This is illusory. Intelligence can be improved marginally, but not radically." 286 The Yom Kippur case clearly corroborates the aforementioned assumptions and the general thesis that, "the route from collection to decision is punctuated" by these endemic barriers,<sup>287</sup> thus, intelligence failures "are rarely a problem of collection, but generally of interpretation." 288 Concretely, despite the excellent intelligence which the Israelis possessed including Syrian and Egyptian war plans and the date when the war was to occur, and in spite of the weak Syrian and Egyptian deception, Israel was caught unprepared. By implementing the aforementioned theoretical framework, the Yom Kippur intelligence failure appears multifactorial in nature. Specifically, the failure was triggered by the inherent and inevitable pathologies of information, which disrupt the individual's ability to perceive reality accurately, the endemic obstacles in the warning-response process, that erode, in the long-run, the victim's receptivity to warnings and obstruct the flow of relevant information, the problematic relationship between senior intelligence officers and senior policy-makers, <sup>289</sup> and the professional devastating interference of DMI Zeira with the intelligence cycle on the eve of the war.<sup>290</sup> Therefore, "The sad truth is that the fault lies more in natural organizational forces, and in the

pure intractability of the problem, than in the skills of spies or statesmen."<sup>291</sup>

<sup>291</sup> Betts, R. "Fixing intelligence", *Foreign Affairs*, vol. 81, (2002), p. 50.

<sup>&</sup>lt;sup>286</sup> Betts, R. *Enemies of intelligence : knowledge and power in American national security*, p. 20.

<sup>&</sup>lt;sup>287</sup> Handel, M. "Intelligence and the Problem of Strategic Surprise", p. 8.

<sup>&</sup>lt;sup>288</sup> Brady, Chr "intelligence failures: plus ca change..." Intelligence and National Security, vol. 8, no. 4, (1993), pp.

<sup>86-87;</sup> Kuhns, W. 'Intelligence Failures: Forecasting and the Lessons of Epistemology', p. 81.

<sup>&</sup>lt;sup>289</sup> Bar-Joseph, U. The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources, p. 2.

<sup>&</sup>lt;sup>290</sup> Bar-Joseph, U. "Intelligence Failures and the Need for Cognitive Closure: the case of Yom Kippur", p. 172.

Simply put," errors are inevitable when intelligence organizations have to tackle difficult issues when the facts are few, intentions obscure and developing, fog thick, and noise levels high."<sup>292</sup>

<sup>&</sup>lt;sup>292</sup> Gentry, J. *lost promise: how CIA analysis misserves the nation: an intelligence assessment* (Lanham, MD: University Press of America, 1993), p. 208.

## Bibliography

## Books and journals used:

Armstrong, W., Leonhart, W., McCaffrey, W., Rotherberg, H. "The Hazard of Single-Outcome Forecasting", *Studies of intelligence*, vol. 28, no. 3, (1984).

Austin, J. "The Psychological Dimension of Intelligence Activities", in *Intelligence: Policy and Process*, edited by Alfred C. Maurer, Marion D. Tunstall, and James M. Keagle. (Boulder: Westview Press, 1985).

Bar-Joseph, U., Levy, J. S. "Conscious Action and Intelligence Failure", *Political Science Quarterly*, Vol. 124, No. 3, (2009).

Bar-Joseph, U. *The Watchman Fell Asleep: The Surprise of Yom Kippur and Its Sources* (New York: State University of New York Press, 2005).

Bar-Joseph, U., Kruglanski, A. W. "Intelligence Failure and Need for Cognitive Closure: On the Psychology of the Yom Kippur Surprise", *Political Psychology*, Vol. 24, No. 1, (March, 2003).

Bar-Joseph, R. "Intelligence Failure and the need for Cognitive Closure: the case of Yom Kippur", in *Paradoxes of Strategic Intelligence: essays in honor of Michael I. Handel*, edited by Betts, R., K., Mahnken, T., G. (Portland, OR; London: Frank Cass, 2003).

Ben- Zvi, Abr." Hindsight and Foresight: a conceptual framework for the analysis of surprise attacks", *World Politics*, vol. 28, (1976).

Ben-Zvi, Abr. "Threat Perception and Surprise: in search of the intervening variables", in *Conflict in World Politics: Advances in the study of crisis, war and peace*, edited by Harvey, F. R., Mor, B., D. (New York: St Martin's press, 1998).

Betts, R. "Analysis, War, and Decision: why intelligence failures are inevitable", *in Intelligence and National Security: the secret world of spies: an anthology,* edited with introductions by Loch K. Johnson, James J. Wirtz. (Oxford: Oxford University Press, 2008).

Betts, R. *Enemies of Intelligence: knowledge and power in American national security* (New York: Columbia University Press, 2007).

Betts, R. "The Politicization of Intelligence: costs and benefits", in *Paradoxes of Strategic Intelligence: essays in honor of Michael I. Handel*, edited by Richard K. Betts and Thomas G. Mahnken. (Portland, OR; London: Frank Cass, 2003). Betts, R. *Surprise Attack: lessons in defense planning* (Washington, DC: Brookings Institute Press, 1982).

Betts, R. "Fixing intelligence", Foreign Affairs, vol. 81, (2002).

Betts, R. "Surprise, Scholasticism, and Strategy: A Review of Ariel Levite's Intelligence and Strategic Surprises", *International Studies Quarterly*, vol. 33, no.3, (September, 1989).

Booth, K., Wheeler, N. *The Security Dilemma: fear, cooperation, and trust in world politics* (Basingstoke: Palgrave Macmillan, 2008).

Booth, K. Strategy and Ethnocentrism (New York: Holmes and Meier, 1979).

Born, H., Johnson, L. "Balancing and operational efficiency and democratic legitimacy", in *Who is Watching the Spies?: establishing intelligence service accountability*, edited by Hans Born, Loch K. Johnson, Ian Leigh (Washington, D.C. : Potomac ; Poole : Chris Lloyd, 2005).

Brady, Chr. "intelligence failures: plus ca change..." *Intelligence and National Security*, vol. 8, no. 4, (1993).

Bruner, J., Minturn, A., L. "Perceptual Identification and Perceptual Organization", *Journal of General Psychology*, vol. 52, (1995).

Bruner, J., Goodnow, J., Austin, G. A Study of Thinking (New York; Wiley, 1956).

Campbell, D. T. "Systematic Error on the Part of Human Links in Communication Systems", *Information and Control*, vol. 1, no. 4, (1958).

Carr, E., H. *The Twenty Years' Crisis, 1919-1939: an introduction to the study of international relation* (London: Macmillan, 1939).

Clausewitz, C. *On War*, edited and translated by Michael Howard and Peter Paret. (Princeton: Princeton University Press, 1989).

Czerwinski, T. Coping with the Bounds: Speculations in Nonlinearity in Military Affairs (Washington: National Defense University, 1998).

David, C. M., Wilderness of Mirrors (New York: Random House, 1980).

Dayan, M. Story of My Life (London: Weidenfeld and Nicolson, 1976).

De Rivera, J. *The Psychological Dimension of Foreign Policy* (Columbus: Charles E Merrill publishing Company, 1968).

Denscombe, M. *The Good Research Guide: for small-scale social research projects* (Maidenhead: Open University Press, 2007).

Doran, Ch. "Why Forecasts Fail: the limits and potential of forecasting", *International Studies Review*, vol. 1, no.2, (1999).

Dupont, A. "Intelligence for the Twenty-First Century", *Intelligence and National Security*, vol. 18, no. 4, (2003).

El-Sadat, A. In Search of Identity (London: Collins, 1978).

Evans, J. T. *Bias in Human Reasoning: Causes and Consequences* (London: Lawrence Erlbaum Associates, 1989).

Fischer, B. "Perception, Intelligence Errors and the Cuban Missile Crisis", in *Intelligence and the Cuban Missile Crisis*, edited by Blight, J and Welch, D. (London; Portland, OR: Frank Cass, 1998).

Fiske, S. Taylor, Sh. Social Cognition (New York : McGraw-Hill, 1991).

Fistinger, L. A Theory of Cognitive Dissonance (London: Tavistock Publications, 1962).

Folker, R. D. "Intelligence Analysis in Theater Joint Intelligence Centers: An Experiment in Applying Structured Methods", Occasional Paper, no. 7, (Washington, D.C.: Joint Military Intelligence College, January, 2000).

Ford, H. P. *CIA and the Vietnam Policymakers: Three episodes, 1962-1968*(Central Intelligence Agency and Center for the Study of Intelligence: Diane Publishing, 1998).

From, Fr. *Perception of Other People,* translated by Kvan, E., Maher, Br. (New York: Columbia University Press, 1971).

Gardiner, K. L. "Dealing with Intelligence-Policy Disconnects," *Studies in Intelligence*, vol. 33, no. 2, (Summer, 1989).

Gates, R. "Guarding against Politicization", *Studies in intelligence: Journal of the American Intelligence Professional*, vol. 36, (Spring, 1997).

Gentry, J. *Lost Promise: How CIA Analysis Misserves the Nation* (Blue Ridge Summit, Pennsylvania, U.S.A.: Univ Pr of Amer, 1993).

Gentry J. "Intelligence analyst/ manager relations at the CIA" *Intelligence and National Security*, vol. 10, no. 4, (1995).

George, L. A. "The Case for Multiple Advocacy in Making Foreign Policy", *The American Political Science Review*, vol.66, no.3, (September, 1972).

Gilman, W. "The Road to the Bomb", New York Times Book Review, January 8, 1967.

Glaser, G. G., Straus, L. A. *The Discovery of Grounded Theory: strategies for Qualitative Research*. (Chicago: Aldine Publishing Company, 1967).

Goldiamong, Isr., Hawkins, W. "Vexierversuch: The log relationship between word-frequency and recognition obtained in the absence of stimulus words." *Journal of Experimental Psychology*, vol. 56, no. 6, (1958).

Grabo, C., M. *Anticipating Surprise: analysis for strategic warning* (Lanham: University Press of America, 2004).

Halberstam, D. The Coldest Winter: American and the Korean War (New York; Hyperion, 2007).

Hall, K., L., "Perceiving and Having a Series of Figures", *Quarterly Journal of Experimental Psychology*, vol. 2.no. 4, (1950).

Handel, M. "Intelligence and the Problem of Strategic Surprise", in *Paradoxes of Strategic Intelligence: essays in honor of Michael I. Handel*, edited by Richard K. Betts and Thomas G. Mahnken. (Portland, OR; London: Frank Cass, 2003).

Handel, M. War, Strategy, and Intelligence (London: Cass, 1989).

Herman, M. "11 September: Legitimizing intelligence?", *International Relations*, vol. 16, no. 2, (August, 2002).

Heuer, R. J. *Psychology of Intelligence Analysis* (Washington, D.C.: Center for the Study of Intelligence, Central Intelligence Agency, 1999).

Higgins, T., Pholes, W., Jones, C. "Category Accessibility and Impression Formation", *Journal of Experimental Social Psychology*, vol. 13, no. 2, (March, 1977).

Hybel, A., R. *The logic of Surprise in International Conflict* (Lexington: Lexington books, 1986).

Ittelson, W. H., Kilpatrick, F. P. "Experiments in Perception", *Scientific American*, vol.185, no.2, (1951).

Jackson, P. "On uncertainty and the limits of intelligence", in *The Oxford Handbook of National Security Intelligence* (Oxford; New York: Oxford University Press, 2010).

Jervis, R. "Reports, Politics and Intelligence Failures: the case of Iraq", *The Journal of Strategic Studies*, Vol. 29, No. 1, (February 2006).

Jervis, R. *The logic of Images in International Relations* (Princeton: Princeton University Press, 1970).

Jervis, R. *Perception and Misperception in International Politics* (Princeton, N.J.; Chichester: Princeton University Press, 1976).

Jervis, R. "What's Wrong with the Intelligence Process?", *International Journal of Intelligence and Counterintelligence*, vo.1, no. 1, (1986).

Johnson. R. *Analytic Culture in the US Intelligence Community: an ethnographic study* (Center for Study of Intelligence, Central Intelligence Agency, Washington, D.C., 2005).

Jones, R., Welsh, J. "Ability Attribution and Impression Formation in a Strategic Game: A limiting case of the primacy effect," *Journal of Personality and Social Psychology*, vol. 20, (1971).

Kahana, E. "Early Warning versus Concept: the case of Yom Kippur 1973", in *Intelligence and National Security: the secret world of spies: an anthology*, edited with introductions by Loch K. Johnson, James J. Wirtz. (Oxford: Oxford University Press, 2008).

Kahn, D. "United States views of Germany and Japan in 1941", in *Knowing One's Enemies: intelligence assessment before the Two World Wars*, edited by Ernest R. May (nceton, N.J.; Guildford: Princeton University Press, 1984).

Karalekas, A. "History of the Central Intelligence Agency", in *The Central Intelligence Agency: History and Documents*, edited by Leary, W. (Tuscaloosa: Univ. of Alabama Press 1984).

Kauppi, M. K. "Counter-Terrorism Analysis", *Defense Intelligence Journal*, vol. 11, no.1, (Winter, 2002).

Kelly, G. A Theory of Personality (New York: Norton, 1968).

Kent, Sh. *Strategic Intelligence for American World Policy* (Princeton: Princeton University Press, 1949).

Kent, Sh. "Estimates and Influence", Studies in Intelligence, vol.12, no.3, (1968).

Klein, G. "Strategies of Decisionmaking." Military Review, vol. 69, no. 5, (May, 1989).

Kuhn, Th. The Structure of Scientific Revolutions (Chicago: University of Chicago Press, 1962).

Kuhns, W. "Intelligence Failures: forecasting and the lessons of Epistemology", in *Paradoxes of Strategic Intelligence: essays in honor of Michael I. Handel*, edited by Richard K. Betts and Thomas G. Mahnken. (Portland, OR; London: Frank Cass, 2003).

Kruglanski, A., Webster, D., M. "Motivated Closing of the Mind: seizing and freezing", *Psychological review*, vol. 102, no. 3, (1996).

Kruglanski, A, Webster, D., M. "Individual Differences in Need for Cognitive Closure", *Journal of Personality and Social Psychology*, vol. 67, no. 6, (1994).

Layne, Chr. "Kant or Cant: the myth of the Democratic Peace", *International Security*, Vol. 19, No. 2, (Fall, 1994).

Laqueur, W. *The Uses and Limits of Intelligence* (New Brunswick, N.J., U.S.A: Transaction Publishers, 1993).

Levite, A. Intelligence and Strategic Surprises (New York: Columbia University Press, 1987).

Lefebvre, St. "A Look at Intelligence Analysis", International Journal of Intelligence and Counter-Intelligence, vol.17, no. 2, (2004).

Lowenthal, M., M. "The Burdensome Concept of Intelligence Failure", in *Intelligence: policy and process*, edited by Maurer, A. C., Tunstall, M. D., Keagle, J. M. (Boulder: Westview Press, 1985).

Lowenthal, M. "Tribal Tongues: intelligence consumer, intelligence producers", *Washington Quarterly*, vol. 15, no. 1, (Winter, 1992).

Lukacs, J. At the End of an Age (New York: Yale University Press, 2002).

Marrin, St. "Homeland Security and the Analysis of Foreign Intelligence", paper written for the *Markle Foundation Task Force on National Security and the Information* age, July 15, 2002.

Ma'oz, M. *Asad: the Sphinx of Damascus: a political biography* (New York: Grove Weidenfeld, 1988).

Meir, G. My Life (New York: Putham, 1975).

Mischel, W. Personality and Assessment (New York: Wiley and Sons, 1968).

Mischel, W. "Toward a Cognitive Social Learning Reconceptualization of Personality", *Psychological review*, vol. 80, (1973).

Osgood, C. E., Tannenbaum, P. "The Principle of Congruity and the Prediction of Attitude Change" *Psychological Review*, vol. 62, (1955).

Polanyi, M. "The Unaccountable Element in Science", in *Knowing and Being: essays*, edited by Polanyi, M., Grene, M. (London: routhledge and Kegan Paul, 1969).

Popper, K. *Conjectures and Refutations: the growth of scientific knowledge* (London: Routledge, 1996).

Rescher, N. *Predicting the Future: an introduction to the theory of forecasting* (New York: State University of New YorkPress, 1998).

Rescher, N. "Prediction", in *The Oxford Companion to Philosophy*, edited by Hondereich, T. ( Oxford: Oxford University Press, 1995).

Rousseau, J. J. A Discourse on Inequality (Harmondsworth: Penguin, 1984).

Russell, B. *History of Western Philosophy, and its Connection with Political and Social Circumstances from the Earliest Times to the Present Day* (London: Allen and Unwin, 1946).

Schelling, Th. *The Strategy of Conflict* (Massachusetts, Harvard University Press, 1980).

Shulsky, A. N., Schmitt, G. J. *Silent Warfare: understanding the world of intelligence* (Washington, D.C.: Brassey's, 2002).

Sibley, G. N. "The Indian Nuclear Test: a case study in political hindsight bias" WWS case study, 3/02, Woodrow Wilson School, August 7, 2002.

Shively, W. *The Craft of Political Research* (Upper Saddle River, N.J; London: Prentice Hall, 1998).

Shlaim, A. "Failures in National Intelligence Estimates: the case of Yom Kippur war", *World Politics*, vol. 28, (1976).

Slater, R. Warrior Statesman : the life of Moshe Dayan (London : Robson, 1991).

Smith, A. "On the Accuracy of the National Intelligence Estimates", *Studies in Intelligence*, vol. 13, no. 3, (1969).

Speer, Al. *Inside the Third Reich: memoirs*, Translated from the German by Winston, R., Winston, C. (London: Weidenfeld & Nicolson, 1970).

Toulmin, St. Foresight and Understanding (New York: Harper and Row, 1961).

Tzu, S. Art of War, translated by John Minford (London; New York : Penguin Books, 2002).

Van Creveld, M. L *Command in War* (Cambridge, Mass. ; London : Harvard University Press, 1985).

Waltz, K. N. *Man, the State, and War: a theoretical analysis* (New York: Columbia University Press, 1959).

Waltz, K. N. Theory of International Politics (London: McGraw-Hill, 1979).

Wirtz, J. "Theory of Surprise", in *Paradoxes of Strategic Intelligence: essays in honor of Michael I. Handel*, edited by Richard K. Betts and Thomas G. Mahnken. (Portland, OR; London: Frank Cass, 2003).

Wirtz, J. The Tet Offensive: intelligence failure in War (Ithaca NY: Cornell University Press, 1991).

Wohlstetter, R. *Pearl Harbor: warning and decision* (Stanford, Calif.: Stanford University Press, 1962).

Wright, E. Generation Kill: living dangerously on the road to Baghdad with the ultra-violent Marines of Bravo Company (Bantam Press: London, 2004).

Reports and officials documents used:

Australian Government, Flood, Ph. Report of the Inquiry into Australian Agencies, Canberra, July, 2004, (the Flood Report).

A Review of the Intelligence Community, March 10<sup>th</sup>, 1971, (the Schlesinger Report).

Devlin, J. F., Jervis, R. "Analysis of NFAC's Performance on Iran's Domestic Crisis, Mid-1977– November 1978", declassified as CIA-RDP86B00269R001100110003-4, June 15<sup>th</sup>, 1979.

Katter, R. V., Montgomery, C., A., Thompson, J., R. "Human processes in intelligence analysis: phase 1 overview" Research Report 1237 (Woodland Hills, CA: Operating Systems Inc. December, 1979).

Report to the President of the United States, The Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction, March 31, 2005.

*Review of intelligence on Weapons of Mass Destruction*, a Report of a Committee of Privy Counsellors to the House of Commons, 14<sup>th</sup> July, 2004 (the Butler Report).

The Silberman-Robb Commission, "WMD intelligence failure", in *Intelligence and national security: the secret world of spies: an anthology*, edited with introductions by Loch K. Johnson, James J. Wirtz. (Oxford: Oxford University Press, 2008).

US Senate, Select Committee to Study Governmental Operation with respect to Intelligence activities, *Final Report, book 1: Foreign and Military intelligence*, 94<sup>th</sup> Congress, 2<sup>nd</sup> Sess. 1976.

Web sites:

Hume, D. An Enquiry Concerning Human Understanding:

http://socserv.mcmaster.ca/econ/ugcm/3ll3/hume/enquiry.pdf (accessed on the 27th of August, 2012).

"Iraq's Continuing Programs for Weapons of Mass Destruction", National Intelligence Estimate, October,2002, declassified on July 18, 2003:

http://www.fas.org/irp/cia/product/iraq-wmd-nie.pdf (accessed on the 27th of August, 2012).

Payne, Q. The History of US involvement in the Vietnam War, May 7, 2009:

http://www.helium.com/items/1441471-the-history-of-us-involvement-in-the-vietnam-war (accessed on the 11th of August, 2012).

Nietzsche, F., W. *The will to power*, Book Three, Principles of new evaluation:

http://evans-experientialism.freewebspace.com/nietzsche\_wtp03.htm(accessed on the 27th of August, 2012).

Khalsa, S., K. "System and method for proving terrorism intelligence indications and warning "

http://www.sumobrain.com/patents/wipo/System-method-providing-terrorismintelligence/WO2008002332.html (accessed on the 27th of August, 2012).