

Deeply Cultivating Perception, Depicting Innovation: A Review of the Postprint of *Theory of Intelligence Perception*

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Abstract

[Purpose/Significance] This paper introduces and reviews the monograph “Intelligence Perception Theory” in intelligence science, providing valuable reference for readers to understand this work.

[Method/Process] Beginning with an introduction to the origin and definition of Intelligence Perception Theory, this study examines the book’s main content, its theoretical and practical value, and its writing style.

[Results/Conclusion] The book integrates both theoretical and practical value, making it suitable for students, intelligence science researchers, and frontline scientific and technical intelligence professionals alike. It can help newcomers avoid common pitfalls while enabling senior researchers to experience the freshness and vitality of intelligence theory and engage with its shining, unique, and novel knowledge points.

Full Text

Deep Cultivation of Awareness, Carving Out the New: A Review of *A Treatise on Intelligence Awareness*

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Abstract

[Purpose/Significance] This review introduces and critiques the monograph *A Treatise on Intelligence Awareness*, providing valuable references for readers to understand the book. [Method/Process] Beginning with the germination and definition of intelligence awareness theory, the review analyzes the

book's main content, theoretical and practical value, and writing style. [**Result/Conclusion**] The book possesses both theoretical and practical value, making it suitable not only for students but also for intelligence science researchers and frontline scientific and technical intelligence workers. It can help newcomers avoid detours and enable senior researchers to experience the freshness and vitality of intelligence theory while touching upon some shining, unique, and brand-new memes of intelligence awareness theory.

Keywords: intelligence awareness; information science; knowledge points; meme; book review

1. Basic Ideas of “Intelligence Awareness Theory”

1.1 The Germination of Intelligence Awareness Theory

Wang Yanfei's team first discovered the existence of the “intelligence awareness” work concept and explicitly proposed using the term “intelligence awareness” in salon discussions and classroom teaching several years ago. Starting in 2018, the concept rapidly spread through a series of published articles on the topic [2-4]. The earliest formal publication by Wang's team on “intelligence awareness theory” appeared in 2018 [2-4], though the thinking actually germinated much earlier in November 2006. At that time, Du Yuanqing proposed “Good intelligence depends on keeping things in mind” at the Yunfo Mountain Experience Exchange Meeting [5], which resonated strongly with colleagues. “Keeping things in mind” means analysts maintain an awakened state of intelligence awareness. Du's team's long-standing practice of “organized ‘keeping in mind’ and monitoring” has become an effective frontline scientific and technical intelligence awareness work model. In June 2009, Du's doctoral dissertation *On Information Environment Design* [6] used the term “sensor” more than 80 times and “perception” more than 40 times.

1.2 Definition of Intelligence Awareness

In Chapter 1 of *A Treatise on Intelligence Awareness*, the authors provide two definitions of intelligence awareness:

First, in the context of intelligence work, intelligence awareness is the cognition, interpretation, and expression of intelligence user needs, intelligence object content, and intelligence task organization that intelligence professionals comprehensively accomplish using various tools during routine information collection, processing, and analysis.

Second, from the perspective of information environment design theorists, intelligence awareness refers to the process by which a subject's memory device forms and modifies intelligence pictures (or images/pictures) within its WIKID (wisdom, intelligence, knowledge, information, and data) environment.

The authors provide these two definitions to facilitate readers' multi-angle and comprehensive understanding. The first definition is macroscopic, suitable for intelligence analysis activities at the institutional and team level, and is quite intuitive. The second definition is microscopic, bearing the strong imprint of the information environment design paradigm (the paradigm formed by the rapid interweaving and fusion of the intelligence source S, intelligence technology T, and intelligence client U paradigms), echoing the book's entire discussion at the level of thinking science.

1.3 An Intriguing Assumption

The book presents a fundamental assumption about intelligence awareness: "People perceive/absorb intelligence one knowledge point (i.e., meme) at a time within a specific WIKID environment." The authors explain that this assumption actually derives from discoveries in practical intelligence work, which significantly narrows the distance between intelligence awareness theory and practice. Grasping this assumption proves very helpful for understanding the book's full implications. *A Treatise on Intelligence Awareness* examines five major tasks of intelligence awareness: perception of intelligence needs, perception of intelligence materials, storage and processing memory, meme [10] planning and depiction, and precise connection of memes with corresponding client needs (see "Section 1.3 Overview of Intelligence Awareness Tasks" in the book). These tasks perfectly unite the two seemingly different definitions of intelligence awareness, as they encompass all intelligence activities at the scientific and technical intelligence institutional and team level—"collecting potentially intelligence-containing information, processing this information, identifying valuable intelligence within the information (and creating high-quality memes easily absorbed by clients), and delivering valuable intelligence (high-quality memes) to clients."

Readers lacking previous intelligence work experience will feel eager to try intelligence awareness practice after reading the book, while those with rich intelligence work experience will feel resonance with the frontline scenarios projected in *A Treatise on Intelligence Awareness*.

2. Main Content of *A Treatise on Intelligence Awareness*

As we know, information science studies the characteristics and laws of intelligence movement [11]. *A Treatise on Intelligence Awareness* is a rare recent work that offers both new intelligence theory and practical handles for intelligence work. Table 1 provides an overview of its main content.

3. Theoretical and Practical Value of *A Treatise on Intelligence Awareness*

The tangled relationship between intelligence theory and practice has long existed in the development history of intelligence work. When theoretical doctrines and practical concerns diverge, disciplinary nihilism and the phenomenon

of term generalization for “intelligence” and “information” increase. Objectively speaking, intelligence theory originates from intelligence practice. Theoretical achievements based on practice not only organize, summarize, and sublimate intelligence operations, intelligence undertakings, and intelligence education from a cognitive perspective but also provide analytical references for subsequent intelligence operations and career planning. The significance of intelligence theory research lies not only in summarizing existing practice but, more importantly, in sharpening intelligence professionals’ expertise through theoretical research to help with future-oriented career planning and business design. History shows that active intelligence practice is always accompanied by flourishing intelligence academic research, with the two serving as key factors that mutually promote or constrain each other.

3.1 Macro Patterns of Intelligence Awareness

Chapter 5 of *A Treatise on Intelligence Awareness* presents a magnificent derivation and discussion of intelligence awareness macro patterns, yielding eight S-T-U fusion patterns (eight quadrants) that provide an important reference framework for future exploration of intelligence awareness theory, as shown in Table 2. Common terms such as “media” and “knowledge management” receive interesting yet easily understandable interpretations under these different patterns. Each quadrant contains rich frontier topics in intelligence theory research worthy of excavation, exploration, and horizon scanning, with no shortage of virgin territory yet to be cultivated.

3.2 Bridging Human and Machine Perception

Another valuable aspect of *A Treatise on Intelligence Awareness* lies in bridging the barrier between human perception and machine perception. The book makes statements that no one has made before, such as: “Feature information extraction is intelligence awareness” and “Make feature information extraction = business operations.” The book grounds intelligence awareness in the operation of “feature information extraction of objects” and in daily intelligence business work—tasks that machines can do (and are doing), humans can do (and are doing), and human-machine combinations can do (and are doing). Moreover, grounding intelligence awareness in “feature information extraction of objects” also helps connect series of information management theories including library science, information science, and archival science.

3.3 Intelligence Awareness Through the Entire Process from “WIKID” to “Intelligence Products”

A Treatise on Intelligence Awareness anchors its discussion in the context of intelligence work tasks, closely integrating exposition and argumentation with intelligence work scenarios and using abundant frontline work materials to vividly illustrate how intelligence theory construction originates from practice and how it helps and guides practice. “Intelligence awareness” runs through the entire

process from “WIKID” to “intelligence products.” The book states: “In team collaborative work, the ideal state of intelligence awareness is: when one person perceives, the entire awareness community synchronously perceives.”

The book introduces the concept of memes as knowledge points in intelligence transmission that are depictable, perceivable, verifiable, and somewhat objective—small intelligence (or fact) pictures that can travel independently (understandable without context) and serve as effective fragments for constructing larger intelligence pictures. People absorb intelligence one meme at a time; at a certain moment, several memes become associated in the mind, and a larger intelligence picture begins to take shape. The frameworks and systematic thinking in the minds of intelligence perceivers (including analysts within intelligence agencies and clients outside them) govern this picture-building process (as the picture becomes increasingly clear).

3.4 Promoting Career Development Ecology through Intelligence Awareness Capability

A Treatise on Intelligence Awareness is another monumental work following the authors' *On Intelligence Research* [12]. If *On Intelligence Research* demonstrated the organizational norms and methodological processes of intelligence research, then *A Treatise on Intelligence Awareness* fully deconstructs the distinctive core capabilities required for intelligence work. The more severe the struggles in economic, scientific, technological, cultural, political, and military domains, and the richer the information means, the more urgent the requirements for building intelligence system capabilities. Intelligence awareness capability is an indispensable core component in the constitution of intelligence system capabilities. Emphasizing and honing perception capabilities in intelligence theory and practice exploration not only helps respond to forward-looking early warning tasks in intelligence work but also provides new means for evaluation and design in intelligence operations and academic management, enabling innovation measurement standards in the intelligence field to break free from the 困扰 of “quantity” versus “quality” relationships and to directly target intelligence business behaviors and processes under the traction of clue discovery needs, thereby fostering a healthy development ecology for intelligence theory and practice.

4. Writing Style of *A Treatise on Intelligence Awareness*

The book combines theoretical and practical value. The earlier students encounter this book, the more detours they can avoid. For intelligence science researchers and frontline scientific and technical intelligence workers, reading this book offers an experience of the freshness and vitality of intelligence theory and contact with some shining, unique, and brand-new memes of intelligence awareness theory.

4.1 Vivid and Expressive

The writing style differs from typical intelligence theory books—it is relatively vivid and expressive, often lacking the soporific theoretical tone when discussing theoretical issues. The authors invite readers to observe four scenarios of “client thinking connecting with memes—clients perceiving intelligence.” When describing client needs, they write: “Client needs that have been correctly perceived (or become more accurate through frequent updating) are like a lighthouse light flashing in the minds of all intelligence workers, guiding the collaborative thinking direction of scientific and technical intelligence teams, or like anchors that intelligence workers use to constrain their attention during work.”

Another example: after providing the second definition of intelligence awareness, the authors state: “Intelligence awareness always occurs when ‘the WIKID in the information environment and the WIKID in the subject’s memory device mutually activate and organically fuse.’ For instance, when you first hear about ‘carbon peak and carbon neutrality’ and feel confused, you quickly search Baidu for ‘carbon peak and carbon neutrality,’ and Baidu presents results for you to read, allowing you to establish basic concepts about ‘carbon peak and carbon neutrality’ from scratch (5W2H: what, when, where, who, why, how, how much, etc.).”

Throughout the book, numerous figures, tables, text boxes (containing stories, cases, and explanations), and scenario descriptions appear precisely where readers need clarification.

4.2 Accessible and Profound

In Chapter 2, “2.2.2 Intelligence Source Awareness: Systematically Scanning New Materials,” when explaining how “what appears as data to A may appear as knowledge to B,” the book provides two strings of characters:

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129651U06057A 08050.77400802 .00256405  
00000-0 29678-30 02  
229651 58.5208 31.806700009932 58.7181  
301.4893 16.08191854 02
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The book then asks: Are these two lines data, information, knowledge, intelligence, or wisdom? The answers to these questions will not be spoiled here. *A Treatise on Intelligence Awareness* attempts to liberate intelligence academic exploration from the impractical shackles of scholasticism. Reading Chapter 8, “Methods and Tools of Intelligence Awareness,” readers may even feel the authors are taking them by the hand to actually conduct intelligence awareness and horizon scanning.

In summary, intelligence is an indispensable yet discreetly essential component of important decision-making. Decisions lacking effective intelligence support must endure more uncertainty and risk challenges. Timely and effective forward-looking early warning represents the professional analytical ideal that intel-

Intelligence workers strive to achieve. The authors of *A Treatise on Intelligence Awareness* practice the intelligence work philosophy of “reducing cognitive surprises for decision-makers,” reduce the intelligence mission to “solving the problem of information incompleteness in decision-making processes,” establish the doctrine of intelligence awareness, derive the theoretical tool of “intelligence awareness,” and demonstrate the unique elegance of intelligence science workers quietly building excellence within the forest of academic theories. *A Treatise on Intelligence Awareness* responds to the era’s requirements for developing national scientific and technical intelligence undertakings, opens up a brand-new space for theoretical and practical exploration, properly handles the “virtual versus real” and “universal versus particular” relationship issues facing information science, and provides feasible handles for intelligence research and management.

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Note: Figure translations are in progress. See original paper for figures.

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