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From Linguistic Judgement to Cognitive Estrangement: Evaluative Discourse in Ted Chiang's *Omphalos*

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Abstract

This article analyses Ted Chiang's science fantasy short story "Omphalos" (2019) to explore the ways in which evaluative language through a de-emotionalized and objectified language generates cognitive estrangement effects at the narrative level. Based on Martin and White's (2005) *Appraisal Theory*, this study employs the judgement system, which mainly takes capacity, legitimacy, or propriety as the main criteria, to systematically analyze evaluative discourse in the text, focusing on how the legitimacy of faith and scientific knowledge is constructed and how such constructions influence individual moral and epistemic identity. This article combines Martin and White's linguistic framework with Darko Suvin's (1930–) cognitive estrangement theory to examine the cognitive function of evaluative discourse in science fiction texts, reconfiguring the established value systems of religious belief and scientific cognition. This article employs qualitative literary close reading to analyze how evaluative discourse is constructed through linguistic strategies such as evoked appraisal, framing, contrast, and absence, triggers, and sustains the cognitive estrangement effect defined by Suvin at the linguistic level, and encodes and classifies representative judgement resources, which induce a strong cognitive estrangement by creating ethical uncertainty and cognitive rupture within the text. The article argues that combining evaluative theory with cognitive estrangement theory helps reveal the cognitive estrangement mechanism of his language in Ted Chiang's works and provides an operational analytical path for studying the epistemic faith of science fiction literature from a discourse analysis perspective, thereby reshaping the implied readers' understanding of faith and anthropocentrism.

Keywords: cognitive estrangement, capacity, Judgement, legitimacy, *Omphalos*

Daripada Pertimbangan Linguistik kepada Pengasingan Kognitif: Wacana Evaluatif dalam Omphalos karya Ted Chiang

Abstrak

Artikel ini menganalisa cerpen fantasi sains "Omphalos" (2019) karya Ted Chiang sebagai korpus kajian, dengan tujuan meneroka bagaimana bahasa evaluatif yang dinyahemosikan dan diobjektifkan menghasilkan kesan pengasingan kognitif pada peringkat naratif. Berasaskan Teori Appraisal oleh Martin dan White (2005), kajian ini menggunakan sistem pertimbangan linguistik, yang menekankan kriteria seperti keupayaan (capacity), legitimasi (legitimacy) dan kepatutan (propriety), untuk menganalisis secara sistematik wacana evaluatif dalam

teks, dengan memberi tumpuan kepada bagaimana legitimasi kepercayaan dan pengetahuan saintifik dibina serta bagaimana pembinaan tersebut mempengaruhi identiti moral dan epistemik individu. Kajian ini turut menggabungkan kerangka linguistik Martin dan White dengan teori pengasingan kognitif (cognitive estrangement) oleh Darko Suvin (1930–) untuk meneliti fungsi kognitif wacana evaluatif dalam teks fiksi sains, sekaligus mengkonfigurasi semula sistem nilai sedia ada berkaitan kepercayaan agama dan kognisi saintifik. Artikel ini menggunakan pendekatan bacaan rapat sastera secara kualitatif untuk menganalisa bagaimana wacana evaluatif dibina melalui strategi linguistik seperti appraisal tersirat (evoked appraisal), pemingkaian (framing), kontras dan ketiadaan (absence), yang mencetuskan dan mengekalkan kesan pengasingan kognitif sebagaimana ditakrifkan oleh Suvin dari aspek linguistik. Selain itu, kajian ini mengenalpasti dan mengklasifikasikan sumber-sumber pertimbangan yang representatif, yang mencetuskan pengasingan kognitif yang kuat melalui penciptaan ketidakpastian etika dan keretakan kognitif dalam teks. Artikel ini berhujah bahawa penggabungan teori evaluatif dengan teori pengasingan kognitif membantu menyingkap mekanisme pengasingan kognitif dalam bahasa karya Ted Chiang, serta menyediakan lauan analisis yang operasional untuk mengkaji kepercayaan epistemik dalam kesusasteraan fiksi sains dari perspektif analisis wacana, sekaligus membentuk semula pemahaman pembaca tersirat terhadap iman dan antroposentrisme.

Kata kunci: pengasingan kognitif, keupayaan, Judgement, legitimasi, Omphalos

1. Introduction

Ted Chiang is widely regarded as one of the most intellectually profound writers in contemporary English science fiction, renowned for his highly rational narrative structures, rigorous conceptual insights, and continuous exploration of issues such as faith, science, free will, and cognition. This article argues that Chiang uses thought experiments to inspire implied readers to re-examine their existing knowledge systems, beliefs, and value judgements. Chiang's science fiction story "Omphalos" features creationism that is empirically validated by science and its subsequent collapse. This collapse evokes the implied readers' deep cognitive conflicts between religious faith and scientific truth, and ethical unease. In this sense, the work continues the traditional function of science fiction by relocating the cognitive conflict between religious belief and scientific knowledge to the epistemic question of ethical judgement.

The discussions that are centered around "Omphalos" on the origins of the universe and humanity (Roberts, 2024) and the continuous exploration and understanding of the meaning of life (Berk, 2025), largely focusing on philosophical interpretations for historical tracings, paying relatively little attention to the linguistic mechanisms underlying the estrangement effect in the text. Darko Suvin's theory of cognitive estrangement emphasizes that the core function of science fiction lies in enabling the implied readers to reinterpret the real world through a rationalized mechanism of estrangement (Suvin, 1979). However, this theory offers little specific explanation of the ways in which cognitive estrangement is constructed and transmitted through micro-linguistic discourse judgement; there is a need for another theory to supplement this part of the analysis.

In linguistics, Martin and White's (2005) Appraisal Theory provides a systematic and operational framework for analyzing attitudes, stances, and value positions in texts. Attitude "moves beyond emotion to deal more comprehensively with feelings, including affect, Judgement and appreciation" (Martin & White, 2005, p. 40). The concept of attitude includes three appraisal systems: affect, Judgement, and appreciation. The Judgement system primarily involves ethical appraisal of human behavior, beliefs, and social norms, encompassing dimensions such as capacity, legitimacy and propriety within factual narratives with implicit stances, enabling serious ethical critiques without relying on "inscribed affect" (Martin & White, 2005, p. 73), which serves as an important medium connecting linguistic analysis and ideological criticism, and is particularly applicable to narrative texts that profoundly reshape the value order (Martin & White, 2005, p. 42). The narrative tension in "Omphalos" primarily stems from repeated judgements and redefinitions of faith, science, and the status of humanity through creating ethical judgement failures and value standard misalignments, thereby triggering a continuous state of cognitive instability. There is a question worthy of continuous interrogation of how exactly is cognitive estrangement gradually generated within a relatively calm, restrained, and even objective narrative at the discourse level. Judgement becomes the key mediating

mechanism by which the implied reader is forced to confront, on a rational level, a world that fully overturns existing knowledge, thus achieving the cognitive estrangement emphasized by Suvin. This study not only helps deepen the implied reader's understanding of Chiang's narrative but also helps bridge the long-standing methodological gap between science fiction theory and linguistic discourse analysis.

Based on the aforementioned research background and theoretical overview, this article aims to explore the ways in which evaluative discourse in "Omphalos" generates cognitive estrangement effects at the linguistic level through the Judgement system, by combining micro-discourse analysis of Appraisal Theory with the macro-literary function of cognitive estrangement theory. This article attempts to demonstrate that the ideological shock in Chiang's works largely depends on the novelty triggered by evaluative discourse systematically operating through an evaluative framework. This cross-theoretical integration not only expands the application space of Appraisal Theory in science fiction literature studies, but also provides new possibilities for re-understanding the cognitive function of science fiction literature from a linguistic perspective.

2. Literature Review

2.1 An Overview of Appraisal Theory

Appraisal Theory was first proposed by James R. Martin in the late 20th century, and systematically developed by Martin and Peter R.R. White in their work *The Language of Evaluation: Appraisal in English* (2005), which represents a significant expansion of the study of interpersonal meta-function within Systemic Functional Linguistics (SFL). From an overall framework perspective, "appraisal itself is regionalized as three interacting domains— 'attitude', 'engagement' and 'graduation'" (Martin & White, 2005, p. 35). Specifically, Attitude forms the semantic core of appraisal meaning, involving "emotional reactions, Judgements of behavior and evaluation of things" (Martin & White, 2005, p. 35), that is, the speaker's or narrator's emotional response and value judgements towards the world; "Engagement deals with sourcing attitudes and the play of voices around opinions in discourse" (Martin & White, 2005, p. 35), focusing on the relationship between single and multiple voices in discourse; and "Graduation attends to grading phenomena whereby feelings are amplified and categories blurred" (Martin & White, 2005, p. 35), which is used to modulate the intensity and focus of appraisal meaning. These three appraisal systems, including Attitude, Engagement, and Graduation, operate at the discourse level to account for the ways in which evaluative meanings are linguistically encoded and negotiated in texts.

Within the Appraisal framework, Attitude is one of the three major appraisal systems and is further subdivided into three subsystems: Affect, Judgement, and Appreciation (Martin & White, 2005, p. 35), in which Affect "deals with resources for construing emotional reactions" (Martin & White, 2005, p. 35), primarily involving the direct or indirect expression of emotional states; Appreciation focuses on evaluating a person's behavior, character, and social norms, which "looks at resources for construing the value of things, including natural phenomena and semiosis" (Martin & White, 2005, p. 36); and "Judgement is concerned with resources for assessing behavior according to various normative principles" (Martin & White, 2005, p. 36), which is about ethics and evaluating behavior. Crucially, the evaluative meaning can be both inscribed (explicit) and evoked (implicit) through context, narrative structure, or discourse arrangement, including contrast, framing, causality, and even evaluative absence (Martin & White, 2005, p. 206). Judgement itself is further divided into two main categories: Social Esteem and Social Sanction (Martin & White, 2005, p. 52). Martin & White aver that "Social Esteem tends to be policed in the oral culture" (52), concerning the image and social status of the appraiser in social interactions, focusing on dimensions such as normality, capacity, and tenacity (Martin & White, 2005, p. 52); while "Social Sanction is more often codified in writing" (Martin & White, 2005, p. 52) and often linked to legal, ethical, and moral norms (Martin & White, 2005, p. 52), assessing the veracity and propriety of behavior or stance. The classification of Judgement and its connection with socio-cultural norms is one of the important theoretical contributions of Appraisal Theory. Appraisal Theory is used to interpret the evaluation of social norms and personal behavior in the expression of feelings, emotions, viewpoints, and intersubjective positioning in translation (Tajvidi & Arjani, 2017) and the

analysis of point of view in news and views journalism (White, 2025). This incorporates as well other political, social policy texts, in which the specific operation and standards of the judgement subsystem has a significant influence on linguistic study and interdisciplinary research. For instance, Kesumawati A Bakar et al (2019) applied appraisal theory to analyse the nature of FELDA Youth's attitudes towards the palm oil industry in Malaysia. Therefore, Appraisal Theory is well-positioned in contributing to support a deeper explanation of the cognitive estrangement effect, which is applicable for text analysis in "Omphalos".

2.2 An Overview of Cognitive Estrangement

Darko Suvin's (1930–) theory of cognitive estrangement is widely regarded as one of the core theories for defining science fiction literature, proposed in his writing *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre* (1979). Suvin defines science fiction as "the literature of cognitive estrangement" (Suvin, 1979, p. 4). Conceptually, cognitive estrangement consists of two inseparable elements: estrangement and cognition. Estrangement refers to the text constructing a world different from the implied readers' real experience, temporarily invalidating existing common sense, values, and belief systems, thus breaking down the original understanding of the world, originating from the novum or alternative settings constructed in the text, which differ significantly from the reader's familiar world, causing the reader to experience uncertainty and a sense of difference; while cognition "implies not only a reflecting of but also on reality" (Suvin, 1979, p. 10) and requires that science fiction settings be rational or explainable, meaning they can be understood through logic, scientific principles, or knowledge reasoning, thus avoiding falling into pure fantasy, and means that this estrangement operates through certain rational principles, explainable logic, or systematic assumptions.

Furthermore, the core mechanism of cognitive estrangement lies in the introduction of the novum. Suvin opines that the novum is "a creative, and especially as an aesthetic, category is not to be fully or even centrally explained by such formal aspects as innovation, surprise, reshaping, or estrangement" (Suvin, 1979, p. 80). Essentially, the novum is a holistic mechanism for organizing meaning, guiding cognition, and shaping aesthetic experience within a text, through which the text compels the implied readers to reflect on concepts, or values taken for granted in the real world while understanding the operational logic of the fictional world. Suvin's theory of cognitive estrangement is deeply influenced by Russian formalism and Brecht's theory of defamiliarization, and integrates Marxist epistemology (Suvin, 1979, p. 6).

This theory not only defines the genre characteristics of science fiction but also provides an analytical model for subsequent science fiction criticism. Carl Freedman and others further proposed view based on Suvin's work. Freedman (2000) agreed with Suvin's view on science fiction, but he argued that cognition lies in the cognitive effect—that is, "the attitude of the text itself to the kind of estrangements being performed" (Freedman, 2000, p. 18)—and cognitive estrangement must not only exist but also dominate the text. Overall, Suvin's cognitive estrangement theory provides a comprehensive analytical framework for understanding science fiction literature with logical and rational critique attention.

2.3 Past studies on Ted Chiang's works

Chiang's work has consistently garnered attention in English-language science fiction studies and literary criticism since the 1990s, with scholars generally regarding him as a representative figure of thought-driven science fiction writing. Related research often emphasizes the high tension between scientific settings and philosophical speculation in his works, arguing that his narratives do not center on predictions of future technology, but rather reconstruct humanity's understanding of free will, causality, faith, and cognitive boundaries through hypothetical worlds (James, 2011; Freedman, 2015). Within this research framework, Suvin's theory of cognitive estrangement is often used as a key framework to explain the science fiction aspect of Chiang's works, illustrating the ways in which his texts, through rationalized defamiliarization mechanisms, prompt implied readers to re-examine the

knowledge premises and value structures of the real world (Suvin, 1979). However, such studies are with relatively limited discussion of the specific linguistic implementation of the estrangement effect.

Research related on “Omphalos” primarily focuses on human’s attitude to the relationship between religion and science and the deconstruction of anthropocentrism. Existing research has pointed out that Chiang’s writing is described as an anti-physics literary paradigm by Hennessey (2023). Taking Chiang’s “Seventy-Two Letters” (2002 [2000]) and “Omphalos” (2019) as examples, Hennessey (2023) applied the pedagogical framework “Decoding the Disciplines,” developed by David Pace, arguing that these works can serve as useful pedagogical tools for teaching the history of science and demonstrating that counter-physical fiction like Chiang’s effectively helps train students to overcome obstacles in thinking about alternative scientific epistemologies. Chiang’s story “Omphalos”, “offers some glimpses of the problems and affordances of attempting to integrate dendrochronological time and cosmogonic times” (Roberts, 2024). “Omphalos” explores whether life only has meaning if God exists, which revolves around Dorothea’s faith in God, from her supernaturalism to her existential crisis and nihilism. This exploration also connects to Dorothea’s naturalism: her belief that the meaning of life originates from within herself, and finally to her existentialism that chooses scientific exploration to find meaning in life, thus revealing her continuous exploration and understanding of the meaning of life (Berk, 2025). These studies powerfully reveal the intellectual complexity of “Omphalos”, but their analytical focus is mostly on thematic meaning or worldview construction, with less attention paid on the ways in which narrative language gradually undermines the reader’s cognitive security without relying on strong emotional expression.

In linguistically-oriented research, Chiang’s works have begun to be included in the discussion of cognitive linguistics and discourse analysis, especially in the areas of metaphor, the concept of time, and cognitive frameworks, where some progress has been made. For example, some studies analyze the non-linear temporal narrative in *Story of Your Life*, revealing the manner in which linguistic structure guides implied readers to accept unconventional causal logic and the reconstruction of human cognition (Madureira & Schlangen, 2020; Penz, 2021; Pokrywka 2022). However, compared to the influence of linguistic structures on the perception on time and cognition, the role of Judgement in Chiang’s texts has not been systematically explored. Existing research often assumes his narrative tone to be calm and neutral, but rarely examines how this de-emotional style has a strong impact on ethical and cognitive levels.

In recent years, the application of Appraisal Theory in literary discourse studies has provided a methodological opportunity to re-examine this issue. Martin and White’s (2005) Judgement system emphasizes how language makes ethical evaluations of behavior, beliefs, and social norms, even if such evaluations do not appear in an explicit subjective stance. However, this theoretical approach has not been systematically introduced into the study of Chiang’s works, especially “Omphalos”. This cross-perspective combining judgement theory with cognitive estrangement theory can help explain why “Omphalos”, despite its highly restrained emotional expression, still produces profound and lasting cognitive shocks through linguistic mechanisms.

2.4. Theoretical Framework: Judgement as a Linguistic Pathway to Cognitive Estrangement

This article’s theoretical framework is built upon the concepts of judgement in Martin and White’s (2005) Appraisal Theory and the cognitive estrangement theory proposed by Darko Suvin (1979) in science fiction literature studies. It aims to explain how judgement triggers cognitive estrangement experiences during science fiction narratives, thereby revealing the key role of evaluative discourse in constructing, dismantling, and reconstructing worldview legitimacy. Judgement can be inscribed not only through explicit evaluative vocabulary but also through evoked judgement. It is at this level of implicit evaluation that judgement becomes a crucial linguistic mechanism for stabilizing worldviews and naturalizing belief systems, allowing the analysis of Judgement to account for how estrangement is produced through subtle shifts that the progressive failure and reorganization of Judgement resources in Judgement. Suvin’s science fiction theory is centered around three core concepts, including cognition, estrangement, and novum (Suvin, 1979). By introducing the concept of the novum, implied

readers can create cognitive tension between the familiar and the unfamiliar. Integrating these perspectives, the framework understands language as a discursive interface between Judgement and cognitive estrangement. In this sense, Judgement is not the opposite of cognitive estrangement, but rather its generative condition. By viewing Judgement as a dynamic linguistic process, Suvin's theory of cognitive estrangement is concretized into a textual mechanism that can be captured by the collapse, transfer, and reorganization of values in linguistic analysis. This article's analysis is strictly limited to the textual level, focusing on how evaluative meaning is structured by language, and the combination of the two enables language analysis directly addressing the core theoretical issues of science fiction literature.

3. Methodology

This article employs qualitative discourse analysis and literary close reading to conduct a systematic linguistic analysis of Chiang's "Omphalos". The officially published version of the story was selected as the research text to ensure the authority and stability of the semantic-discursive resources. Based on Martin and White's (2005) Appraisal Theory, the article focuses on using the Judgement system to identify and classify evaluative discourse concerning the legitimacy of faith-based and scientific knowledge, as well as the ethical norms constructed in the text. In the meantime, Darko Suvin's cognitive estrangement theory is incorporated to examine the cognitive function of evaluative language in science fiction narratives. At the operational level, the article first conducts a close reading of the entire text combined with Suvin's three core concepts of cognitive estrangement: cognition, estrangement, and novum, marking all candidate statements that may carry evaluative meaning. This identification for evaluative discourse follows the theoretical definition of Martin and White (2005), using evaluations of capacity, propriety, and related normative values as the primary criterion. For ambiguous statements, Judgements are made in conjunction with the context and narrative function to ensure the contextual sensitivity of the analysis. Subsequently, the identified Judgement instances were categorized by the progress of the plot based on Suvin's cognitive estrangement theory, distinguishing whether they achieved evaluative meaning through explicit expression or evoked appraisal, and their function within the narrative structure was recorded. In the analysis phase, this article does not primarily aim at the quantitative statistics of evaluative resources but focuses on examining how the language of Judgement continuously operates through language strategies such as evoked appraisal (Martin & White, 2005, p. 67), framing (Martin & White, 2005, p. 112), contrast (Martin & White, 2005, p. 224), and absence (Martin & White, 2005, p. 166), thereby constructing a de-emotionalized yet highly standardized evaluative domain based on the stability of Judgement patterns in the text and how the destabilization and reconfiguration of evaluative discourse produce ethical uncertainty and epistemic rupture at the level of reader cognition. The table below presents judgement categories and analytical criteria:

Table 3
Judgement Categories and Analytical Criteria

Judgement Categories	Subcategory	Core Question	Evaluative Focus
Social Esteem	Normality	Is this behavior treated as usual or exceptional?	Worldview legitimacy
	Capacity	Is human understanding framed as capable or limited?	Epistemic authority
	Tenacity	Is commitment to belief sustained or weakened?	Faith perseverance
Social Sanction	Veracity	Is a belief framed as truthful or questionable?	Truth legitimacy
	Propriety	Is an action ethically appropriate or problematic?	Moral legitimacy

3.1 Data Selection

To ensure consistency in theoretical relevance and explanatory validity, this article systematically and reproducibly screened evaluative statements in the text of "Omphalos". The screening process was

based on a comprehensive close reading of the text and incorporated the defining principles of the Judgement system in Martin and White's (2005) Appraisal Theory and the three core concepts of cognitive estrangement theory by Suvin, focusing on how the evaluative discourse related to human behavior, cognitive abilities, and their legitimacy and aligned with cognitive estrangement theory. Cognitive estrangement here functions as an analytically defined effect produced by the destabilization of normative assumptions. Given the low frequency of explicit affective expressions in the text, this article did not use affective density as a screening criterion, to ensure a high degree of fit between the analyzed object and the theoretical framework.

The article limited candidate evaluative statements to three types of narrative paragraphs according to Suvin's theory: paragraphs where Dorothea's worldview is explained, transitional paragraphs where faith and science create tension, and paragraphs where Dorothea reflects on her self-positioning and belief, which helps to avoid misjudging purely factual statements or narrative background descriptions as evaluative instances.

All candidate statements must simultaneously meet the following four screening criteria: whether the judgement points to human understanding or behavioral practices; whether the evaluation involves judgements of ability or legitimacy; whether the judgement is implicitly elicited through evoked appraisal, framing, contrast, or absence; and whether the evaluation can be associated with cognitive conflict or value reconstruction processes within the text. The selected resources effectively support the analysis of how judgement resources participate in the construction of cognitive estrangement, thus ensuring that the research conclusions stem from systematic evaluation practices within the text.

Through cross-screening using these multiple criteria, the final analytical statements retained in this article are 18–20 candidate statements that meet the judgement criteria. After this initial selection, the article further checks the analytical resources to ensure the explanatory and theoretical focus, forming an analytical system with complementary internal functions and repeatedly identifiable judgement patterns, thereby supporting systematic argumentation as follows. First, it prioritizes retaining statements that clearly reflect subcategories of judgement, such as capacity, legitimacy, and propriety, avoids repetitive statements of the same subcategory, and ensures representative statements across different evaluation dimensions. Second, it prioritizes implicit judgements achieved through evoked appraisal, framing, contrast, or absence. Third, it retains only statements that explicitly participate in the construction of cognitive conflict, from worldview stability to cognitive tension to value reconstruction, according to the introduction of Suvin's theory. The table below presents judgement categories and analytical criteria:

Table 3.1
Criteria for Candidate Sentence Selection

	Criterion	Analytical Function
Q1	Does the statement evaluate human behavior or understanding?	Identifies Judgement relevance
Q2	Is capacity, legitimacy, or authority involved in this statement?	Narrows to Judgement focus
Q3	Is judgement evoked through framing, contrast, or absence in this statement?	Prioritizes evoked Judgement
Q4	Does this statement contribute to or sustain cognitive estrangement?	Links to Suvin's theory

4. Results and Discussion

4.1 Worldview Legitimization Phase: Judgement as a Stabilizing Resource

Through literary close reading of the story and a grasp of cognitive estrangement theory, this article roughly identifies the dense areas where judgements emerge in the story, mainly concentrated in three narrative phases through a strategy of framing: worldview legitimization, cognitive tension and the collapse of Legitimacy, and value reconstitution. In the early stages of the narrative, a series of judgemental resources centered on capacity, normality, and propriety underpin Dorothea's confidence in the coherence of divine intention and scientific evidence and constructs a highly stable and self-consistent cognitive framework. This strategy of early narrative framing functions to stabilize Dorothea's worldview prior to their disruption by the subsequent assumptions. As the statement goes, "Without the growth-ring chronology, we would have no way of knowing when those primordial humans appeared; their bodies tell us that humanity was created all over the world, but the tree sections tell us exactly when it happened" (Chiang, 2019, p. 240), explicitly frames human cognitive ability as scientific practice relying on empirical evidence. This judgement does not explicitly label itself as "correct" or "incorrect," but rather implicitly affirms humanity's ability to produce knowledge using natural evidence through conditional restrictions on "knowing," thus constituting a judgement of ability that has been naturalized.

Similarly, the statement, "The world we see around us cannot be infinitely old, so it must have had a beginning, and it's only logical that when we look closely enough, we discover confirmation of that beginning" (Chiang, 2019, p. 241), legitimizes the understanding of the origin of the world as a result of rational inference through the language of logical necessity. The judgement here is directed at universally accepted mode of understanding, achieving consistency between belief and reason at the linguistic level. The function of Judgement at this stage is not to create disagreement, but to stabilize a worldview through the framing of logic and evidence. This belief is further reinforced, as the sentence depicts that trees "without growth rings and men without navels attest to our reasoning" (Chiang, 2019, p. 241). This sentence, by juxtaposing atypical natural scientific discovery with human reasoning, makes reasoning itself an object that can be supported by tangible evidence, through which constitutes a typical evoked judgement which does not appear explicitly, but is naturally evoked within the discourse structure, and affirms humanity's ability to understand the natural world. Nazor Illahi et al (2023) in an ecofeminist semiotics analysis looked at the tree as a sign in order to unearth meaning in folktale revision (p.119) but that tree within the context of Chiang's work provides a deeper understanding of belief systems.

Furthermore, the institutional legitimacy judgement is reflected in the statement, "Any and all recovered relics became part of the collections of the university's museums, so there should be no primordial abalone shells in the hands of private collectors" (Chiang, 2019, pp. 247-248). The description of academic institutions' collection practices means that judgement here is not directed at individuals, but rather, through institutional framing, entrusts the authority of knowledge production and preservation to the scientific community, where the legitimacy of the scientific system is a given premise, thereby establishing a seemingly stable epistemic order of belief as both rational and ethically justified, showing how judgement initially functions as a stabilizing mechanism that naturalizes a theologically grounded cosmology. The judgement functions as a cognitive norm that aligns Dorothea and the implied readers, providing a solid background for subsequent conflicts.

4.2 Cognitive Tension and the Collapse of Legitimacy: Judgement in Crisis

However, as previously authoritative interpretive positions of scientific evidence render untenable, Dorothea produces a form of estrangement grounded in epistemic uncertainty, led by the failure of evaluative norms from the introduction of novum rather than affective shock, and her judgement resources progressively lose their veracity and propriety, realized through evoked judgement that presents evidence, logical necessity, or causal reasoning. As Chiang writes, "When people read it [the article that's about to be published], a lot of them will lose their faith" (Chiang, 2019, p. 254). This

evaluative clause, through the strategy of contrast with the expected judgement, which is between belief and evidence, past certainty and present doubt, or divine intention and human interpretation, foreshadows the social diffusion of the consequences of judgement. Here, Dorothea's judgement doesn't directly evaluate the value of her existing faith, but rather links knowledge production with the collapse of values through the prediction of "losing her faith," making the judgement potentially destructive.

In the statement, "As I stared at the page, I tried to come up with an alternate explanation, but couldn't think of any" (Chiang, 2019, pp. 260–261), her judgement here is achieved through the strategy of absence, that is, the lack of moral condemnation, emotional reaction, or authoritative resolution. The narrative doesn't directly declare the impossibility of explanation but rather presents the failure of explanatory ability and creates an evaluative vacuum, in which it marks the first time that previously considered reliable cognitive ability has become incredible in the text.

A similar legitimacy crisis is also reflected in Dorothea's statement, "I wanted to recommend that it be rejected, but I couldn't find any grounds for doing so" (Chiang, 2019, p. 261). Here, the core basis for institutional judgement, the normative "grounds," is absent, rendering scientific institutions unable to effectively adjudicate new knowledge, ultimately pointing to the subjective judgement of Dorothea herself. Dorothea says, "The problem for me as a secular scientist is that my faith has always been, first and foremost, shaped by the evidence" (Chiang, 2019, p. 265). Therefore, the focus of judgement shifts from external objects to Dorothea's own belief structure; the premises upon which she understands the world are dismantled, which is the key condition for the generation of cognitive estrangement.

4.3 Value Reconstitution: Judgement Reconfigured Rather than Rejected

In this stage, Dorothea's judgement is a human responsibility rather than a divinely assigned role, foregrounds human capacity and agency, and enables a redefinition of subjectivity. Cognitive estrangement, as a rearticulated evaluative framework, invites the implied readers to reassess the legitimacy of meaning-making on which beliefs and values are constructed. In the later stage of the narrative, the reorganization of her judgement resources supports a new value structure. As Chiang writes, her normative reflection, "If the evidence doesn't support that premise, then we must ask where our commitment truly lies" (Chiang, 2019, p. 265), makes the object of judgement shift from sacred belief to human choice itself, including redefining the meaning of "proof," just as the statement, "That primordial clamshell that Wilhelmina keeps with her is indeed proof of something: not of God's plans for humanity, but of the existence of miracles" (Chiang, 2019, p. 268), which is a crucial reconstruction of judgement that no longer denies evidence but changes the meaning system supported by the evidence, thus avoiding reducing cognitive conflict to a collapse of faith. In the statement, "the evidence has always been there for us to find: the trees without growth rings, the mummies without navels, the motion of Eridani" (Chiang, 2019, p. 269), the judgement of ability redirecting cognitive responsibility is explicitly returned to the human subject, rather than a transcendental order. This shift is further reinforced in the statement, "We chose to do that, which means we can choose to do otherwise" (Chiang, 2019, p. 269), where judgement begins to affirm human capacity for action and choice, forming a positive tenacity judgement. The evaluative sentence, "What that demonstrates to me is that we as humans are capable of creating meaning for our lives" (Chiang, 2019, p. 269), constitutes one of the most central judgemental statements in the text, explicitly affirming humanity's capacity for meaning production, where judgement re-establishes its subjective position that is no longer predicated on anthropocentrism. Ultimately, the evaluative discourse, "This search [for how the universe operates] is my purpose; not because you chose it for me, Lord, but because I chose it for myself" (Chiang, 2019, p. 269), reveals that the source of legitimacy shifts from divine will to the subjective choice itself, and not only responds to the void brought about by cognitive estrangement but also provides a linguistic foothold for a new value order, thus completing the ethical restructuring of judgement. The above three-stage analysis reveals that the Judgement in "Omphalos" is not a static evaluative resource, but rather undergoes a dynamic process of stabilization, failure, and reorganization as the narrative unfolds. It is precisely in this process that the judgement guides the implied readers, to gradually detach from existing cognitive framework to a new understanding structure.

5. Conclusion

This article has examined “Omphalos” through the combined lens of Martin and White’s (2005) Judgement system within Appraisal Theory and Darko Suvin’s theory of cognitive estrangement and argues that evaluative discourse constitutes a central mechanism of the novum that Suvin defined through which the text negotiates belief, legitimacy, and human subjectivity to realize the evaluative meaning.

By tracing the dynamic reconfiguration of Judgement resources across three narrative phases – worldview legitimization, cognitive tension and the collapse of Legitimacy, and value reconstitution – this article has shown that Judgement is a mutable linguistic structure whose stability and breakdown directly shape the implied readers’ cognitive orientation in “Omphalos” and that this cognitive estrangement is linguistically sustained through the gradual failure and subtle shifts in judgemental alignment as well as the subsequent reorganization of Judgement meanings as a process of evaluative recalibration rather than through dramatic affective cues of explicit emotional expression. This evaluative approach recurs throughout the text, forming a stable judgement pattern and providing linguistic evidence for understanding the story’s cognitive effects. In “Omphalos”, Judgement resources are primarily achieved through evoked appraisal. Its evaluative meaning is often embedded within the narrative framework, contrastive structures, and the absence of values, allowing the text to maintain a superficially objective and rational narrative stance while subtly reshaping the value relationship between faith and science.

This article prioritizes literary close reading and the theoretically motivated selection of evaluative instances, which foregrounds qualitative analysis over quantitative frequency counts to reflect the narrative-dependent and context-sensitive nature of judgement meanings, particularly in texts where judgement is predominantly evoked rather than inscribed, and systematically integrated into literary interpretation.

These findings invite a broader reconsideration of how appraisal resources function as a crucial field between linguistic evaluation and speculative cognition within science fiction narratives, which may be extended beyond “Omphalos” to other works of contemporary science fiction, and how this judgement-based approach may be applied to other works by Chiang or to science fiction more broadly, particularly narratives that engage with religion, science, and posthuman ethics. By attending to how evaluative meanings are linguistically orchestrated, scholars may further illuminate the ways in which science fiction short stories reshape not only what implied readers think about the world, but how they evaluate their place within it. This research also shows that approaching science fiction literature from a linguistic perspective not only helps to refine the operational mechanisms of cognitive estrangement but also provides an operational analytical paradigm for interdisciplinary research on the intellectual effects of science fiction texts.

References

- A. Bakar, K. Stapa, S. H, et al (2019). “Pemuda zaman kini sangat memilih kerja”: An Appraisal Analysis of FELDA Youth’s Attitudes Towards the Palm Oil Industry”. *Jurnal Linguistik* 23 (2), 21-40.
- Berk, K. (2025). Death, God, and Meaning in Ted Chiang’s Stories. In *The Philosophy of Ted Chiang* (pp. 21-28). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-81662-8_3
- Chiang, T. (2016). *Stories of your life and others*. Vintage Books.
- Chiang, T. (2019). *Exhalation: Stories*. Alfred A. Knopf.
- Freedman, C. (2000). *Critical theory and science fiction*. Wesleyan University Press.
- Hennessey, J. L. (2023). Ted Chiang’s Counter-physical Stories and History of Science Pedagogy. In *History and Speculative Fiction* (pp. 151-168). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-42235-5_8
- Madureira, B., & Schlangen, D. (2020). Incremental processing in the age of non-incremental encoders: An empirical assessment of bidirectional models for incremental NLU. In *Proceedings of the 2020*

- Conference on Empirical Methods in Natural Language Processing (EMNLP)* (pp. 357–374). Association for Computational Linguistics. <https://doi.org/10.18653/v1/2020.emnlp-main.26>
- Martin, J. R., & White, P. R. R. (2005). *The language of evaluation: Appraisal in English*. Palgrave Macmillan.
- Nazor Illahi, N. S & Harris Satkunanathan, A. (2023). Nature Symbolism in *Bawang Merah, Bawang Putih* Revisions: An EcoFeminist Semiotics Analysis. *Jurnal Linguistik* 27(2), 119-128.
- Penz, H. (2021). Adapting to changing concepts of time. In D. N. Silva & J. L. Mey (Eds.), *The pragmatics of adaptability* (pp. 55–74). John Benjamins.
- Pokrywka, R. (2022). Three visions of humanity in extraterrestrial ecosystems: Klein, Kosik, Skåden. *Porównania*, 31(1), 133–142.
- Roberts, B. R. (2024). On Dates, Calendars, and Time Lags in Trans-nationalist Thought. *Journal of Transnational American Studies*, 15(2). <https://doi.org/10.5070/T815264465>
- Suvin, D. (1979). *Metamorphoses of science fiction: On the poetics and history of a literary genre*. Yale University Press.
- Tajvidi, G. R., & Arjani, S. H. (2017). Appraisal theory in translation studies: An introduction and review of studies of evaluation in translation. *Journal of Research in Applied Linguistics*, 8(2), 3-30. <https://doi.org/10.22055/rals.2017.13089>
- White, P. R. (2025). Appraisal theory and the analysis of point of view in news and views journalism—unpacking journalistic “persuasiveness”. *Language & Communication*, 100, 95-107. <https://doi.org/10.1016/j.langcom.2024.11.005>

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