
Dependent Origination and Emptiness in Nāgārjuna's Mūlamadhyamakakārikā (MMK): An Analytical Study

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Abstract

The Mūlamadhyamakakārikā (MMK), attributed to Nāgārjuna, is a foundational text of Madhyamaka philosophy and one of the most influential works of Mahāyāna Buddhism. Through its analysis of dependent origination (pratītyasamutpāda), emptiness (śūnyatā), causal conditions (pratyaya), and the Eight Negations, the MMK articulates a distinctive account of the Middle Way that profoundly shaped later Buddhist thought.

This qualitative study employs historical, textual, and comparative analysis to examine dependent origination in the MMK and its relationship with emptiness and non-arising (anutpāda). It aims to clarify Nāgārjuna's understanding of dependent origination, analyze its relationship with causal conditions and emptiness, and examine the significance of non-arising for Madhyamaka practice and liberation.

The findings reveal three major points. First, Nāgārjuna does not treat dependent origination merely as a theory of causal production; rather, it functions as a philosophical method for revealing the absence of inherent existence (niḥsvabhāva) in all phenomena. Comparative analysis of early Buddhist, Mahāyāna, and Tibetan Madhyamaka interpretations further highlights the distinctive Madhyamaka use of dependent origination.

Second, the relationship among dependent origination, causal conditions, and emptiness shows that emptiness is not the negation of phenomena but the recognition that phenomena arise only in dependence on conditions. Dependent origination and emptiness therefore express the Middle Way beyond the extremes of inherent existence and nihilistic nonexistence.

Third, the analysis indicates that non-arising (anutpāda) and non-ceasing (anirodha) do not deny conventional appearance; rather, they deny arising and ceasing through an independent essence. This insight provides a philosophical basis for overcoming reified views and cultivating liberative wisdom in Madhyamaka.

Keywords: Dependent origination; Emptiness; Causal conditions; Non-arising; Madhyamaka; Mūlamadhyamakakārikā

Introduction

Dependent origination (*pratītyasamutpāda*) is one of the fundamental teachings in Buddhist philosophy and plays a central role in explaining the arising and cessation of phenomena. In early Buddhism, dependent origination was primarily presented as an explanation of the conditioned process through which suffering arises and ceases. The twelve links of dependent origination describe the relationship between ignorance, karmic formations, consciousness, and the continuation of the cycle of birth and death. However, dependent origination is not limited to a description of rebirth; it also provides a philosophical framework for understanding the conditional nature of human experience and the possibility of liberation through wisdom and insight (Ellis, 2021).

With the development of Mahāyāna Buddhism, dependent origination came to be interpreted in increasingly philosophical terms, especially in relation to emptiness (*śūnyatā*). Because phenomena arise dependently, they cannot possess an independent and permanent essence. Later Buddhist traditions further elaborated the implications of conditionality and interdependence for understanding reality, causality, and liberation (Anālayo, 2021).

Among the various philosophical interpretations of dependent origination, Nāgārjuna's Mūlamadhyamakakārikā (MMK) occupies a particularly significant position. Nāgārjuna develops the Madhyamaka philosophy of the Middle Way through systematic analysis of dependent origination, emptiness, and causal conditions. The MMK rejects both independently existing entities and nihilistic nonexistence, instead presenting phenomena as conventionally existent through dependent conditions (Garfield, 1995; Westerhoff, 2009).

Previous studies of the MMK have extensively examined Nāgārjuna's theory of emptiness, Madhyamaka reasoning, and the relationship between conventional and ultimate truth. Ames (1994), Eckel (1987), Garfield (1995), and Westerhoff (2009) have made important contributions to interpreting Nāgārjuna's arguments. However, the integrated relationship among dependent origination, causal conditions, emptiness, and non-arising (*anutpāda*), particularly in relation to liberation, warrants further systematic analysis.

This study therefore seeks to address this gap by examining dependent origination in the MMK from the perspectives of textual analysis, historical

development, and comparative philosophical interpretation. In particular, this study investigates how Nāgārjuna connects dependent origination with emptiness and how this relationship contributes to understanding the Madhyamaka path toward liberation.

Research Objectives

1. To examine dependent origination in the Mūlamadhyamakakārikā (MMK).
2. To analyze the relationship among dependent origination, causal conditions (pratyaya), and emptiness (śūnyatā) in the MMK.
3. To examine the relationship between dependent origination and emptiness and its significance for non-arising (anutpāda), the Middle Way, and liberation.

The significance of this research lies in its contribution to Madhyamaka studies by clarifying the philosophical relationship between dependent origination and emptiness. Furthermore, this study provides a deeper understanding of how *Nāgārjuna's* analysis of causal conditions functions not only as a philosophical argument but also as a framework for Buddhist practice and the cultivation of wisdom.

Literature Review

Scholarship on Nāgārjuna's Mūlamadhyamakakārikā (MMK) has concentrated principally on emptiness (śūnyatā), dependent origination (pratītyasamutpāda), causality, and the Madhyamaka rejection of intrinsic existence (svabhāva). These studies provide the philosophical foundation for the present research, but they also reveal a need for a more integrated account of how dependent origination, causal conditions (pratyaya), emptiness, and non-arising (anutpāda) function together within Nāgārjuna's thought.

Garfield (1995) provides one of the most influential modern philosophical interpretations of the MMK. His reading emphasizes that emptiness should not be interpreted as nihilism or the denial of conventional phenomena. Rather, phenomena are empty precisely because they arise dependently and therefore lack independent, self-established existence. This interpretation is particularly important for understanding MMK 24.18, where dependent origination, emptiness, dependent designation, and the Middle Way are presented as conceptually inseparable.

Westerhoff (2009) further develops this interpretation by examining Nāgārjuna's critique of *svabhāva*. He argues that phenomena cannot possess intrinsic existence because their identity, causal efficacy, and conceptual determination depend upon conditions and relations. Dependent origination therefore functions not merely as a description of causal succession but as a philosophical argument against metaphysical independence. This perspective provides an important basis for examining how causal dependence supports the Madhyamaka doctrine of emptiness.

The analysis of causal conditions is further illuminated by Ames (1994), whose study of Bhāvaviveka's *Prajñāpradīpa* examines the interpretation of the MMK's opening chapter on conditions (*pratyaya*). The study demonstrates how Madhyamaka reasoning scrutinizes causal relations in order to challenge assumptions that causes, conditions, and effects possess fixed inherent natures. Such analysis is relevant to the present study because the critique of causal production forms an important step toward understanding non-arising.

Historical studies also clarify the development of dependent origination prior to and beyond Madhyamaka. Shulman (2008) challenges overly simplified interpretations of early dependent origination as merely a universal doctrine of causality and emphasizes its close relationship with the arising and cessation of suffering. Anālayo (2021) similarly distinguishes dependent arising from broader modern notions of interdependence, showing the importance of maintaining doctrinal precision when comparing early Buddhist and later Mahāyāna interpretations. These studies indicate that Nāgārjuna's interpretation develops from earlier Buddhist conditionality while giving it a distinctive ontological and epistemological function.

Eckel (1987), through his study of Bhāvaviveka, demonstrates how later Madhyamaka thinkers employed systematic reasoning and philosophical argument to interpret reality without reifying either conventional or ultimate truth. Ellis (2021), although approaching dependent origination from a contemporary cognitive perspective, also illustrates the continuing interpretive significance of conditionality for understanding the formation of human experience.

The literature establishes three important points. First, dependent origination is central to Buddhist accounts of conditionality and suffering (Anālayo, 2021; Shulman, 2008). Second, in Madhyamaka it becomes inseparable from the critique of intrinsic existence and the doctrine of emptiness

(Garfield, 1995; Westerhoff, 2009). Third, causal analysis serves as an important philosophical method for exposing reified assumptions concerning arising, existence, and identity (Ames, 1994; Eckel, 1987). However, the relationship among dependent origination, causal conditions, emptiness, and non-arising has often been treated in separate discussions. The present study therefore synthesizes these concepts as an interconnected framework for explaining Nāgārjuna's Middle Way and its relevance to wisdom and liberation.

Conceptual Framework

The conceptual framework of this research is developed based on the three research objectives and follows an input–process–output model. The framework aims to examine how *Nāgārjuna's* analysis of dependent origination in the *Mūlamadhyamakakārikā* (MMK) provides a philosophical foundation for understanding emptiness and the realization of non-arising.

The input of this research consists of primary Buddhist texts, particularly the *Mūlamadhyamakakārikā* and related *Madhyamaka* literature, together with secondary scholarly studies on dependent origination, emptiness, and causal conditions. These sources provide the theoretical foundation for examining *Nāgārjuna's* philosophical analysis.

The research process is divided into three analytical stages corresponding to the research objectives:

First, the study examines the concept of dependent origination in the MMK through textual and philosophical analysis. This stage investigates how *Nāgārjuna* interprets dependent origination beyond a simple theory of causation and connects it with the absence of inherent existence (*niḥsvabhāva*).

Second, the research analyzes the relationship between dependent origination, causal conditions (*pratyaya*), and emptiness. This stage explores how the arising of phenomena through conditions demonstrates their empty nature and reflects the *Madhyamaka* understanding of the Middle Way.

Third, the study compares the concepts of dependent origination and emptiness in the MMK in order to clarify the significance of non-arising (*anutpāda*) and non-ceasing. This stage examines how the realization of dependent origination and emptiness contributes to the understanding of reality and liberation.

The expected output of this research is a systematic interpretation of the relationship between dependent origination, emptiness, and non-arising in *Madhyamaka* philosophy. This framework contributes to a deeper understanding of *Nāgārjuna's* philosophical method and demonstrates how causal analysis functions as a foundation for the cultivation of wisdom and the Buddhist path toward liberation.

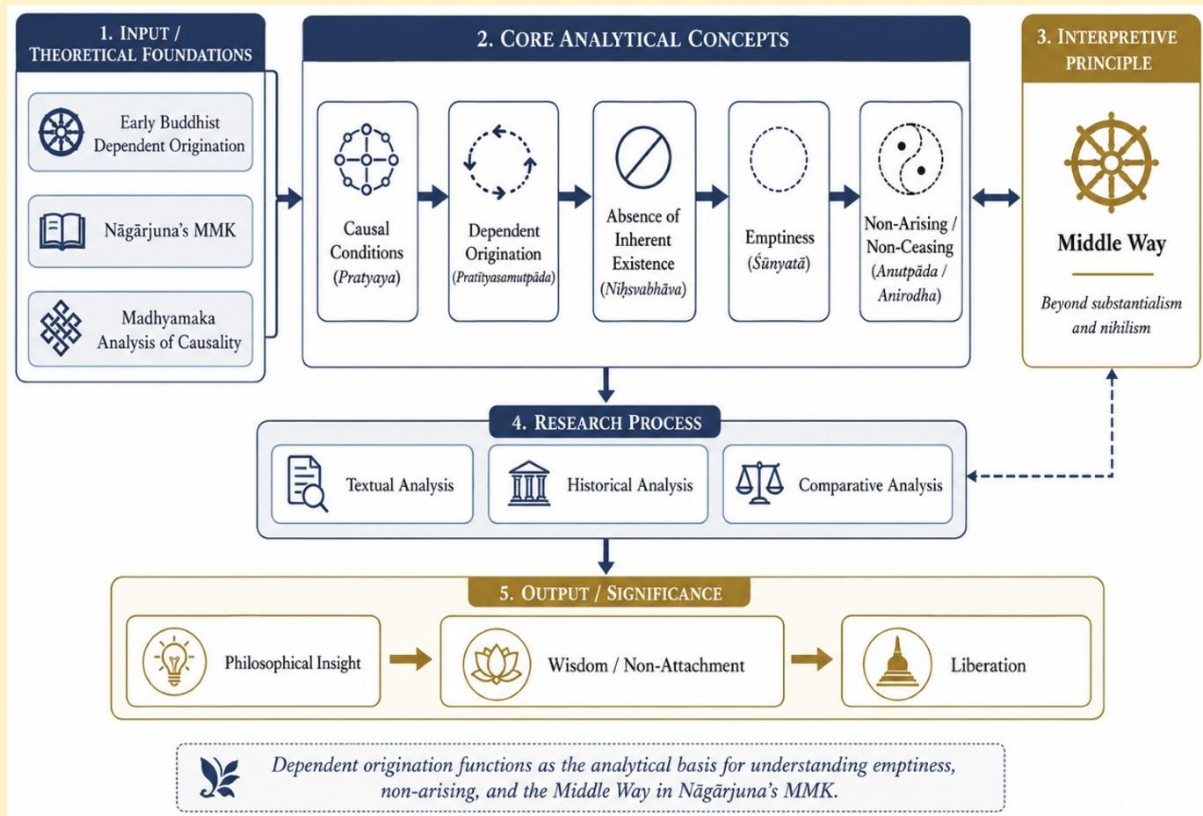


Figure 1. The conceptual framework

Research Methodology

This study adopts a qualitative research design based on textual, historical, and comparative analysis. Because the research concerns philosophical interpretation of the *Mūlamadhyamakakārikā* (MMK), these methods are appropriate for examining textual arguments, doctrinal concepts, and their development across Buddhist traditions. The analysis proceeds in three stages corresponding to the research objectives.

Step 1: Textual Analysis of Dependent Origination in the MMK

The first stage applies close textual analysis to dependent origination (*pratītyasamutpāda*) in the MMK and related Madhyamaka literature. Particular attention is given to passages concerning causal conditions (*pratyaya*), emptiness (*śūnyatā*), and the rejection of inherent existence (*svabhāva/niḥsvabhāva*),

including the MMK's analysis of causation and its identification of dependent origination with emptiness (Garfield, 1995).

Step 2: Philosophical Analysis of the Relationship between Dependent Origination and Emptiness

The second stage analyzes the philosophical relationship between dependent origination and emptiness. Nāgārjuna's arguments are examined to clarify how dependence on causes, conditions, concepts, and relations undermines claims to intrinsic existence and how this relationship supports the Madhyamaka understanding of the Middle Way (Garfield, 1995; Westerhoff, 2009).

Step 3: Comparative Analysis of Dependent Origination and Emptiness

The third stage employs comparative analysis to situate Nāgārjuna's account alongside early Buddhist, Mahāyāna, and Tibetan Madhyamaka interpretations. The comparison identifies distinctive emphases in Madhyamaka reasoning and clarifies the significance of non-arising (*anutpāda*), non-ceasing (*anirodha*), and liberation.

Through these three methodological steps, this research provides a systematic analysis of the relationship between dependent origination, causal conditions, emptiness, and liberation. The methodology enables a deeper understanding of Nāgārjuna's philosophical framework and its significance within Buddhist studies.

Research Results

1. Findings on the Concept of Dependent Origination in the *Mūlamadhyamakakārikā* (MMK)

The first objective of this research was to examine the concept of dependent origination (*pratītyasamutpāda*) in the *Mūlamadhyamakakārikā* (MMK). Through textual analysis of the MMK and comparative examination of *Theravāda*, *Mahāyāna*, and Tibetan Buddhist interpretations, this study found that dependent origination has developed from an explanation of conditional arising and cessation into a profound philosophical principle for understanding the nature of reality.

The findings indicate that Nāgārjuna's interpretation of dependent origination in the MMK differs from a merely causal explanation of how phenomena arise. Instead, dependent origination functions as a method of philosophical analysis that reveals the absence of inherent existence (*niḥsvabhāva*). According to Nāgārjuna, because all phenomena arise dependently, they cannot possess an independent and permanent essence.

Therefore, dependent origination becomes the foundation for understanding emptiness (*śūnyatā*) and the Middle Way (Garfield, 1995; Westerhoff, 2009).

The comparative analysis further reveals that different Buddhist traditions emphasize different aspects of dependent origination. Early Buddhist traditions mainly understand dependent origination as the explanation of the conditioned process of suffering and liberation. Mahāyāna Buddhism develops this understanding by emphasizing the relationship between dependent origination and emptiness. Tibetan Madhyamaka further elaborates this relationship through philosophical reasoning, emphasizing that dependent origination demonstrates the lack of intrinsic existence and supports the realization of the Middle Way (Anālayo, 2021; Shulman, 2008; Westerhoff, 2009).

The different interpretations of dependent origination among the three Buddhist traditions are summarized in Table 1.

Table 1. Different Interpretations of Dependent Origination among Buddhist Traditions

Buddhist Tradition	Understanding of Dependent Origination	Main Philosophical Emphasis
Theravāda Buddhism	Dependent origination explains the conditional process through which suffering arises and ceases, particularly through the twelve links (<i>paṭiccasamuppāda</i>).	Conditionality, causation, cessation of suffering
Mahāyāna Buddhism	Dependent origination is understood together with emptiness; because phenomena arise dependently, they lack independent essence.	Relationship between dependent origination and emptiness (<i>śūnyatā</i>)
Tibetan Madhyamaka Buddhism	Dependent origination is used as a philosophical argument demonstrating the absence of inherent existence and establishing the Middle Way.	Logical analysis, emptiness, rejection of extremes

2. Findings on the Relationship between Dependent Origination, Causal Conditions, and Emptiness in the MMK

The second objective of this research was to examine the relationship between dependent origination (*pratītyasamutpāda*), causal conditions (*pratyaya*), and emptiness (*śūnyatā*) in the Mūlamadhyamakakārikā (MMK). Through textual analysis of Nāgārjuna's examination of causal conditions and philosophical analysis of the relationship between dependent arising and emptiness, this study found that dependent origination and emptiness are not separate doctrines but mutually connected principles within Madhyamaka philosophy.

The findings demonstrate that Nāgārjuna’s analysis of causal conditions aims to reveal that phenomena do not arise independently or possess their own inherent nature (*svabhāva*). Since all phenomena arise through dependence upon causes and conditions, they lack permanent and independent existence. Therefore, dependent origination provides the logical foundation for understanding emptiness (Ames, 1994; Garfield, 1995).

Furthermore, this study finds that emptiness should not be interpreted as the denial of phenomena or a form of nihilism. Rather, emptiness represents the recognition that phenomena exist through dependent conditions. In this sense, dependent origination explains the conventional existence of phenomena, while emptiness reveals their ultimate nature. Together, the two concepts represent the Middle Way that avoids both the extremes of eternalism and nihilism (Garfield, 1995; Westerhoff, 2009).

The relationship between dependent origination, causal conditions, and emptiness is summarized in Table 2.

Table 2. The Philosophical Relationship between Dependent Origination, Causal Conditions, and Emptiness in the MMK

Concept	Explanation	Philosophical Significance
Causal Conditions (<i>pratyaya</i>)	Phenomena exist because multiple conditions come together; no single permanent cause exists independently.	Reveals the relational and conditional nature of existence.
Dependent Origination (<i>pratītyasamutpāda</i>)	All phenomena arise through the interaction of causes and conditions.	Demonstrates that phenomena are dependent rather than independent.
Absence of Intrinsic Existence (<i>niḥsvabhāva</i>)	Dependent arising means that phenomena lack an inherent essence because they rely on external and changing conditions.	Provides the logical basis for understanding emptiness.
Emptiness (<i>śūnyatā</i>)	Because phenomena arise dependently, they lack inherent existence (<i>niḥsvabhāva</i>).	Reveals the ultimate nature of phenomena and establishes the Middle Way.
Relationship	Dependent origination explains how phenomena appear; emptiness explains why they lack independent essence. Both concepts function within the framework of the Two Truths and are mutually inseparable.	Together they form Nāgārjuna’s philosophical method for overcoming mistaken views regarding the nature of reality.

3. Findings on the Comparison between Dependent Origination and Emptiness in the *Mūlamadhyamakakārikā*

The third objective of this research was to compare the concepts of dependent origination (*pratītyasamutpāda*) and emptiness (*śūnyatā*) in the *Mūlamadhyamakakārikā* (MMK). Through comparative philosophical analysis of Nāgārjuna's arguments, this study found that dependent origination and emptiness are not two separate teachings, but two interconnected aspects of the same Madhyamaka understanding of reality.

The findings demonstrate that dependent origination explains the conventional functioning of phenomena through causes and conditions, while emptiness reveals that these dependently arisen phenomena lack inherent existence (*niḥsvabhāva*). Therefore, dependent origination provides the logical basis for understanding emptiness, and emptiness reveals the ultimate meaning of dependent origination (Garfield, 1995).

Furthermore, this research found that Nāgārjuna's integration of dependent origination and emptiness establishes the Middle Way (*madhyamā pratipad*) by avoiding the two extremes of eternalism (*śāśvatavāda*) and nihilism (*ucchedavāda*). The realization that phenomena arise dependently but lack independent essence leads to an understanding of non-arising (*anutpāda*) and non-ceasing, which is essential for the cultivation of wisdom and the Buddhist path toward liberation (Garfield, 1995; Westerhoff, 2009).

The comparison between dependent origination and emptiness in the MMK is summarized in Table 3. In Madhyamaka, conventional and ultimate truth are not independent domains; rather, dependent origination and emptiness reveal two inseparable aspects of the same reality.

Table 3. Comparison of Dependent Origination and Emptiness in the MMK

Aspect	Dependent Origination (<i>Pratītyasamutpāda</i>)	Emptiness (<i>Śūnyatā</i>)	Relationship in <i>Madhyamaka</i>
Main Question	How do phenomena arise?	What is the nature of phenomena?	Together they explain the nature of reality.
Analytical Focus	Examines causes and conditions (<i>pratyaya</i>) through which phenomena appear.	Examines the absence of inherent existence (<i>svabhāva</i>).	Causal dependence reveals emptiness.
Level of Explanation	Mainly explains conventional reality (<i>saṃvṛti-satya</i>).	Reveals ultimate understanding (<i>paramārtha-satya</i>)	Two truths are mutually related, not contradictory.

Aspect	Dependent Origination (<i>Pratītyasamutpāda</i>)	Emptiness (<i>Śūnyatā</i>)	Relationship in <i>Madhyamaka</i>
Philosophical Meaning	All phenomena exist dependently and relationally	All phenomena are empty of independent essence.	Dependent origination and emptiness express the Middle Way.
Function in Practice	Helps practitioners understand the conditioned nature of experience.	Helps practitioners overcome attachment to fixed existence.	Together they support wisdom and liberation.

Discussion

The findings of this research demonstrate that dependent origination (*pratītyasamutpāda*) occupies a central position in Nāgārjuna's *Madhyamaka* philosophy. Although dependent origination originated as a fundamental Buddhist teaching explaining the conditional arising and cessation of suffering, the MMK develops a deeper philosophical interpretation by connecting dependent origination with emptiness (*śūnyatā*) and the absence of inherent existence (*niḥsvabhāva*).

The first finding indicates that Nāgārjuna's understanding of dependent origination cannot be reduced to a simple theory of causation. Instead, dependent origination functions as a method of philosophical investigation that reveals the relational and conditioned nature of all phenomena. This interpretation distinguishes *Madhyamaka* from approaches that understand causality as involving independently existing entities or fixed essences (Garfield, 1995; Westerhoff, 2009).

The second finding highlights the inseparable relationship between dependent origination and emptiness. Nāgārjuna does not regard emptiness as a denial of conventional reality; rather, emptiness is understood precisely because phenomena arise dependently. Since phenomena depend upon causes and conditions, they cannot possess independent existence. Therefore, dependent origination and emptiness represent two aspects of the same Middle Way: dependent origination explains the conventional appearance of phenomena, while emptiness reveals their ultimate nature (Garfield, 1995; MMK 24.18).

The third finding demonstrates that integrating dependent origination and emptiness provides the philosophical foundation for understanding non-arising (*anutpāda*) and non-ceasing. In the MMK, non-arising does not imply that phenomena completely disappear or do not appear at all. Instead, it indicates that phenomena do not arise from an independent essence. This understanding enables

practitioners to overcome attachment to fixed views of reality and cultivate wisdom consistent with the Madhyamaka path (Garfield, 1995).

Finally, the findings suggest that Nāgārjuna's causal analysis has a practical as well as philosophical function. By exposing the tendency to treat persons, objects, and experiences as inherently fixed, Madhyamaka reasoning undermines attachment to reified views. In this sense, understanding dependent origination and emptiness contributes to the cultivation of wisdom and non-attachment. The study therefore supports the conclusion that, in the MMK, philosophical analysis and liberative practice are not separate enterprises: insight into dependent and empty phenomena constitutes part of the transformation of view required for liberation.

New Knowledge from the Research

This study contributes new knowledge by synthesizing dependent origination, causal conditions, emptiness, and non-arising as an integrated interpretive sequence within the MMK. Rather than treating dependent origination as only a causal doctrine and emptiness as a separate metaphysical claim, the study shows how analysis of conditionality functions as the argumentative basis for the denial of inherent existence and, consequently, for the Madhyamaka understanding of emptiness (Garfield, 1995; Westerhoff, 2009).

A second contribution is the clarification that dependent origination and emptiness operate at different but inseparable explanatory levels: dependent origination accounts for the conventional functioning of phenomena, while emptiness identifies their lack of intrinsic nature. This relationship avoids both substantialism and nihilism and provides a coherent interpretation of the Middle Way (MMK 24.18; Garfield, 1995).

A third contribution concerns non-arising (anutpāda). The study interprets non-arising not as the denial of conventional appearance but as the denial that phenomena arise through an independent essence. This interpretation connects causal analysis with the transformation of view: insight into dependent and empty phenomena weakens reification and supports wisdom, non-attachment, and liberative practice.

Taken together, these findings provide a four-part analytical framework: *causal conditions* → *dependent origination* → *absence of inherent existence* → *emptiness/non-arising*. This framework clarifies how Nāgārjuna's analysis of causality functions simultaneously as philosophical critique and as a basis for Buddhist wisdom.

Conclusion

This research aimed to examine the concept of dependent origination (*pratītyasamutpāda*) in the *Mūlamadhyamakakārikā* (MMK) and to clarify its philosophical relationship with causal conditions (*pratyaya*), emptiness (*śūnyatā*), and non-arising (*anutpāda*). Through textual, historical, and comparative analysis, this study investigated how *Nāgārjuna*'s interpretation of dependent origination contributes to the understanding of Madhyamaka philosophy and the Middle Way.

Regarding the first objective, this research examined the concept of dependent origination in the MMK. The findings demonstrate that *Nāgārjuna* does not interpret dependent origination merely as a process of causal production, but as a philosophical method for revealing the lack of inherent existence (*niḥsvabhāva*) of all phenomena. Dependent origination therefore provides a fundamental framework for understanding the conditioned and relational nature of reality.

Regarding the second objective, this research analyzed the relationship between dependent origination, causal conditions, and emptiness. The findings show that dependent origination and emptiness are inseparable aspects of *Madhyamaka* philosophy. Since all phenomena arise through causes and conditions, they cannot possess independent and permanent existence. Therefore, emptiness is not a rejection of phenomena but the deeper understanding of their dependent nature.

Regarding the third objective, this research compared the concepts of dependent origination and emptiness in the MMK. The findings reveal that these two concepts together establish *Nāgārjuna*'s Middle Way by avoiding the extremes of eternalism and nihilism. Understanding the dependent and empty nature of phenomena provides the foundation for realizing non-arising (*anutpāda*), cultivating wisdom, and progressing toward liberation.

In conclusion, the study clarifies the interconnected relationship among dependent origination, causal conditions, emptiness, and non-arising in *Nāgārjuna*'s MMK. It argues that dependent origination is not merely a doctrine of causal succession but a Madhyamaka method for exposing the absence of inherent existence. Emptiness, accordingly, does not negate conventional phenomena but expresses their dependent mode of existence. This integrated interpretation illuminates the Middle Way and demonstrates how philosophical analysis can support the cultivation of wisdom and liberation.

Recommendations for Future Research

Although this research provides an analysis of dependent origination, causal conditions, and emptiness in the *Mūlamadhyamakakārikā* (MMK), further studies may expand and deepen this investigation from broader historical, comparative, and interdisciplinary perspectives.

First, the scope of the study may be extended beyond *Mahāyāna Madhyamaka* interpretations. Since this research mainly focuses on Sanskrit, Chinese, and Tibetan *Mahāyāna* sources, future research may further compare the understanding of dependent origination among *Theravāda*, *Mahāyāna*, and *Vajrayāna* traditions. Such comparative studies may provide a more comprehensive understanding of the development and transformation of Buddhist theories of causality and conditionality.

Second, future research may expand the range of primary and secondary sources. In addition to Sanskrit, Chinese, and Tibetan Buddhist texts, further studies may include Pāli canonical materials, commentarial literature, and contemporary academic research. A broader range of sources may contribute to a more complete understanding of the historical development of dependent origination and emptiness across Buddhist traditions.

Third, future research may apply additional research methods beyond textual analysis. While philosophical and textual approaches are essential for Buddhist studies, interdisciplinary methods such as interviews with Buddhist practitioners and scholars, surveys, or comparative studies with contemporary philosophical and scientific perspectives may provide additional insights into the interpretation and practical significance of dependent origination.

Possible future research topics include:

A comparative study of dependent origination and causal conditions (*pratyaya*) among *Theravāda*, *Mahāyāna*, and *Vajrayāna* Buddhist traditions.

A comparative investigation of Buddhist philosophical explanations of causality and contemporary scientific interpretations of causal relationships.

Further studies on related *Madhyamaka* concepts, including *nirvāṇa*, the Four Noble Truths, the Middle Way, selflessness (*anātman*), emptiness (*śūnyatā*), and dependent origination.

Through these future investigations, further research may continue to deepen the academic understanding of Buddhist philosophy while exploring the relationship between theoretical analysis and Buddhist practice.

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