

# Philosophy of Science and Law: Integrating Science in Realizing the Art of a Just Life

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<p><b>Article History</b> Received: 2024-07-01 Revised: 2024-07-12 Published: 2024-07-31</p> <p><b>Keywords:</b> <i>Philosophy of Science, Law, Integration of Science, Justice, Legal System.</i></p>	<p>This study aims to examine the role of the philosophy of science in the legal realm as a means to realize a just way of life. Science plays a fundamental role in shaping, developing, and directing the legal system so that it is not merely normative, but also responsive to social dynamics. Through a philosophical approach, law is not seen simply as a set of rules, but as a reflection of core values such as justice, morality, and freedom. The research method used is a literature review, by analyzing key concepts of the philosophy of science and their application in law. The research findings show that the integration of various disciplines, such as philosophy, sociology, and psychology, contributes to a more comprehensive understanding of law, increases the effectiveness of law enforcement, and supports the development of a just and human-centered legal system. Furthermore, knowledge also plays a crucial role in legal education, both at the academic and practical levels, to produce competent human resources with high integrity. Thus, the philosophy of science emerges as an essential foundation in making law part of the art of living that is capable of bringing justice to society.</p>

## I. INTRODUCTION

Knowledge is a fundamental element in human life, shaping ways of thinking, attitudes, and behavior in addressing life's various challenges (Suriasumantri, 2009). In the realm of social life, knowledge serves not only as a tool for understanding reality but also as a foundation for establishing norms that govern social interactions, including in the legal sector. Law as a system of norms is inseparable from scientific progress, as quality law must be able to adapt to social change and reflect the values of justice inherent in society (Soerjono Soekanto, 2008).

The philosophy of science emerged as a conceptual framework for understanding the essence of science and its application in various disciplines, including law (Jujun S. Suriasumantri, 2009). Through the lens of the philosophy of science, law is not merely understood normatively as a series of binding rules, but is also explored from the aspects of ontology, epistemology, and axiology. This approach is essential so that law does not only emphasize certainty, but also embodies justice, morality, and freedom as fundamental values of human life (Gustav

Radbruch, 1946). In this way, law can be considered as part of the art of living that not only regulates but also guides humans towards a more harmonious and just life.

In practice, the legal system often faces various obstacles, such as social injustice, a lack of legal awareness among the public, and a gap between legal provisions and conditions in the field (Satjipto Rahardjo, 2006). This situation indicates that law cannot be constructed solely normatively, but requires contributions from other disciplines, such as legal sociology, which views law as a social phenomenon, and psychology, which analyzes individual behavior related to law (Soerjono Soekanto, 2008). The integration of these disciplines is crucial to creating a more holistic, flexible, and humanitarian legal system.

Furthermore, science plays a vital role in legal education, both academically and in practice. Legal education grounded in science will produce human resources who not only master legal theory but also skillfully apply it in everyday life (Peter Mahmud Marzuki, 2011). This is a determining factor in realizing just and integrated law enforcement.

Based on the description above, this study aims to examine the role of the philosophy of science in law as a step towards realizing the art of living justly. This research adopts a qualitative approach through a literature study method, analyzing a variety of related literature to gain in-depth insight into the relationship between science, law, and justice in societal dynamics.

## II. RESEARCH METHODS

This research uses a qualitative approach with library research. The data used in this study are sourced from various sources, such as books, scientific journals, and relevant sources related to the philosophy of science and law. Data collection techniques are carried out through documentation studies by examining, reviewing, and identifying concepts relevant to the research problem.

Next, the data was analyzed using descriptive-qualitative analysis methods, namely by describing, interpreting, and connecting various philosophical concepts of science with legal practices in society. This analysis aims to gain a comprehensive understanding of the role of science in shaping, developing, and realizing a just legal system as part of the art of human life.

## III. RESULTS AND DISCUSSION

### A. Research Results on Basic Philosophy and Law

From a philosophical perspective, law is not simply understood as a collection of norms, but rather as a system grounded in a solid philosophical foundation and closely linked to human existence (Sudikno Mertokusumo, 2007). Essentially, law arises from the human need to establish order, justice, and harmony in social life. Therefore, a comprehensive understanding of law requires a philosophical approach capable of uncovering the profound essence of its existence.

The philosophy of law, as a branch of philosophy that focuses on the essence of law, its purpose, and its relationship to societal values, is supported by the philosophy of science as a framework for thought (Satjipto Rahardjo, 2006). This framework helps explain the process of law formation, the sources of legal legitimacy, and its application in everyday life. The philosophy of science approach allows law to be viewed not only from a formal perspective but also from a

substantive perspective concerning justice and humanity.

Ontologically, law is a social reality inseparable from human life. Law is not merely a written document or provision, but rather a reflection of the values that exist within society (Soerjono Soekanto, 2008). Thus, law is dynamic and continually evolves in line with social change. Science plays a role in understanding these dynamics, enabling law to adapt to societal needs.

Epistemologically, law involves the acquisition and development of legal knowledge. Science provides a systematic method for analyzing law, both normatively and empirically (Peter Mahmud Marzuki, 2011). Through a scientific approach, legal analysis becomes more objective and logical, resulting in a deeper and more holistic understanding. This ensures that law is based on accountable truth, not merely assumptions or narrow interests.

Meanwhile, from an axiological perspective, law is related to the values to be achieved through its application, such as justice, certainty, and utility (Gustav Radbruch, 1946). However, in practice, these values often clash; for example, rules that guarantee certainty are not necessarily fair to all parties. Therefore, the philosophy of science is necessary to balance these values so that law functions optimally in society.

The philosophical basis of law is also inseparable from the contributions of philosophers who have enriched the development of law. Their thinking forms the foundation for a better and fairer legal system. By understanding this philosophical foundation, legal practitioners and academics can develop a broader vision, avoiding narrow and formalistic views (Satjipto Rahardjo, 2006).

Science also strengthens the philosophical foundations of law through the perspectives of other disciplines such as sociology, psychology, and anthropology. Sociology, for example, views law as a social phenomenon influenced by societal factors (Soerjono Soekanto, 2008). This approach views law as a complex social process, not simply a rule. Psychology also helps understand individual behavior related to compliance with or

violation of the law.

This integration of disciplines allows for the development of a more comprehensive and human-centered law. Law is no longer seen as a mere instrument of power, but rather as a means to achieve justice and social welfare. Science serves as a bridge between theory and practice, enabling law to be effectively implemented according to societal needs (Sudikno Mertokusumo, 2007).

In this increasingly complex modern era, the role of philosophy of science in law is increasingly crucial. Technological advances, globalization, and rapid social change demand an adaptive and responsive legal system. Philosophical and scientific approaches are essential to maintaining the relevance of law in resolving the various issues that arise (Peter Mahmud Marzuki, 2011).

Thus, a philosophical foundation of law supported by science is the primary foundation of a just legal system. Without this solid foundation, law will lose its direction and fail to achieve its goal of realizing social justice. Understanding the philosophy of science and its application to law is vital to making law an integral part of the art of human life.

## **B. The Role of Science in Forming Legal Conceptions**

The influence of science on legal concepts is evident in the contributions of other disciplines. Sociology, for example, views law as a social phenomenon influenced by culture, values, and societal structures (Soerjono Soekanto, 2008). A sociological approach allows for the development of law based on social reality, making it more relevant and effective.

Psychology plays a crucial role in understanding individual behavior related to the law. This science explains factors such as motivation, perception, and attitudes that influence compliance or violation (Satjipto Rahardjo, 2006). This psychological insight allows for the design of laws that are more effective in shaping societal behavior.

Economics contributes significantly through its emphasis on the efficiency and economic impact of legal policies (Richard A. Posner, 1973).

Economic analysis facilitates the evaluation of whether legal provisions produce optimal benefits or harms. This approach is increasingly vital in the modern era, with its broad implications for the economy of society.

Political science contributes to the development of legal concepts, particularly regarding power and the legislative process. Law is inseparable from politics, so understanding this aspect is essential to ensure that law reflects the public interest, not the interests of elite groups (Miriam Budiardjo, 2008).

This integration of disciplines produces a more comprehensive and multi-layered concept of law. Law is no longer a rigid norm, but rather a dynamic system that reflects the diverse dimensions of human life (Soerjono Soekanto, 2008). Science serves as a bridge of perspectives, creating a comprehensive and in-depth understanding of law.

In practice, developing science-based concepts requires a critical and reflective approach. Legal experts must go beyond accepting outdated concepts, while continually criticizing and advancing them in line with societal dynamics (Satjipto Rahardjo, 2006). This ensures the law's relevance in addressing contemporary issues.

Technological developments significantly influence legal concepts. In the digital age, new phenomena such as cybercrime, data protection, and electronic transactions require appropriate regulation (Peter Mahmud Marzuki, 2011). Information technology knowledge is crucial in formulating legal concepts that are relevant to the times.

The role of science in legislation is evident. Policymakers need to incorporate scientific analysis so that laws are not only normative but also implementable, including considering their social, economic, and political impacts (Miriam Budiardjo, 2008). The result is laws that are accepted and effective in society.

In conclusion, science is essential in developing legal concepts that are holistic, adaptive, and sensitive to societal needs. Science not only constructs but also critiques, evaluates, and advances concepts to align with developments.

The integration of science into law is essential for a just legal system, a cornerstone of human life.

### C. The Role of Science in Realizing Justice

The influence of science on the fulfillment of justice is not limited to the conceptual level but also extends to the realm of application in society. Justice, as the primary goal of law, requires an approach that transcends the normative, grounded in empirical facts. Science serves as a bridge between written legal norms and the reality of their enforcement on the ground. Through scientific methods, the effectiveness of law in delivering justice can be concretely verified, not merely an abstract ideal (Satjipto Rahardjo, 2006).

One significant contribution of science to realizing justice is the refinement of more comprehensive legal research methods. Legal research is not only normative through the study of laws, but also empirical through observations of legal implementation in society. This method allows for an objective assessment of the legal system, thus revealing the extent to which the law provides justice for all levels of society (Peter Mahmud Marzuki, 2011).

Science also reveals the forms of injustice often implicit in the legal system. Injustice is not always obvious, but manifests as discrimination, unfair access to justice, or unequal treatment. Social and legal studies allow for in-depth identification and analysis, opening up opportunities for appropriate solutions (Soerjono Soekanto, 2008).

Here, justice is no longer limited to identical treatment, but rather to fair adjustments based on individual circumstances and needs. This aligns with distributive justice, which prioritizes balanced distribution based on needs and contributions (Gustav Radbruch, 1946). Science provides the theoretical and empirical foundations for deeper understanding, allowing for accurate application in legal practice.

Science contributes to increasing the transparency and accountability of the legal system. Transparency is essential for justice, as it allows for public oversight of the legal process. Advances in science, particularly information technology, have contributed significantly, such as

legal information systems and court digitization, which facilitate data access (Peter Mahmud Marzuki, 2011).

Knowledge also strengthens the competence of law enforcement. Law enforcement officers who understand knowledge are able to act professionally and impartially, making decisions based on logic and fairness. Knowledge also fosters ethos and integrity, preventing abuse of power (Satjipto Rahardjo, 2006).

The influence of science on justice is reflected in alternative conflict resolution. Litigation is not always ideal, leading to the development of methods such as mediation and arbitration, which prioritize deliberation and improving relationships. This demonstrates that justice can be achieved through flexible and empathetic means, not just rigid procedures (Soerjono Soekanto, 2008).

Science promotes restorative justice, which is increasingly applied in contemporary law. This approach emphasizes restoring bonds between the perpetrator, victim, and community, as well as addressing the impact of the crime. It is considered more reliable for long-term justice, as it emphasizes not only sanctions but also social restoration (Satjipto Rahardjo, 2006).

Amidst globalization, the role of science is increasingly complex. New issues such as transborder crime, human rights violations, and interstate disputes demand global collaboration based on science and universal legal norms (Miriam Budiardjo, 2008). This collaboration is expected to uphold justice at both the national and international levels.

Science also drives public-responsive legal reform. Reform is needed to address systemic gaps and align with the times. Scientific research is essential as a basis for precise and impactful legal policy (Peter Mahmud Marzuki, 2011).

In short, science plays a vital role in delivering justice, from concept to execution. Science facilitates conceptual understanding, problem identification, solution development, and assessment of legal effectiveness. The integration of science into law is the primary foundation of a just, open, and pro-social system.

#### IV. CONCLUSION AND SUGGESTIONS

##### A. Conclusion

From the discussion above, it can be concluded that science plays an essential role in shaping, advancing, and establishing a just legal system. From the perspective of the philosophy of science, law is not simply a series of norms, but rather a system imbued with core values such as justice, certainty, and utility. Through ontological, epistemological, and axiological analysis, law can be understood more holistically, thus aligning it with the needs and changes of society.

Science contributes to a more logical, analytical, and responsive understanding of law, addressing the dynamics of the times. The integration of disciplines such as sociology, psychology, economics, and politics transcends formality, becoming more contextually relevant and human-centered. Furthermore, science improves the quality of law enforcement, uncovers injustices, and facilitates an open and accountable legal system.

Furthermore, to achieve justice, science provides a scientific basis for legal decision-making, while encouraging more inclusive approaches, such as restorative justice and alternative conflict resolution. In this way, law plays a role not merely as a regulator, but as an element of the art of life that creates harmony and justice in society.

##### B. Suggestion

Based on the conclusions above, here are several recommendations. First, the integration of scientific knowledge into legal development and drafting needs to be strengthened, so that the resulting laws are not only normative but also sensitive to social dynamics. Second, legal education should prioritize a multidisciplinary approach, thereby producing human resources who not only master legal theory but also possess critical analytical skills and high integrity.

Third, law enforcement officers are encouraged to deepen their understanding of

science and ethical values to carry out their duties professionally, impartially, and fairly. Fourth, legal research must be conducted continuously to assess the effectiveness of the legal system and identify emerging issues, allowing appropriate solutions to be formulated.

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