SCIENCE TO THINK, MATH TO DESIGN, SPORTS TO LIVE III

EDİTOR: DOÇ. DR. TAYFUN TUTAK

EĞİTİM
yayınevi

SCIENCE TO THINK, MATH TO DESIGN, SPORTS TO LIVE III

Editor: Doç. Dr. Tayfun Tutak

Chairman of the Publishing House Group: Yusuf Ziya Aydoğan (yza@egitimyayinevi.com)
Executive Editor: Yusuf Yavuz (yusufyavuz@egitimyayinevi.com)
Interior Designer: Kübra Konca Nam
Cover Designer: Eğitim Yayınevi Graphics Unit

Republic of Türkiye Ministry of Tourizm and Culture
Publisher Certificate No: 76780

E-ISBN:978-625-385-789-9
1. Edition, February 2026

Library Information Card

SCIENCE TO THINK, MATH TO DESIGN, SPORTS TO LIVE III
Editor: Doç. Dr. Tayfun Tutak
IV+137, 160x240 mm
Includes references, no index.
E-ISBN: 978-625-385-789-9

The authors are solely responsible for all chapters in this book.

Publisher Turkey Office: İstanbul: Eğitim Yayınevi Tic. Ltd. Şti., Atakent mah. Yasemen sok. No: 4/B, Ümraniye, İstanbul, Türkiye

Konya: Eğitim Yayınevi Tic. Ltd. Şti., Fevzi Çakmak Mah. 10721 Sok. B Blok, No: 16/B, Safakent, Karatay, Konya, Türkiye
+90 332 351 92 85, +90 533 151 50 42, 0 332 502 50 42
bilgi@egitimyayinevi.com

Publisher USA Office: New York: Egitim Publishing Group, Inc.
P.O. Box 768/Armonk, New York, 10504-0768, United States of America
americaoffice@egitimyayinevi.com

Logistics and Shipping Center: Kitapmatik Lojistik ve Sevkiyat Merkezi, Fevzi Çakmak Mah. 10721 Sok. B Blok, No: 16/B, Safakent, Karatay, Konya, Türkiye
sevkiyat@egitimyayinevi.com

Bookstore Branch: Eğitim Kitabevi, Şükran mah. Rampalı 121, Meram, Konya, Türkiye
+90 332 499 90 00
bilgi@egitimkitabevi.com

Internet Sales: www.kitapmatik.com.tr
+90 537 512 43 00
bilgi@kitapmatik.com.tr

EĞİTİM YAYINEVİ GRUBU

İÇİNDEKİLER

RECONCEPTUALIZING TPACK IN THE AGE OF AI: FROM TECHNOLOGY INTEGRATION TO AI-INFORMED TEACHING KNOWLEDGE

Selim Yavuz[1], Deniz Kaya[2]

INTRODUCTION

Artificial Intelligence (AI) has become increasingly visible and influential in the field of education in recent years, particularly with the widespread adoption of generative AI tools. Although AI technologies have long been utilized across various fields, their sudden and rapid adoption within the educational context over the past two years has significantly intensified debates regarding their role in teaching and learning processes (Mishra et al., 2023). One of the primary reasons behind this rapid proliferation is that AI-based tools facilitate access to information and integrate diverse sources of knowledge within a single platform. These systems, which can simultaneously provide search engines, academic articles, online resources, and data analyses, are extensively used not only for solving questions or completing assignments but also for brainstorming, generating new ideas, and synthesizing complex information. Another reason for the growing interest in AI in education is its easier accessibility and the belief that it offers valuable benefits. The active use of numerous AI tools whether paid or free by teachers, students, and researchers has led to the perception of these technologies not merely as assistive tools, but as structures that offer new professional and academic opportunities. While this situation has elevated expectations regarding the role of AI in education, it has also raised various pedagogical and ethical concerns. The debates surrounding the use of AI in education primarily focus on ethical principles, control mechanisms, data security, and the potential effects of AI on the cognitive processes of teachers and students (Al-Abdullatif, 2024; Celik, 2022). In particular, concerns that rapid and easy access to information may negatively affect students' conceptual understanding constitute a core basis for criticisms directed at AI. However, it can be argued that these concerns are largely related not to AI itself, but to the

1 Dr., Indiana University, School of Education, Department of Curriculum and Instruction, Bloomington, USA, yavuz@iu.edu, ORCID: orcid.org/0009-0005-6816-2422
2 Assoc. Prof. Dr., Nevşehir Hacı Bektaş Veli University, Faculty of Education, Department of Mathematics and Science Education, Nevşehir, Türkiye, denizkaya@nevsehir.edu.tr, ORCID: orcid.org/0000-0002-7804-1772

continued preservation of traditional structures in learning outcomes, curricula, and assessment paradigms. The expected learning outcomes for students often emphasize the final product rather than the process itself; this emphasis hinders the pedagogically effective use of AI.

These debates bear significant similarities to past experiences regarding the integration of technology in education. Calculators, graphing devices, digital math tools, and online learning environments were initially met with similar concerns; critics argued that these technologies would weaken students' fundamental skills and lead to superficial learning. Nevertheless, the deliberate use of these technologies for pedagogical purposes has enriched instructional processes and contributed to a deeper understanding of abstract concepts. The pandemic, however, moved the discussion beyond questioning the role of technology in education and clearly demonstrated its indispensability for the continuation of instructional activities. In this context, the core issue concerning AI is not its mere existence, but how teachers position and utilize this technology for pedagogical purposes. In an environment where the individual use of AI by students has become increasingly uncontrollable, it is crucial for teachers to recognize the opportunities and limitations of AI and to design its use in ways that support learning. This situation necessitates a new perspective on teachers' professional knowledge.

This chapter examines the aforementioned transformation through the framework of Technological Pedagogical Content Knowledge (TPACK) and discusses how AI is reshaping teacher knowledge. Building upon the limitations of the classical TPACK model, approaches such as AI-TPACK and Intelligent-TPACK, developed to understand teachers' knowledge and competencies in the context of AI, are introduced, and their potential roles in teacher education, professional development, and pedagogical decision-making processes are explored.

TPACK: A FOUNDATIONAL FRAMEWORK

TPACK is an approach that conceptualizes the types of knowledge teachers need to possess for effective instruction within a holistic framework. The theoretical underpinnings of the TPACK framework are grounded in Shulman's (1986, 1987) concept of Pedagogical Content Knowledge (PCK), which extends beyond the separation of teacher knowledge into merely content knowledge (CK) and general pedagogical knowledge (PK). Shulman emphasized that effective teaching requires a special type of knowledge that integrates a teacher's subject matter expertise with the ability to teach that knowledge to students. This approach represents a significant paradigm shift by focusing not only on what teachers teach, but also on how they teach it. However, the rapid transformation of educational environments through technological advancements has revealed

that limiting teacher knowledge to these two dimensions is insufficient. With the integration of information and communication technologies into classrooms, it has become essential for teachers to possess not only CK and pedagogical approaches but also knowledge of how to use technology for pedagogical purposes. In this context, Mishra and Koehler (2006) extended Shulman's PCK framework and developed the TPACK model. TPACK conceptualizes teacher knowledge through three core components: CK, PK, and Technological Knowledge (TK). While each of these components is important in its own right, the fundamental assumption of the TPACK framework is that effective teaching is made possible through the interaction and integration of these knowledge domains (Koehler & Mishra, 2009).

CK refers to the teacher's deep and accurate understanding of the subject matter being taught. Without content knowledge, the effective functioning of the other components of the instructional process becomes impossible. If a teacher lacks sufficient subject knowledge, even the most advanced pedagogical methods or technological tools may fail to strengthen the instructional process. Therefore, CK can be considered an indispensable component forming the foundation of teacher knowledge. PK encompasses the teacher's understanding of teaching and learning processes, student characteristics, instructional strategies, and classroom management. PK enables teachers to structure CK in ways that are appropriate to students' levels and to support their active participation. When CK is not integrated with PK, the instructional process often becomes transmissive and superficial (Shulman, 1987). TK refers to the teacher's ability to recognize and functionally use technological tools employed in education. However, within the TPACK framework, TK is not limited to operating tools or possessing technical proficiency. TK also involves the ability to select appropriate tools for pedagogical purposes and to evaluate both the affordances and limitations these tools present (Angeli & Valanides, 2009). When a teacher's TK is insufficient, the use of technology may result in wasted time and pedagogical disruptions rather than supporting the instructional process.

In the TPACK framework, these three core components are not treated as independent; rather, they are considered interrelated and mutually influential domains of knowledge. Without content knowledge, pedagogical and TK may lose their significance; without PK, conveying content to students becomes challenging; and without technological knowledge, benefiting from the opportunities offered by modern learning environments remains limited. In this respect, TPACK views teacher knowledge not as a static structure, but as a dynamic one that continuously evolves alongside technological advancements (Mishra & Koehler, 2006). One of the key reasons why TPACK has been

widely accepted in teacher education and educational research is its capacity to reveal the extent to which teachers are prepared for technology integration and the areas in which they need support. In today's context, where technology is rapidly evolving and classroom environments are becoming increasingly complex, TPACK offers a powerful analytical framework to understand and support teachers' professional development levels. In this regard, TPACK offers a comprehensive model for understanding how teachers integrate technology with both their pedagogical reasoning and CK.

TPACK in Teacher Education and Educational Research

The TPACK framework has emerged as a widely adopted approach in teacher education programs and educational research. One of the main reasons for this widespread adoption is TPACK's ability to address the professional development of pre-service teachers through a holistic perspective. In the context of teacher education, TPACK enables the evaluation of pre-service teachers' content knowledge, PK, and TK not as isolated competencies, but as interactive and integrated domains within instructional settings (Koehler & Mishra, 2009; Mishra & Koehler, 2006). In this regard, TPACK allows pre-service teachers to understand and enhance their processes of pedagogical integration with technology in a more systematic manner.

One of the most significant contributions of TPACK in the preparation of pre-service teachers is its capacity to reveal teachers' readiness levels for technology integration. In today's rapidly evolving technological landscape and ever-changing classroom environments, identifying the areas in which pre-service teachers are strong and those where they require support has become a critical necessity. TPACK responds to this need by offering a conceptual framework for structuring the professional development processes of pre-service teachers (Niess, 2011). In this context, TPACK is regarded as a tool that supports the transition from traditional instructional approaches to more advanced, technology-integrated teaching practices.

In educational research, TPACK is frequently employed through both quantitative and qualitative methods. The literature includes various scales and rubrics developed to determine the TPACK levels of teachers and pre-service teachers. These assessment tools allow researchers to examine how teachers position technology for instructional purposes and how they incorporate it into their pedagogical decision-making (Angeli & Valanides, 2009). However, TPACK research is not limited to surveys and scales; it is also supported by qualitative data sources such as lesson plans, teaching practices, teacher portfolios, and interviews (Koehler et al., 2013).

Rubric-based analyses, in particular, provide an effective means for examining pre-service teachers' thoughts and practices regarding technology

integration in greater depth. Such rubrics address various dimensions of pre-service teachers' general approaches to technology use, their perspectives on student learning, their relationships with curriculum, and the instructional strategies they employ. For instance, the TPACK rubric developed by Tournaki and Lyublinskaya (2014) outlines the levels of pre-service teachers' technology integration in a progressive manner, offering a developmental perspective. This approach enables the tracking of pre-service teachers' progress in technology use and the identification of pedagogically meaningful changes. The potential of TPACK to support teachers' professional development is not limited to pre-service teachers alone. In the context of in-service teacher training, TPACK also assists teachers in reflecting on their practices and identifying their professional needs. Recognizing their strengths and weaknesses regarding technology integration enables teachers to facilitate the design of targeted professional development activities (Niess et al., 2009). In this respect, TPACK can be considered a reflective tool that supports teachers' professional growth.

Within the context of mathematics education, TPACK plays a particularly important role in understanding how pre-service and in-service teachers use digital tools for pedagogical and conceptual purposes. The integration of technologies such as dynamic mathematics software, graphing tools, and online applications into instructional processes is not solely a matter of technical proficiency but is also related to how these tools support the understanding of mathematical concepts. The TPACK framework enables the evaluation of whether pre-service teachers are using technology in ways that align with mathematical content and pedagogical goals. In this way, it becomes clearer whether pre-service teachers' use of technology is superficial or pedagogically meaningful (Niess, 2011).

Overall, the widespread use of TPACK in teacher education and educational research is rooted in its ability to address teachers' knowledge and skills regarding technology integration in a multidimensional manner. TPACK offers a robust analytical framework not only to determine whether teachers are using technology, but also to understand for what pedagogical purposes, in which content contexts, and how they are utilizing it. With these characteristics, TPACK continues to serve as a significant reference point in the field of teacher education, both in research and in practice.

Limitations of Traditional TPACK in Emerging Technological Contexts

The TPACK framework has provided a strong theoretical foundation for understanding and supporting technology integration in education for many years. However, the radical transformation of the technological context particularly with the emergence of AI-based systems has made certain limitations of the traditional TPACK approach more visible. One of the primary limitations

is that TK has largely been conceptualized at the level of tool knowledge in many studies. The classification of technologies used in education and their pedagogical applications have long been debated; for example, Dick and Hollebrands (2011) distinguished technological tools as conveyance tools and mathematical action tools, demonstrating that technology can function not merely as a medium of transmission but as a means of structuring mathematical thinking. While this approach represents an important step toward attributing pedagogical meaning to technology, it remains limited in explaining more complex and autonomous systems such as AI.

Unlike earlier digital tools, AI-based technologies are not merely passive instruments directed solely by teachers or students. Rather, these systems are capable of learning, generating suggestions, producing content, and actively participating in decision-making processes (Mishra et al., 2023). These characteristics fundamentally transform the role of technology in instructional processes and challenge the core assumptions of TPACK regarding technology. Whereas technology is positioned as a supportive element in the instructional process within the traditional TPACK framework, AI can, in some cases, assume roles such as teacher, learner, or learning partner. This situation requires teachers to reconsider the role of technology in their pedagogical decision-making processes. These new affordances offered by AI clearly demonstrate that teacher knowledge cannot be limited solely to knowing how to use technology. In the context of AI, TK also encompasses understanding how these systems operate, what data they are trained on, what types of outputs they can generate, and what limitations they possess (Celik, 2022). In the absence of such awareness, AI may become a difficult to control element in instructional processes rather than a pedagogical advantage. In this context, the conscious use of AI by teachers emerges as a critical necessity for both their professional development and students' learning processes.

Another significant limitation of the traditional TPACK framework is its failure to explicitly address issues such as ethics, responsibility, control, and teacher agency. While teachers largely functioned as the drivers and controllers of technology in earlier technological tools, in AI-based systems they are often reduced to the role of users. The accuracy, sources, and pedagogical appropriateness of information generated by AI are not always transparent, giving rise to new ethical questions for teachers (Al-Abdullatif, 2024; Ning et al., 2024). In this regard, the traditional TPACK approach fails to sufficiently encompass the ethical dilemmas and areas of responsibility that teachers may encounter when using AI. These limitations do not imply that teachers should completely avoid the use of AI. On the contrary, in a reality where AI is increasingly prevalent in educational settings and its individual use has

become uncontrollable, it becomes even more important for teachers to learn how to guide this technology for pedagogical purposes. The affordances offered by AI in areas such as lesson planning, instructional material development, summarization, generating multiple representations, and diversifying learning processes can provide significant advantages when used pedagogically and consciously (Mishra et al., 2023). The central issue here is not that AI becomes an element that "thinks" on behalf of students, but that it is positioned as a tool that deepens learning under teacher guidance.

In this context, while the traditional TPACK model has long supported effective technology integration, the evolving role of AI in education requires it to be rethought and adapted to contemporary pedagogical needs. This reconsideration does not entail abandoning TPACK altogether; rather, it requires expanding the existing framework to encompass the distinctive characteristics of AI. Conceptualizations such as Intelligent-TPACK and AI-TPACK that have emerged in the literature in recent years can be considered reflections of this need (Celik, 2022; Ning et al., 2024). These approaches aim not only to deepen teachers' TK of AI, but also to adapt the TPACK framework to contemporary demands by foregrounding pedagogical decision-making processes, ethical awareness, and teacher agency.

AI IN EDUCATION AS A NEW PEDAGOGICAL CONTEXT

The role of AI in the educational context is not confined to functioning as a singular tool, unlike traditional digital technologies. Contemporary AI systems are positioned as dynamic actors capable of assuming multiple roles within educational environments. In this regard, AI can adopt various roles such as teacher, teaching assistant, student, content generator, feedback provider, private tutor, or problem solver. This multi-role structure transforms the use of AI in education from a purely technical issue into a pedagogical design concern. The ability of AI to assume these roles largely depends on the guidance provided by the user and the contextual parameters. In other words, AI functions not as a passively "used" tool, but as a pedagogical actor constructed by the teacher or student. There are significant differences in the outputs provided by AI between general, ambiguous prompts and specific, pedagogically targeted instructions. This indicates that, for AI to be used effectively in education, teachers must not only have access to technology but also possess pedagogical awareness regarding how to guide its use (Mishra et al., 2023).

Students and teachers often use AI for different purposes. From the students' perspective, AI is frequently used for completing assignments, conducting research, or accessing information quickly. While this mode of use may support the learning process, it can also lead to the risk of superficial learning when lacking pedagogical guidance. Teachers, on the other hand, may use AI for

purposes such as lesson planning, rubric development, creating instructional materials, supporting assessment processes, and diversifying instructional design. For both groups, the primary function of AI is to assume a supportive role in teaching and learning processes. However, the pedagogical quality of this supportive role varies significantly depending on its mode of use and contextual factors. One of the most critical distinctions between generative AI systems and earlier digital tools is that these systems have evolved from being passively directed tools into entities that can actively offer suggestions during instructional processes. While teachers largely controlled the use of technology in traditional digital tools, in AI-based systems, they make decisions through interaction with the suggestions provided by AI. Rather than eliminating the teacher's role in instructional design, this situation transforms and redefines it (Celik, 2022).

Positioning AI as a "learning partner" in the learning process also brings discussions about the teacher's role to the forefront. Debates on the workforce transformation caused by AI in various sectors have triggered similar concerns in the field of education. However, in the educational context, it is more plausible and pedagogically meaningful for AI to function as an assistant that supports the teacher's pedagogical capacity rather than replacing the teacher. Teachers can effectively use AI to understand students' thinking processes, present multiple perspectives, and enrich learning experiences. In this sense, AI has the potential not to undermine but to enhance the teacher's pedagogical agency when used appropriately (Ning et al., 2024).

Nevertheless, there are several pedagogical mistakes that teachers frequently encounter when using AI. The first of these is the tendency to completely exclude or prohibit AI. Ignoring a technology that students are already using does not constitute a pedagogically productive approach. The second common mistake is maintaining traditional assessment and task structures without rethinking instructional goals and learning outcomes in light of AI's affordances. In such cases, AI may cease to be a tool that deepens learning and instead become a shortcut that leads to superficial learning. Therefore, the use of AI in the classroom should be viewed as a pedagogical decision-making process that must align with instructional design, content selection, and learning objectives.

Pedagogical Opportunities and Risks of AI

The pedagogical opportunities offered by AI in education share certain advantages with earlier digital technologies; however, they possess a more advanced potential in terms of scope and speed. Time efficiency, representational diversity, and rapid feedback are among the foremost of these opportunities. By enabling the simultaneous use of multiple tools and access to extensive knowledge networks, AI allows for the generation of multiple representations

and the presentation of learning content in diverse forms within the instructional process. In particular, the acceleration and diversification of feedback can contribute to teachers' ability to adjust instruction in real time and to students' faster development of awareness regarding their learning processes (Mishra et al., 2023). Nevertheless, the transformation of these opportunities into genuine learning gains depends on specific pedagogical conditions. Alignment between teachers' and students' purposes for using AI constitutes one of the primary conditions. Positioning AI not as a tool that "does assignments," but as an assistant that deepens learning requires task design, scaffolding, and teacher guidance to be structured in ways that serve this purpose. Likewise, students' perception of AI not merely as a shortcut to outcomes but as a learning partner that supports the development of diverse perspectives is critical for pedagogical value to emerge.

Alongside the opportunities offered by AI, there are also significant pedagogical risks. One of the foremost risks is an excessive reduction in cognitive load. When lengthy and complex texts or challenging problems are resolved quickly by AI, students' active engagement in the learning process may decrease and their learning motivation may weaken. Over time, this may lead students to become dependent on AI and to transfer much of their responsibility for learning to these systems. Pedagogically, this situation entails the risk of superficial learning and the delegation of thinking processes (Celik, 2022). Another significant risk lies in the misinterpretation of AI's generative capacity. AI systems generate outputs that are largely based on existing data and knowledge patterns. This indicates that human guidance remains indispensable in processes of generating new ideas and original thinking. Positioning AI as a "central actor" in the instructional process may overshadow the authentic roles of teachers and students. Perceiving AI as a structure that replaces the teacher or the student represents one of the most pedagogically risky scenarios. Therefore, AI should be approached not as a substitute for genuine teacher and student roles, but as an assistant that supports them.

The fact that the same AI tool can generate both pedagogical opportunities and risks highlights the determining role of its intended use. How AI is used, for which purposes, in which tasks, and within what boundaries directly affects the nature of the resulting pedagogical outcomes. When used to support learning, foster diverse perspectives, and enrich thinking processes, AI presents a pedagogical opportunity; however, usage focused solely on producing quick and effortless outcomes turns into a pedagogical risk. In this context, the primary factor that differentiates outcomes is not AI itself, but the purpose attributed to it within the instructional process (Ning et al., 2024). Integrating AI into instructional processes without changing learning outcomes and assessment

approaches may further intensify these risks. In particular, allowing the use of AI while preserving traditional assignment and assessment structures may cause teachers to devote more time to AI detection and prohibition efforts. This situation leads to a departure from the core purpose of instruction and fails to offer students a meaningful learning experience. By contrast, rethinking learning goals and assessment strategies and focusing on process-oriented, explanatory, and reflective tasks can allow AI to play a genuinely supportive role in learning.

In conclusion, the tension between the pedagogical opportunities offered by AI and the risks it entails is directly related to teacher knowledge and pedagogical decision-making processes. Rather than avoiding AI or allowing its unrestricted use, it is necessary to possess the knowledge and awareness required to guide this technology toward pedagogical purposes. This situation compels teachers to reconsider how they position AI, the boundaries within which they use it, and how they adapt learning objectives to this new context. In this context, the opportunity risk tension surrounding AI once again makes visible the central role of teacher knowledge and pedagogical expertise.

FROM TPACK TO AI-TPACK

The increasingly influential role of AI in educational contexts necessitates a reconsideration of existing frameworks regarding how teacher knowledge is defined and structured. As discussed in previous sections, TPACK has provided a strong theoretical foundation for many years in understanding teachers' knowledge and decisions related to technology integration. However, the ability of AI-based systems to act independently, generate content, and offer suggestions has made it essential to reconsider the role of technology in the TPACK model. In this context, models like AI-TPACK and Intelligent-TPACK mark key steps in adapting the TPACK framework to meet the demands of AI-driven educational environments.

Why AI-TPACK?

To understand the emergence of AI-TPACK, it is first necessary to examine the ways in which AI has transformed teacher knowledge. While traditional digital technologies are typically positioned as tools controlled by teachers and used for specific pedagogical purposes, AI-based systems are becoming more actively involved in instructional processes. AI has evolved into a structure that not only executes teachers' instructions, but also offers suggestions, generates alternatives, and shapes the instructional process (Mishra et al., 2023). This situation directly affects the nature of teachers' technology-related knowledge and decision-making processes. Although the classical TPACK framework remains valuable for understanding the pedagogical integration of technology, it is limited in explaining these new characteristics introduced by

AI. In particular, the tendency to conceptualize TK in many studies at the level of technical proficiency or tool use is insufficient to capture the pedagogical effects of complex systems such as AI. In the context of AI, what teachers need to know is not limited to the question of "which tool to use and how"; it also includes understanding how these systems function, what types of outputs they can generate, what limitations they have, and how they can be guided within pedagogical processes (Celik, 2022). For this reason, AI-TPACK has emerged not as an approach that replaces TPACK, but as one that extends it to encompass the distinctive nature of AI.

Conceptualizing AI-TPACK

In the literature, studies that relate AI to teacher knowledge are grouped under different terms and models. Concepts such as Intelligent-TPACK, AI-TPACK and I-TPACK, although they differ terminologically, share a common aim: to explain how teachers conceptualize and use AI-based technologies within pedagogical and content contexts. While these approaches retain the core components of TPACK, they place the distinctive characteristics of AI in educational contexts at the center (Ning et al., 2024). The primary reason for preferring the term AI-TPACK in this chapter is that the concept comprehensively addresses not only the technological dimension of AI but also its pedagogical and ethical dimensions. AI-TPACK requires teachers to view AI not merely as a technology, but as an actor that plays an active role in the instructional process. This perspective entails the reconfiguration of teachers' pedagogical decisions, classroom interactions, and learning objectives. Within the AI-TPACK framework, teacher knowledge is conceptualized not as a static set of competencies, but as a context-sensitive and continuously evolving structure. The purposes for which teachers use AI, the roles they assign to it, and how they manage those roles directly influence the quality of the instructional process. In this respect, AI-TPACK offers an analytical lens for understanding the pedagogical relationship teachers establish with AI.

What Does AI-TPACK Add to TPACK?

One of the most fundamental contributions that AI-TPACK adds to TPACK is the expansion of the scope of technological knowledge. In the context of AI-TPACK, TK goes beyond knowing the technical features of AI to include the ability to evaluate the pedagogical potential and limitations of these systems. This situation requires teachers to develop a more informed and critical stance toward AI. Moreover, AI-TPACK brings the concepts of ethical awareness and teacher agency to the center of teacher knowledge. The accuracy, objectivity, and pedagogical relevance of information generated by AI-based systems cannot always be assured. Therefore, it is of great importance for teachers to be aware of their ethical responsibilities regarding the use of AI and to be able to

regulate these systems in line with pedagogical purposes (Al-Abdullatif, 2024). AI-TPACK emphasizes that teachers should not be passive users in the face of AI, but active agents of pedagogical decision-making. Another important contribution is the reconsideration of teachers' pedagogical decision-making processes within the context of AI. The suggestions, alternatives, and content provided by AI can constitute a powerful support mechanism for teachers. However, unless this support is guided by teachers' pedagogical expertise and goals, it carries the risk of superficializing the learning process. AI-TPACK provides a reflective framework regarding the contexts, boundaries, and pedagogical goals within which teachers should use AI (Mishra et al., 2023).

Finally, AI-TPACK addresses teachers' use of AI not as being limited to classroom practices alone, but also within the contexts of instructional design, assessment processes, and professional development. In this respect, AI-TPACK supports teachers in viewing AI not as a pedagogical threat, but as a potential resource that can enrich instruction when used consciously and purposefully. In doing so, AI-TPACK provides a holistic framework that maintains the core principles of TPACK while highlighting the new dimensions of teacher knowledge required in the era of AI.

IMPLICATIONS, FUTURE DIRECTIONS, AND CONCLUDING REFLECTIONS

This chapter has examined the increasing role of AI in education from the perspective of teacher knowledge, discussing how the TPACK framework should be rethought within the context of AI. As outlined in the preceding sections, AI is not merely a new technological tool; it presents a context that assumes multiple roles in teaching and learning processes, influences pedagogical decision-making, and reshapes teacher agency. This clearly demonstrates that how teachers position AI plays a decisive role in shaping educational outcomes. The AI-TPACK approach offers significant implications for teacher education and professional development programs. Firstly, raising awareness of AI among pre-service and in-service teachers has become essential for recognizing its pedagogical potential. The effective integration of AI into classroom practices must be addressed not solely through technical skills but also in conjunction with pedagogical goals, ethical responsibilities, and teacher agency. In this context, AI-TPACK can be employed as a reflective framework to identify both strengths and areas for growth among teacher candidates within teacher education programs.

From a professional development standpoint, AI-TPACK provides a tool that can support teachers in evaluating their own practices and making informed decisions regarding the use of AI. Teachers viewing AI not as something to be banned or as an uncontrollable element, but as a support mechanism that can

be guided for pedagogical purposes, holds the potential to enhance the quality of instructional processes. This approach encourages teachers to become not passive users of AI, but active agents in pedagogical design. The AI-TPACK domain is still an emerging field of research and presents significant opportunities for future studies. First, increasing observational studies focusing on in-class AI usage by teachers and teacher candidates is essential for understanding how AI-TPACK takes shape in practice. Teachers' purposes for using AI, the roles they assign to it, and how these uses are reflected in learning processes can be explored in depth through qualitative and mixed-methods research. In addition, studies addressing teachers' beliefs, concerns, and ethical approaches regarding AI use will contribute to a better understanding of the pedagogical and ethical dimensions of AI-TPACK. Specifically, research examining how teachers utilize AI in instructional design, assessment, and feedback processes can more holistically reveal the impact of these technologies in education. Moreover, experimental and design-based research investigating the impact of AI-TPACK-based interventions in teacher education programs will fill an important gap in evaluating the framework's contribution to teacher development.

The discussions presented in this chapter do not aim to offer a single definitive answer about the role of AI in education; rather, they focus on how teacher knowledge should be rethought in this new context. Rather than avoiding AI or allowing its unrestricted use, teachers must possess the knowledge and awareness to guide its application toward pedagogical objectives. At this point, AI-TPACK provides a meaningful framework that enables teachers to evaluate AI use from a critical, ethical, and pedagogical perspective. In conclusion, the role of teaching has not been eliminated in the age of AI; on the contrary, it has become more complex and more central. As long as teachers are able to direct the affordances of AI in ways that deepen learning, these technologies will transform into genuine opportunities for education. AI-TPACK offers a solid foundation for examining and enhancing teachers' knowledge, skills, and pedagogical decisions during this transformation. In this regard, the future of AI in education will be shaped less by the technology itself and more by how teachers understand and utilize it.

REFERENCES

Al-Abdullatif, A. M. (2024). Modeling teachers' acceptance of generative artificial intelligence use in higher education: The role of AI literacy, intelligent TPACK, and perceived trust. *Education Sciences, 14*(11), 1209. DOI: 10.3390/educsci14111209

Angeli, C., & Valanides, N. (2009). Epistemological and methodological issues for the conceptualization, development, and assessment of ICT–TPCK: Advances in technological pedagogical content knowledge (TPCK). *Computers & Education, 52*(1), 154–168. DOI: 10.1016/j.compedu.2008.07.006

Celik, I. (2022). Towards Intelligent-TPACK: An empirical study on teachers' professional knowledge to ethically integrate artificial intelligence (AI)-based tools into education. *Computers in Human Behavior, 138,* 107468. DOI: 10.1016/j.chb.2022.107468

Dick, T. P., & Hollebrands, K. F. (2011). *Focus in high school mathematics: Technology to support reasoning and sense making.* Reston, VA: NCTM.

Koehler, M. J., & Mishra, P. (2009). What is technological pedagogical content knowledge (TPACK)? *Contemporary Issues in Technology and Teacher Education, 9*(1), 60–70.

Koehler, M. J., Mishra, P., Kereluik, K., Shin, T. S., & Graham, C. R. (2013). The technological pedagogical content knowledge framework. In M. J. Spector et al. (Eds.), *Handbook of research on educational communications and technology* (pp. 101-111). Springer Publishing. DOI: 10.1007/978-1-4614-3185-5_9

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record, 108*(6), 1017–1054.

Mishra, P., Warr, M., & Islam, R. (2023). TPACK in the age of ChatGPT and generative AI. *Journal of Digital Learning in Teacher Education, 39*(4), 235–251. DOI: 10.1080/21532974.2023.2247480

Niess, M. L. (2011). Investigating TPACK: Knowledge growth in teaching with technology. *Journal of Educational Computing Research, 44*(3), 299–317. DOI: 10.2190/EC.44.3.c

Niess, M. L., Ronau, R. N., Shafer, K. G., Driskell, S. O., Harper, S. R., Johnston, C., Browning, C., Ozgun-Koca, S. A., & Kersaint, G. (2009). Mathematics teacher TPACK standards and development model. *Contemporary Issues in Technology and Teacher Education, 9*(1), 4–24.

Ning, H., Yang, X., Zhou, L., & Han, X. (2024). Teachers' AI-TPACK: Exploring the relationship between knowledge elements. *Sustainability, 16*(3), 978. DOI: 10.3390/su16030978

Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher, 15*(2), 4–14. DOI: 10.3102/0013189X015002004

Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review, 57*(1), 1–23. DOI: 10.17763/haer.57.1.j463w79r56455411

Tournaki, N. & Lyublinskaya, I. (2014). Preparing special education teachers for teaching mathematics and science with technology by integrating TPACK framework into the curriculum: A study of teachers' perceptions. *Journal of Technology and Teacher Education, 22*(2), 243-259.

TECHNOLOGICAL PEDAGOGICAL CONTENT KNOWLEDGE FRAMEWORK: UNDERSTANDING CONTEXTUAL KNOWLEDGE

Didem Karakaya Cirit[1]

INTRODUCTION

One of the central determinants of the learning process is undoubtedly the teacher. Teacher quality is a key marker of school quality in terms of both instructional processes and the quality of graduates (Adamba, 2025; Erdem & Koçyiğit, 2025; Wani et al., 2025). Therefore, teachers—who constitute the backbone of educational systems—should be capable of coordinating learning processes in which technology is meaningfully integrated. With the emergence of digital systems, rapid transformations in education have reshaped teaching and learning. These inevitable technological developments have intensified the need for technology integration in learning environments (Gruszczynska, Merchant, & Pountney, 2013). Digital technology has become widespread in educational settings and has functioned as a catalyst for re-defining teaching–learning experiences (Blannin, 2022). Accordingly, the role of digital technology in education has undergone a substantial transformation (Selwyn, 2021).

Effective integration of digital technology requires a synthesis of technological competence, pedagogical expertise, and content knowledge. This synthesis lies at the core of the educational paradigm known as Technological Pedagogical Content Knowledge (TPACK). Mishra and Koehler's (2006) TPACK framework represents a contemporary interpretation of Shulman's (1986) original notion of Pedagogical Content Knowledge (PCK). PCK refers to the unique knowledge teachers need to teach a specific topic effectively. It can be understood as the capacity to build a bridge between what teachers know (content knowledge) and how they teach (pedagogical knowledge), enabling them to represent content in ways that are comprehensible and engaging for learners. PCK also encompasses curriculum materials, students' understandings, instructional strategies, and assessment approaches related to a particular topic.

To increase instructional effectiveness, teachers may employ tools such as online instruction, spreadsheets, programming environments, and digital

1 Assoc. Prof.

videos. The knowledge required for effective teaching—technology, pedagogy, content, and the interrelationships among these domains—is conceptualized as TPACK. TPACK is not merely the sum of content, technology, and pedagogy; rather, it is a broader construct that also captures the complex interactions among these knowledge domains (Koehler, Mishra, & Cain, 2013; Mishra & Koehler, 2006). The TPACK framework clarifies the knowledge domains teachers need in order to integrate technology successfully into teaching. Since the early 2000s, many researchers have examined various forms of this knowledge base (Angeli & Valanides, 2005; Koehler & Mishra, 2005; Niess, 2005; Pierson, 2001). The framework has shaped research in teacher education and professional development and has guided extensive scholarly work. In broad terms, teachers' knowledge of technology use includes: (1) how technology can be used to develop representations of specific content and how it can facilitate or hinder learning; (2) how to align particular pedagogical practices with topics in ways that enhance instruction; and (3) how to incorporate students' prior knowledge and support the construction of new learning (Koehler et al., 2013; Mishra & Koehler, 2006).

The TPACK framework is most widely recognized through its diagram depicting three overlapping knowledge domains—content, pedagogy, and technology. Over time, this model has been revised and redesigned in different ways. The original TPACK model emphasizes that both the knowledge domains contributing to TPACK and TPACK itself are situated within a circle of contexts. Contextual knowledge outside the model is thus positioned as an additional knowledge domain that influences teachers' technology integration. In the initial conceptualization, context was described rather narrowly in terms of student background, grade level, topic, and available technology (Mishra & Koehler, 2006). This narrow framing complicates the identification of contextual factors and how they shape TPACK, and it has led to diverse interpretations (Angeli & Valanides, 2009; Kelly, 2010). Mishra (2019) later updated the framework by explicitly adding contextual knowledge to an encompassing outer ring. Contexts may be considered specific to individuals, classrooms, schools, and regions (Doering et al., 2009). Researchers have also argued that whether teachers can enact TPACK within a given context may be more important than whether they possess TPACK in the abstract (Rosenberg & Koehler, 2018; Swallow & Olofson, 2017).

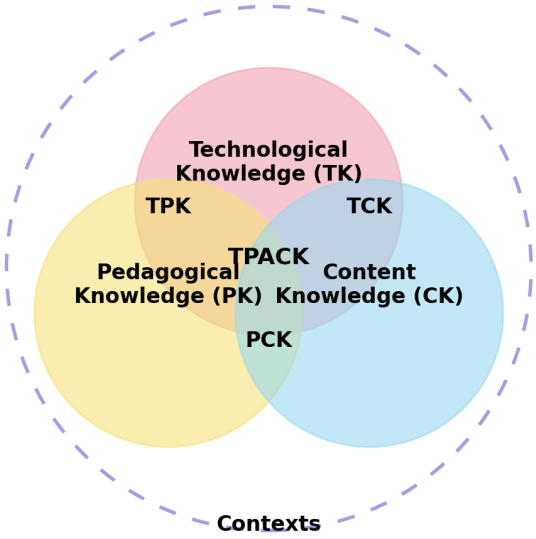


Figure 1. Technological Pedagogical Content Knowledge (TPACK) model (recreated in English; original image source: https://tpack.org/tpack-image/).

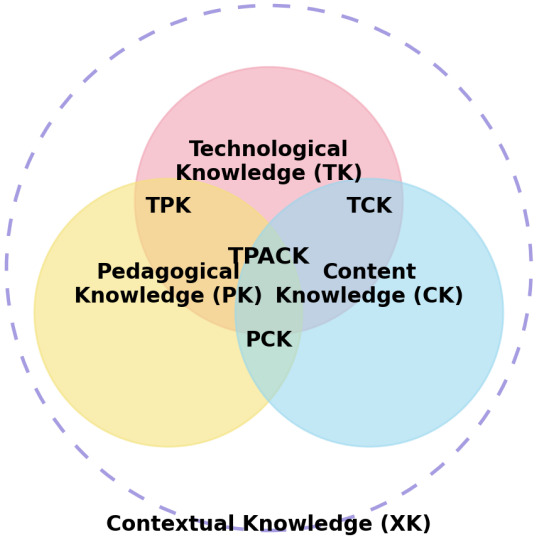


Figure 2. Revised version of the TPACK framework including Contextual Knowledge (Mishra, 2019, p. 77; recreated in English).

Research on contextual knowledge has expanded, and one of the most influential contributions is the ecological approach proposed by Porras-Hernandez and Salinas-Amescua (2013) (see also Rosenberg & Koehler, 2015). In another study conducted with Australian instructors, Lewthwaite,

Knight, and Lenoy (2015) demonstrated how students' cultural, geographical, social, and prior experiences shaped the roles that instructors adopted, and in turn influenced how instructors enacted TPACK. For example, contextual constraints related to geography led instructors to record synchronous sessions so that students with unstable internet access could engage with the content asynchronously. Contexts related to students' family and social responsibilities prompted instructors to adjust assessment windows and provide flexibility for synchronous participation. Harris and Hofer (2017) likewise showed that contextual factors are decisive in teachers' adoption and implementation of TPACK.

A systematic review focusing on contextual knowledge in TPACK reported that empirical studies predominantly involve teachers or preservice teachers (Brianza et al., 2022). Rosenberg and Koehler (2015) also found that the literature tends to focus on school- or classroom-level contexts rather than student- or community-level contexts. Overall, relatively few studies explicitly incorporate students' perspectives when examining contextual factors in TPACK.

Despite the rapid adaptation of teachers and students to technology during the recent pandemic, several questions remain open. For instance, is TPACK the pinnacle of teacher knowledge for technology integration, or is contextual knowledge—especially from students' perspectives—more central for effective learning? During emergency remote teaching, which contextual knowledge (particularly knowledge about students) was perceived as most critical in online courses? (Gozali & Cahyono, 2022). The pandemic also highlighted the growing importance of pedagogies of care. Mehrotra (2021), for example, proposed strategies such as mindfulness, creativity (e.g., sharing quotations and poems), power-sharing (making feelings and concerns visible), meaning-making (discussing how to align course requirements with student realities), and community care (encouraging students to care for one another). In online settings, teachers' efforts to get to know students and communicate with them can be understood as part of contextual knowledge about learners.

TPACK AND CONTEXT

The TPACK framework consists of three foundational knowledge domains—content knowledge, pedagogical knowledge, and technological knowledge—and, through their interactions, yields four composite domains: Technological Content Knowledge (TCK), Pedagogical Content Knowledge (PCK), Technological Pedagogical Knowledge (TPK), and Technological Pedagogical Content Knowledge (TPACK) (Table 1). These composite domains represent the integration of two or three components and emphasize the interconnectedness and mutual dependence of the knowledge domains (Koehler et al., 2013).

Table 1. Definitions of TPACK and its components (adapted from Li & Nugraha, 2025).

Knowledge Domain	Definition
Content Knowledge (CK)	Represents a deep understanding of the subject matter being taught. It includes the curriculum, standards, and core concepts required for effective teaching.
Pedagogical Knowledge (PK)	Encompasses instructional design, classroom management, assessment strategies, and the selection of instructional methods.
Technological Knowledge (TK)	Understanding of a variety of technological tools and their integration into learning environments. It involves proficiency in technology use and the ability to select tools that best serve educational purposes.
Technological Pedagogical Knowledge (TPK)	Represents the interaction between TK and PK—how technology can be integrated into pedagogical practices to enhance learning experiences.
Technological Content Knowledge (TCK)	Represents the interaction between TK and CK—knowledge and use of technology specific to a content domain.
Pedagogical Content Knowledge (PCK)	Represents the interaction between CK and PK—knowledge and use of pedagogical practices specific to a content domain.
Technological Pedagogical Content Knowledge (TPACK)	Represents the integration of all seven knowledge domains; it is the 'heart' of the framework and reflects the complex interplay among technological, pedagogical, and content knowledge.
Contextual Knowledge (XK)	Contextual knowledge includes a broad range of understandings—from awareness of available technologies to knowledge of the policies and conditions of the school, district/region, state, and national education systems (Mishra, 2019, p. 76).

TPACK is inherently context-oriented, and many researchers using the framework have emphasized that context is critical in shaping how TPACK develops and is enacted in authentic classroom environments (Doering et al., 2009; Pierson & Borthwick, 2010). Berliner (2002) argued that research in educational settings can be seriously misleading when contextual elements are neglected. Context matters for TPACK because it influences both TPACK development (Angeli & Valanides, 2009) and the meanings of the knowledge categories themselves (Doering et al., 2009; Mishra & Koehler, 2008).

Teachers' epistemological beliefs, classroom experiences, institutional goals, and expectations shape how they design learning processes—including how they integrate technology—and these factors may all be treated as dimensions of context (Angeli & Valanides, 2009). Contextual knowledge spans a wide range of considerations, from a teacher's awareness of available technologies to knowledge about the policies of the school, district/region, state, and nation. Factors such as the school in which a teacher works, the region in which the school is located, school/classroom resources, students' prior experiences, and parent-related variables can meaningfully differentiate instructional processes (Karakaya Cirit, 2016). Contextual knowledge not only shapes instruction but also influences students' achievement, interest in school, and attitudes toward learning (Votaw, 2008). Accordingly, contextual

knowledge may be conceptualized through components such as the student/family profile, classroom climate, school location and culture, and the broader education system.

MODELS OF CONTEXTUAL KNOWLEDGE

Porras-Hernandez and Salinas-Amescua (2013) offered one of the most comprehensive definitions by adopting an ecological approach and identifying three levels of context: macro, meso, and micro (Figure 3). The macro level corresponds to the sociopolitical and technological environment. For example, rapid technological developments may trigger policy changes that require teachers to integrate technology. The micro level represents classroom conditions (e.g., learning resources, teacher–student interaction), whereas the meso level represents schools and local communities (e.g., school and district administration; political and economic conditions). At the micro level, teachers may have insufficient access to hardware or software; at the meso level, school administrators may not provide adequate support. Such constraints can hinder effective technology integration and thereby influence teachers' TPACK. It is also important to consider how teacher and student characteristics shape TPACK (Porras-Hernandez & Salinas-Amescua, 2013). Students' prior knowledge, interests, individual needs, and sociocultural backgrounds can shape teachers' lesson designs and their approaches to integrating technology. Teachers' technological competencies, attitudes, and beliefs may also influence TPACK.

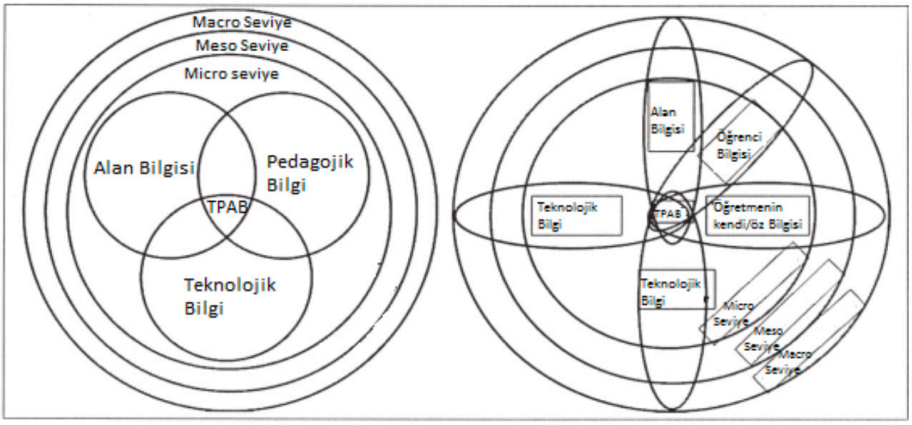


Figure 3. TPACK draft and contextual knowledge at different levels (Porras-Hernández & Salinas-Amescua, 2013, p. 232, cited in Karakaya Cirit, 2016).

Falk and Dierking (2000) also identified three foundational contributors to learning: personal, physical, and sociocultural context (Figure 4). Personal context foregrounds emotions and motivation and includes interests, knowledge, ideas, feelings, and attitudes toward learning. Sociocultural context encompasses expectations shaped by schooling and informal education, classroom-related

expectations, and communication with peers. A "community of learners" may shape how individuals behave in specific situations—for instance, what a learner takes away from a zoo visit may differ depending on whether they attend with family or friends. Physical context includes factors such as feeling safe, the attractiveness of the learning setting, and emotions such as fear and excitement; classroom size, seating density, room layout, and temperature may be considered examples (Karakaya Cirit, 2016).

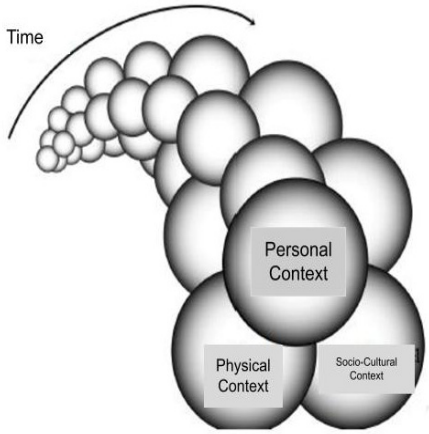


Figure 4. Falk and Dierking's (2000) contextual model for learning (cited in Karakaya Cirit, 2016).

Chai, Koh, and Tsai (2013) conceptualized contextual knowledge as four interdependent yet distinguishable dimensions: intrapersonal, interpersonal, cultural/institutional, and physical/technological. The intrapersonal dimension includes teachers' epistemological and pedagogical beliefs, which can shape instructional decisions. In lesson design, teachers may need to assume "design literacy," expressed through epistemic competence, flexibility, and creativity (Kereluik, Mishra, & Koehler, 2011); however, teachers are often more accustomed to being the authority in classrooms. Teachers' beliefs about instruction, learning, pedagogy, students, technology, and their interaction within classroom practice can shape how technology is adopted and used. For example, a teacher who believes that students cannot fulfill certain tasks or responsibilities may be less willing to enact specific strategies. Teachers' beliefs about technology and pedagogy influence technology integration (Hew & Brush, 2007; Inan & Lowther, 2010), and both technological and pedagogical beliefs are reflected in teachers' TPACK practices (Voogt et al., 2013). Niess (2013), for instance, found that teachers who view mathematics teaching primarily as memorization of rules and procedures use ICT less frequently; in contrast, teachers who believe that spreadsheet use can foster problem-solving

and decision-making tend to implement more student-centered activities supported by spreadsheets.

The interpersonal dimension is especially important for collaborative design (Koehler et al., 2007) and should be carefully considered when design work is conducted with groups. Cultural/institutional factors—such as seeing schools as sites of cultural reproduction where paper-and-pencil tests and high-stakes examinations dominate—may strongly shape whether and how teachers integrate technology (Almas & Krumsvik, 2008; Groth et al., 2009). School culture, policies, and curriculum have been shown to influence teachers' integration of technology. When school culture is perceived as innovative and supportive, teachers tend to hold more positive attitudes toward using technology to support learning activities (Tondeur et al., 2008). Physical/technological affordances also clearly influence teachers' decisions. Insufficient resources may lead novice teachers to retreat from technology use (Polly et al., 2010). When technology use requires additional effort—such as uncommon scheduling arrangements or moving students to a computer lab—teachers may opt for simpler alternatives, which can reduce willingness to integrate technology.

Ertmer (1999) reduced these contextual categories into two broader dimensions: (1) Physical/technological factors, referring to the availability and effectiveness of resources for technology integration (e.g., hardware, software); and (2) Cultural/institutional factors, referring to institutional influences on teaching practice such as society and culture, education policies, curriculum, school leadership, and school policies.

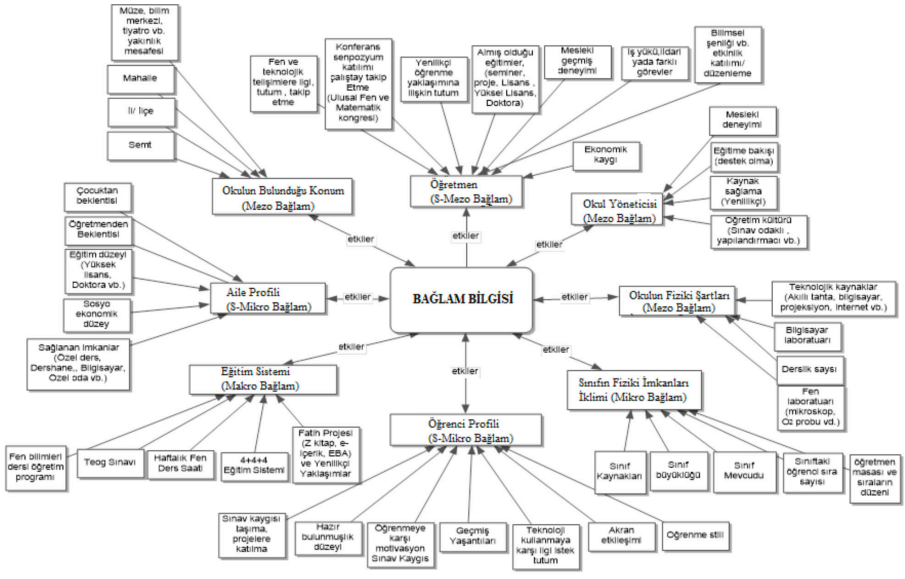


Figure 5. Elements of contextual knowledge (Karakaya Cirit, 2016).

Karakaya Cirit (2016) examined contextual knowledge under five categories: (1) macro context, (2) meso context, (3) sub-meso context, (4) micro context, and (5) sub-micro context (Figure 5). Macro context includes education policies and system-level structures such as curricula, program structures, the distribution of topics across weeks, and learning outcomes. Meso context includes elements such as school leadership, school culture, the school's stance toward education, and the school's physical structure and location. For example, a school administration with a strongly exam-oriented approach may constrain the use of online learning systems, whereas an alternative leadership stance may promote such use. Sub-meso context can be described through teachers' professional backgrounds, trainings/seminars, relationships with colleagues and administrators, beliefs about integrating technology into instruction, attitudes, and experience. Micro context includes classroom physical characteristics such as classroom size, seating/desk arrangements, and available technological equipment.

As an example of classroom-level design, the University of Texas Learning Technology Center described a 21st-century classroom model organized into five different areas, each designed with tools suitable for its purpose (e.g., camera systems, audio systems). For instance, chairs used in collaborative areas may differ from those used in direct instruction areas to better support student comfort and interaction. Sub-micro context refers to student profile characteristics such as interest in science, attitudes, peer relations, and socioeconomic status (Karakaya Cirit, 2016).

Figure 6. 21st-century classrooms (University of Texas, 2009, cited in Karakaya Cirit, 2016).

In sum, efforts to develop and identify teachers' knowledge domains and overall TPACK should also make teachers' contextual knowledge visible and should support its development. Prior research suggests that contextual knowledge is critical for teachers; when contextual knowledge is underdeveloped, both TPACK development and teachers' technology integration may be constrained. Although recent TPACK scholarship has begun to focus more explicitly on contextual knowledge, the volume of research remains limited. Therefore, additional studies are needed to deepen understanding of technology integration and contextual factors and to interpret meaningfully the differences observed across empirical findings.

REFERENCES

Adamba, C. (2025). Teacher Credentials, Students' Efforts and Aspirations as Determinants of Learning Achievement in Mathematics and Science. International Journal of Learning, Teaching and Educational Research, 24(1), 584–608.

Almas, A., & Krumsvik, R. (2008). Teaching in technology-rich classrooms: Is there a gap between teachers' intentions and ICT practices? Research in Comparative and International Education, 3(2), 103-121.

Angeli, C., & Valanides, N. (2005). Pre-service elementary teachers as information and communication technology designers: An instructional systems design model based on an expanded view of pedagogical content knowledge. Journal of Computer Assisted Learning, 21, 293-302.

Angeli, C., & Valanides, N. (2009). Epistemological and methodological issues for the conceptualization, development, and assessment of ICT-TPCK: advances in technological pedagogical content knowledge (TPCK). Computers & Education, 52(1), 154-168.

Berliner, D. C. (2002). Educational research: The hardest science of all. Educational Researcher, 31(8), 18–20.

Blannin, J. (2022). Beginning teaching with digital technology. SAGE.

Brianza, E., Schmid, M., Tondeur, J., & Petko, D. (2022, April). Investigating contextual knowledge within TPACK: How has it been done empirically so far? In Society for Information Technology & Teacher Education International Conference (pp. 1980-1988). Association for the Advancement of Computing in Education (AACE).

Chai, C. S., Koh, J. H. L., & Tsai, C. C. (2013). A review of technological pedagogical content knowledge. Education Technology and Society, 16(2), 31–51.

Doering, A., Veletsianos, G., Scharber, C., & Miller, C. (2009). Using technological pedagogical content knowledge framework to design online environments and professional development. Journal of Educational Computing, 41(3), 319-346

Erdem, C., & Koçyiğit, M. (2025). The interplay among school climate, instructional quality and teacher job satisfaction: Mediation of teacher motivation. International Journal of Educational Development, 114, 103231.

Ertmer, P. A. (1999). Addressing rst and second-order barriers to change: strategies for technology integration. Educational Technology Research & Development, 47(4), 47–61.

Falk, J. H., & Dierking, L. D. (2000). Learning from museums: Visitor experiences and the making of meaning. Walnut Creek, CA: Altamira Press.

Gozali, I., & Cahyono, B. Y. (2022). Students' Perspective on the Importance of EFL Teachers' TPACK (Technological Pedagogical Content Knowledge) and XK (Contextual Knowledge) for Learning English during the Pandemic. PASAA: Journal of Language Teaching and Learning in Thailand, 64, 244-277.

Groth, R., Spickler, D., Bergner, J., & Bardzell, M. (2009). A qualitative approach to assessing technological pedagogical content knowledge. Contemporary Issues in Technology and Teacher Education (CITE Journal), 9(4), 392-411.

Gruszczynska, A., Merchant, G., & Pountney, R. (2013). "Digital futures in teacher education": exploring open approaches towards digital literacy. Electronic Journal of E-Learning, 11(3), pp193--206.

Harris, J. B., & Hofer, M. J. (2017). "TPACK stories": Schools and school districts repurposing a theoretical construct for technology-related Professional development. Journal of Research on Technology in Education, 49 (1-2), 1–15.

Hew, K. F., & Brush, T. (2007). Integrating technology into K–12 teaching and learning: current knowledge gaps and recommendations for future research. Educational Technology Research and Development, 55(3), 223–252.

Inan, F. A., & Lowther, D. L. (2010). Factors affecting technology integration in K–12 classrooms: a path model. Educational Technology Research and Development, 58(2), 137–154.

Karakaya Cirit, D. (2016). Farklı sınıf seviyelerindeki fen bilgisi öğretmen adaylarının yenilenebilir enerji konusunda teknolojik pedagojik bağlam bilgisi ve öğelerinin araştırılması (Doctoral dissertation, Doktora Tezi, Fırat Üniversitesi, Elazığ).

Kelly, M. (2010). Technological Pedagogical content knowledge (TPACK): a content analysis of 2006-2009 print journal articles. In D. Gibson, & B. Dodge (Eds.), Proceedings of society for information technology & teacher education International conference 2010 (pp. 3880-3888). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

Kereluik, K., Mishra, P., & Koehler, M. J. (2011). On learning to subvert signs: Literacy, technology and the TPACK framework. California Reader, 44(2), 12-18.

Koehler, M.J., & Mishra, P. (2005). What happens when teachers design educational technology? The development of technological pedagogical content knowledge. Journal of Educational Computing Research, 32(2), 131–152.

Koehler, M. J., Mishra, P., & Cain, W. (2013). What is technological pedagogical content knowledge (TPACK)? Journal of Education, 193(3), 13-19.

Koehler, M. J., Mishra, P., & Yahya, K. (2007). Tracing the development of teacher knowledge in a design seminar: Integrating content, pedagogy, and technology. Computers and Education, 49, 740–762

Lewthwaite, B. E., Knight, C., & Lenoy, M. (2015). Epistemological considerations for approaching teaching in an on-line environment Aboriginal and Torres Strait Islander teacher education program: Reconsidering TPACK. Australian Journal of Teacher Education (Online), 40 (9), 63–85.

Li, M., & Nugraha, M. G. (2025). Validating a context-specific TPACK scale for primary mathematics education in China. International Electronic Journal of Mathematics Education, 20(2), em0819.

Mehrotra, G. R. (2021). Centering a pedagogy of care in the pandemic. Qualitative Social Work, 20 (1–2), 537–543.

Mishra, P. (2019). Considering contextual knowledge: The TPACK diagram gets an upgrade. Journal of Digital Learning in Teacher Education, 35 (2), 76–78.

Mishra, P., & Koehler, M.J. (2008). Introducing technological pedagogical content knowledge. Paper presented at the Annual Meeting of the American Educational Research Association, New York City, March 24–28

Mishra, P., & Koehler, M. (2006). Technological pedagogical content knowledge: a framework for teacher knowledge. Teachers College Record, 108(6), 1017-1054

Niess, M. L. (2005). Preparing teachers to teach science and mathematics with technology: Developing a technology pedagogical content knowledge. Teaching and Teacher Education, 21(5), 509–523.

Niess, M. L. (2013). Central component descriptors for levels of technological pedagogical content knowledge. Journal of Educational Computing Research, 48(2), 173–198.

Pierson, M. (2001). Technology integration practice as a function of pedagogical expertise. Journal of Education Research on Computing in Education, 33(4), 413-430

Pierson, M., & Borthwick, A. (2010). Framing the assessment of educational technology professional development in a culture of learning. Journal of Digital Learning in Teacher Education, 26(4), 126-131.

Polly, D., Mims, C., Shepherd, C. E., & Inan, F. (2010). Evidence of impact: Transforming teacher education with preparing tomorrow's teachers to teach with technology (PT3) grants. Teaching and Teacher Education: An International Journal of Research and Studies, 26(4), 863-870.

Porras-Hernandez, L. H., & Salinas-Amescua, B. (2013). Strengthening TPACK: a broader notion of context and the use of teachers' narrative to reveal knowledge construction. Journal of Computing Research, 48(2), 223e244.

Rosenberg, J. M., & Koehler, M. J. (2015). Context and technological pedagogical content knowledge (TPACK): A systematic review. Journal of Research on Technology in Education, 47 (3), 186–210.

Selwyn, N. (2021). Education and technology: Key issues and debates. Bloomsbury Academic.

Shulman, L. S. (1986). Those who understand: knowledge growth in teaching. Educational Researcher, 15(2), 4-14.

Swallow, M. J., & Olofson, M. W. (2017). Contextual understandings in the TPACK framework. Journal of Research on Technology in Education, 49(3-4), 228-244.

Tondeur, J., Van Keer, H., van Braak, J., & Valcke, M. (2008). ICT integration in the classroom: challenging the potential of a school policy. Computers & Education, 51(1), 212–223.

University of Texas, Learning Technology Center. (2009). 21st century classroom demonstrates model learning environment. Retrieved July 2, 2016, from http://www.edb.utexas.edu/education/ito/news/2009/21stcen/

Voogt, J., Fisser, P., Pareja Roblin, N., Tondeur, J., & van Braak, J. (2013). Technological pedagogical content knowledge– a review of the literature. Journal of Computer Assisted Learning, 29(2), 109–121.

Votaw, L. N. (2008). Impact of an informal learning science camp on urban, low socioeconomic status middle school students and participating teacher-leaders. Unpublished doctoral dissertation, University of Louisville, Louisville, KY.

Wani, N. U. H., Deshpande, A., Sidana, N., & Rasa, M. M. (2025). Determinants of higher education quality in Afghanistan's higher education sector: insights from students' perceptions. Journal of Applied Research in Higher Education, 17(1), 123–138.

A DISCOURSE ANALYSIS OF MAARIF MODEL FIFTH GRADE TURKISH 1 COURSEBOOK WITHIN THE SCOPE OF SOCIAL LEARNING[1]

Murat Gökmen[2]

INTRODUCTION

Languages are significant instruments for establishing systematic, repeatable, and long-term communication. These elements are regarded as foundational components of culture, initially comprising symbolic expressions and letters, subsequently words, and ultimately evolving into expressions and meanings (Elalmış, & Çetinkaya, 2025). Accordingly, languages are intrinsically linked to the culture, way of life, and perception of the individuals who utilize them. However, the dissociation of symbols and expressions from their cultural, semantic, and communicative contexts, as well as from the experiential and dynamic nature of life, can impose limitations on the expressive capacity and breadth of communication. From this perspective, languages, as a set of symbols, cannot be considered independently of the dynamics of life, as these symbols gain their significance through their context. In this regard, language skills are classified into four distinct categories: listening, speaking, reading, and writing. The transmission of expression to the other party corresponds to speaking among four distinct skills. The ability to articulate thoughts through language is referred to as "speaking," and it is widely regarded as the most crucial instrument of language. The study assesses the speaking skill in the Maarif Model 5th Grade Turkish 1st Textbook within the framework of Bandura's social learning theory. In this regard, the study employs document analysis as its research method.

Languages

Sounds in nature exist independently of humans. The human capacity to exercise influence or authority over these sound is limited. It is an established fact that the sounds of a waterfall cascading down rocks, birds singing, and

1 The study is generated from the final paper submitted to the Developing Language Skills course taught by Asst. Prof. Dr. Hakan Sarıtiken within the Department of Turkish Language and Social Sciences Education Master Program (with thesis) at Düzce University as of 2026.

2 Lect, Foreign Language Support Department, Office of the Dean of Research, Düzce University, Düzce, Türkiye, muratgokmen@duzce.edu.tr

animals making noise exist independently of human existence. It is evident that these sounds are distant and not indicative of human nature. The Islamic scriptural text, specifically the surah (chapter) of Al-Mulk, verse 26, page 561, asserts that humankind is not autonomous or isolated from these auditory phenomena (Mülk Süresi, 2026). The relationship between sounds in nature and the human spirit, body, mind, and physiology is well-established. It is difficult to imagine a scenario in which humans would not engage in communication with one another when they are not indifferent to the sounds of nature (Roever & Kasper, 2018). Throughout history, humans have developed fundamental methods and patterns for communicating with one another (Humboldt, 1988). The most prominent and widely accepted form of communication is language. Language is a pivotal element in conveying emotional states and expressions to the other party, as it is systematically part of a continuous cycle (Bruner, 1997). Initially, letters are formed through the symbolization of recurrent auditory phenomena. Subsequently, words derived from these letters correspond to situations and expressions that align with the words' meaning and context, forming repeatable expressions with coherent meaning. When a community engages with these expressions, it is evident that they constitute language (Boz, 2015). Accordingly, the most significant feature that distinguishes language from natural sounds is the systematic production of sounds and facial expressions at human agency (Boz, 2015). Thus, languages are not naturally emerging phenomena; rather, they serve as a means for humans to comprehend each other, encode information, and express themselves (Bayar, 2008). In essence, languages are not inherently natural phenomena. It is an indisputable fact that all languages undergo an evolutionary process, gradually developing and adapting over extended periods of time. These linguistic metamorphoses have the capacity to nurture and give rise to a society's civilization, shaping its cultural and intellectual landscape across the course of its history (Bekleyen, 2015).

Speaking

The act of speaking is considered to be the application phase of language, necessitating the highest level of linguistic capability and the most flexible utilization of language (Yıldırım, 2024). Speaking is defined as the conveyance of thoughts through the use of context, symbols, shapes, gestures, and facial expressions to the intended recipients (Er & Demir, 2013). Speaking is frequently accompanied by a greater need for practice and focused attention, in contrast to the written word. However, unlike written language, verbal communication does not offer the same ease with which errors can be rectified (Mercan & Temizyürek, 2024). Speaking represents the pinnacle of human communication, playing a pivotal role in the verbal articulation of circumstances, reflections,

and resolutions (Banarlı, 2008; Sapancı & Kuyumcu-Vardar, 2018). However, the comprehension of speech as merely sounds and words would be inadequate to define them (Temizkan, 2007, 2010). However, it is important to note that silences also coexist amidst verbal expressions and circumstances within the realm of communication. Recognizing that silence can be considered a form of communication, the field of communication can be categorized into two distinct classifications: verbal and nonverbal communication, as well as vocal and silent communication(Ruddell, 1966). However, communication can occur independent of verbal expression, employing non-linguistic means such as speech, situational context, or auditory stimuli within the environment (Balta, 2024a, 2024b; Thornbury, 2005). While this may not be the case for individuals in the 21st century, it is important to recognize that examining this phenomenon in isolation, disregarding the role of communication, would be both misleading and restrictive (CEFR, 2020;Gruber-Miller, 2005). However, a narrow interpretation of speech as merely a combination of sounds would also be a simplification (Humboldt, 1988; S. Şahin, 2011). The esteemed Turkish–Islamic poet Yunus Emre elucidates the significance of words in his oeuvre, underscoring their value and importance.

A word that causes the face of the individual who possesses knowledge of the keleci to become pale.

A word that transforms the word and renders the speaker's efforts futile

A word that has the capacity to terminate the war, a word that has the capacity to terminate the head.

A word that has the capacity to make the bitter bread sweet with honey and oil them to boiling.

A word that resonates with reason, a word that will be remembered. (Yunus Emre, 2026).

The concepts expressed by Yunus Emre concerning the potency of words and expressions are fundamental to understanding the efficacy of speech. Despite the increasing prevalence of technological products, speech remains a critical component of communication (Temizkan & Atasoy, 2016). In the aftermath of the Industrial Revolution, which commenced in Britain, there was an increased demand for raw materials and laborers to operate the assembly lines (M. Gökmen, 2026). The necessity to expedite production led to an augmentation in the quantity of raw materials required. This development subsequently led to the establishment of a streamlined production chain. The advent of steam power resulted in the expansion of train and steamship networks, thereby enhancing economic efficiency (Heller, 2011). The process unfolded at varying velocities and to differing extents across diverse regions of Europe (M. Gökmen, 2026). Nevertheless, this process had ramifications for numerous regions across the

globe, most notably in Europe. Given the interconnected nature of all facets of society, the study of language was deemed paramount to ensure efficacious and resilient modes of communication (Bruner, 1997). The most significant application domain of language is the act of speaking, which conveys both the immediate message and the intended connotations (Gruber-Miller, 2005). Additionally, it facilitates the transfer of references, allusions, and meanings to the interlocutor through subtext and semiotics (Mercan & Temizkan, 2024). For effective communication to transpire, the parties involved must be operating from a shared perspective and within a congruent context (). In the absence of contextual factors, recurrent themes, or communal discourse, the expressiveness of language is constrained to the immediate circumstances, a circumstance that is suboptimal. From this perspective, Koselleck defined speech as "meaning and experience" (Koselleck, 1989). An alternative formulation of this principle is the maxim "text and context." From this perspective, it is imperative to prioritize the act of understanding before the act of speaking. However, individuals with weak or insufficient comprehension and perception will not be able to fully understand what is being said as intended, and will therefore be unable to respond in this context. It is likely that the response given will not be as desired or requested (Bağcı-Ayrancı, 2016). This phenomenon underscores the notion that verbal communication is not merely an act, but rather, it should be executed with meticulous deliberation and articulated with this significance in mind. The final stage and application of learning and communication is speech (Er & Demir, 2013). According to Ahmed and Alamin, the assessment of speaking skills presents a greater challenge than the evaluation of other competencies (Ahmed & Alamin, 2014). However, while writing, listening, and reading comprehension are structured around knowledge and expression, speaking is different from other skills in that it involves knowledge and expression, making it quite difficult to measure. However, Harlen, Inbar-Lourie, Louma, and Knight have proposed the development of rubrics for assessing speech in terms of language acquisition and expressive power, asserting its potential benefits (Harlen, 2007; Inbar-Lourie, 2008; Knight, 1992; Louma, 2004). Speech is a skill that can be measured and evaluated in this respect; however, the behavior or pattern to be assessed must first be defined. The framework and the behavior pattern to be graded or measured must be communicated to students as learning objectives (Backlund et al., 1982; Mukminatien, 2015; Ülker, 2017). Turkish is also an ancient language of communication, spoken across a wide geographical area (Karademir, 2013; Korkmaz, 2003). The preservation and development of Turkish as a language of communication in the societies in which it is used is clearly expressed by Kaşgarlı Mahmut in Dîvânu Lugâti't-Türk (Ülkü Taşır, 1972). Kaşgarlı Mahmud posits in this text that Turkish is a dynamic language of communication and possesses the same depth of expression and meaning

as Arabic. Turkish is a language that presents a relatively low barrier to entry, in terms of both grammar and expressive power. However, it is important to note that Turkish also possesses a depth of meaning and expression (Karaağaç, 2013). Turkish, which initiated the adoption of the Latin alphabet with the establishment of the Turkish Republic, swiftly emerged as a lingua franca, garnering widespread popularity among a diverse audience (Baş & Temizyürek, 1972; Kavcar, 1988).

Motivation of the Study

Turkish has been spoken as a native language for approximately two thousand years (Tozlu, 2010). Despite the geographical and ethnic diversification of its speakers and the regions where it has been spoken over time, Turkish and the concepts it expresses have demonstrated a remarkable ability to maintain their etymological integrity. This phenomenon can be attributed to Turkey's alignment with the archetypal characteristics of the Turkish people. From this perspective, the instruction of Turkish to foreigners, as well as to Turks, is significant from a cultural, sociological, and economic point of view. Moreover, it has been demonstrated that this instruction also serves to enhance the expressive power of Turkish. In light of these developments, the Turkish Ministry of National Education, which transitioned to the Maarif Education Model in 2024, has undertaken a substantial transformation in its programmatic initiatives and educational activities. This transformation is designed to sustain students' engagement in lessons and to empower teachers to provide enhanced support to students as leaders and mentors. In this regard, the roles of teachers and students in this new model have been restructured based on contemporary educational approaches with a student-centered reconstructive perspective (K Kılıç, 2009; Koçer, 2024). In this study, an evaluation of the speaking activities in the 5th grade Turkish textbook is conducted within the framework of Bandura's social learning theory.

1. Problem of the Study

The research was carried out with the objective of elucidating the significance of imparting knowledge regarding the semantics, verbal expressions, and contextual applications of Turkish. Turkish, a language with a rich historical and cultural heritage, is widely regarded as one of the most challenging languages to master due to its intricate grammatical structure and profound semantic nuances. The depth of Turkish is influenced by two factors: the expressive power of words and the context formed in the flow of daily life. From this perspective, it is crucial to assess the speaking activities in the 5th Grade Turkish textbook using Bandura's social learning theory. However, the Maarif Model education system prioritizes students' ability to transcend mere learning activities and transform them into practice and character patterns.

The objective of this study is to make a scholarly contribution to the existing literature on the pertinent topic.

2. Methodology of the Study

The research is conducted through a document analysis of speaking activities within the 5th grade Turkish textbook based on Bandura's social learning theory.

3. Bandura's Social Learning Theory

Bandura (1977) posits the notion that cognitive learning constitutes a distinct form of learning that occurs within the context of everyday life. Bandura proposes that individuals establish connections with their respective social environments through this process, and asserts that learning can transpire not solely through verbal language, but also through non-verbal means. The individual's sense of self-expression, which develops with primary needs such as shelter, protection, and feeling safe, is nourished by language and enriches the framework of language's expression, context, and narration by adding meaning and depth to it (Maslow, 1943). In his foundational work, Bandura (1977) advanced the notion that symbols play a pivotal role in communication, underscoring that learning can transpire in both indirect and direct manners. The native language displays a spiral structure that is innate. In other words, the integration of language into the production process, through writing and speaking, has been facilitated by reading and listening activities. These activities have enabled the attainment of a level of communication that is a significant stage in the utilization of language (Özkan & Bağdagül, 2004; Öztürk, 2011). In accordance with Bandura's (1977) theory, learning does not solely transpire within the context of structured educational programs; it can also occur as part of one's daily routine. Furthermore, Bandura proposed that social learning could be systematized and incorporated into school curricula. According to Bandura, the process of social learning can be conceptualized as a form of programmed learning. Bandura advanced the notion that learning can be efficacious if predetermined outcomes and the social environment are adapted, and that social learning constitutes a permanent form of learning. This, in turn, enables individuals to learn behavior by analyzing the other party through their observation skills. Bandura's theory provides educators with a significant platform and opportunity, as it facilitates engagement in learning activities among students with limited perception or reduced attention, through the medium of social interaction with their peers. It is essential to incorporate this in educational curricula in accordance with Bloom's principle of mastery learning. However, as stated by Bloom (1956), the taxonomy of mastery learning encompasses not only cognitive domains but also areas such as comprehension, analysis, and evaluation. In this regard, Bandura's social learning theory is of particular significance, as it provides a framework for analysing and interpreting the context of speech. This includes

the explanation of situations and the comprehension of expressions that emerge in response to them.

4. Türkiye's Century Maarif Model

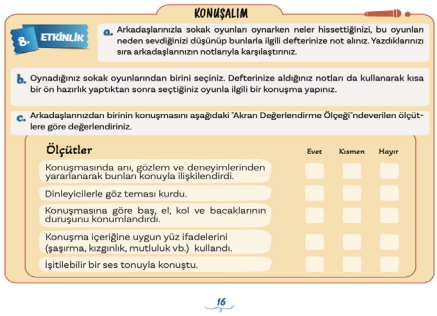
Anatolia is located at the easternmost point of the West and the westernmost point of the East, and throughout history, it has been the site of important civilisations (Ö. Şahin, & Balta, 2024). In this respect, the geography of Anatolia bears a strong resemblance to that of Bayt al-Maqdis, and it is also considered to be its historical and cultural counterpart (M. Gökmen, 2025d; 2025ı; &S. Gökmen, 2025e). However, the past of both regions is replete with the legacy of numerous civilisations (Buzpınar, 2016). In this sense, İstanbul's connection to Bayt al-Maqdis was the same not only during the Ottoman Empire, but also during the Roman and Byzantine periods (M. Gökmen, 2025d, 2025g, 2025ğ, 2025h, & S. Gökmen, 2025e,). However, these two geographies, with their human presence above ground and their human treasure, natural resources, and abundance underground, continue to contribute to the common identity of the world today (Golan, 1986). In this sense, the Anatolian continent is not confined within geographical boundaries; its borders are infinite, extending beyond human borders, to the borders of the heart, memory, and history (M. Gökmen, 2025a, 2025b &S. Gökmen, 2025e, 2025f, 2025h,). It is an irrefutable fact that, within the tolerant framework of Islam, these geographical boundaries serve to safeguard new worlds and lives on a daily basis, thereby facilitating the establishment of an ideal society. The Türkiye Century Education Model is predicated on the premise of imparting contemporary knowledge, fostering the accumulation of human capital, and safeguarding the cultural heritage of Anatolian geography. The overarching objective of the Model is to ensure the transmission of this identity and understanding to posterity through the process of synthesis. The pedagogical approach under scrutiny places the student at the centre of the learning process. The teacher is regarded as a mentor and a master, with the responsibility of guiding the student's moral, social, cultural, and knowledge development(Adıgüzel, 2025a, 2025b; Öğretim Programlarının Temel Yaklaşımı, 2026). It is crucial to underscore that this system fosters a comprehensive methodology for lifelong learning and development, catering not only to students, but also to educators and the broader community (Çeviker-Ay, & Orhan, 2024; Önal, & Maden, 2025). This methodology is founded on the pillars of morality, respect, ethics, and universal values (Öğretim Programlarının Temel Yaklaşımı, 2026; Pınar, 2025; Suluk,&Yıldırım, 2025). As indicated by Bursalıoğlu, educational institutions, and by extension, their faculty members, exert a substantial influence on the societal structure (Bursalıoğlu, 2004). From this perspective, it would be erroneous to consider teachers passive and students active in this process. However, while students form their identities

through this system, teachers are closely involved in both their own updating processes and their students' development processes. Consequently, the system possesses two dimensions, with each dimension providing a foundation for the other. This system endeavors to operationalize the concept of flipped learning in a pedagogical and pragmatic manner, while maintaining the oversight of educational institutions and pedagogues (Bergmann & Sams, 2014; N. Gökmen et al., 2025). The flipped classroom model, which combines distance and in-person learning, offers students a space for development and the opportunity for meaning-making (N. Gökmen et al, 2025). However, the de facto approach to education, characterized by its emphasis on rote memorization and surface-level understanding, hinders the ability to process, encode, and transform information into meaningful actions (M. Gökmen, 2025ç). From this perspective, the flipped learning model is also crucial for students to structure their own learning (Dolmacı & Evran-Acar, 2025; Göksoy, 2021; N. Gökmen et al., 2025). In this approach, the teacher's active involvement in the instructional process and direct guidance of the student are not a part of the model. Instead, the student's development, change, and progress goals and programs are meticulously planned in advance by the teacher. It is expected that these programs and plans will also be implemented by the students (Adıgüzel, 2025a, 2025b; Öğretim Programlarının Temel Yaklaşımı, 2026). The Maarif Education Model system, developed by the Turkish Ministry of National Education in 2024, is predicated on interactive, student-centered learning (Öğretim Programlarının Temel Yaklaşımı,, 2026). The objective of this system is to cultivate students' analytical thinking skills when confronted with problems. Consequently, students make a substantial contribution to both their learning needs and their personal development through their active participation (Aslanargun, 2023; Göksoy, 2021). The objective of this initiative is to cultivate students' self-assurance and ensure the permanence of their learning. The Maarif Education Model textbooks, which are dedicated to cultivating a generation capable of effecting change and adapting to external circumstances, play a pivotal role in this process (Önal, & Maden, 2025; Pınar, 2025). However, the book serves as a guide for both the instructor and the student, facilitating their engagement in these activities (Koçer, 2024).

5. 5th Grade Turkish 1 Textbooks: Speaking Activity

The initial speaking activity in the book commences with an exercise that prioritizes students' thoughts, ideas, and feelings. Ensuring the students' comfort is of the utmost importance; however, it is equally crucial for them to engage in the conversation activity, as this fosters the ability to articulate their own thoughts and to heed those of their peers. This activity is important for students to become acquainted with one another and to be prompted to share

their thoughts in a manner commensurate with their level of readiness, without engaging in any information or comprehension activity (Sultana, 2019). Given that students will both articulate their own thoughts and observe their peers' thoughts, this phenomenon can be regarded as an illustration of Bandura's social learning theory. However, it is important to note that when students engage in the act of sharing their thoughts or feelings, they also establish an important example for their peers. This activity, which aims to establish communication and trust between students and teachers, is consistent with both Bloom's mastery learning taxonomy and Bandura's social learning activity (Bandura, 1977; Bloom, 1956). However, both peer assessment and students' self-assessments have been facilitated in this manner. The provision of rubrics and criteria in advance is also of significant importance; however, students have the opportunity to learn in what context they can make their assessments (Andrade & Heritage, 2018). The implementation of this activity in an instructional setting has been demonstrated to engender substantial awareness and to exert a notable impact on the domain of speaking activities. Furthermore, it provides students with the opportunity to cultivate their speaking abilities, thereby facilitating more efficacious communication. This contributes significantly to students' personal and social development. Students who feel appreciated as individuals will be more inclined to engage in activities, and they will also have the chance to observe the thoughts, attitudes, and behaviors of their peers through social learning, thereby achieving socialization (Bloom, 1956). However, given that students learn how their thoughts are received in society not through direct teaching but by experiencing and doing, the likelihood of this learning transforming into character is higher when evaluated within the framework of social learning (Karamert & Kuyumcu Vardar, 2021). It is more probable that this will become a more habitual behavior; however, in this case, the student has achieved direct learning through individual study and indirect learning through social interaction. The employment of first-person singular language, or "I" language, in the activity is also a significant detail. However, given that students will encounter this activity with a compassionate language and style rather than a commanding tone, there is a greater probability of students exhibiting a more respectful and empathetic attitude in their behavior, both directly and indirectly.


KONUŞALIM

8. ETKİNLİK

a. Arkadaşlarınızla sokak oyunları oynarken neler hissettiğinizi, bu oyunları neden sevdiğinizi düşünüp bunlarla ilgili defterinize not alınız. Yazdıklarınızı sıra arkadaşlarınızın notlarıyla karşılaştırınız.

b. Oynadığınız sokak oyunlarından birini seçiniz. Defterinize aldığınız notları da kullanarak kısa bir ön hazırlık yaptıktan sonra seçtiğiniz oyunla ilgili bir konuşma yapınız.

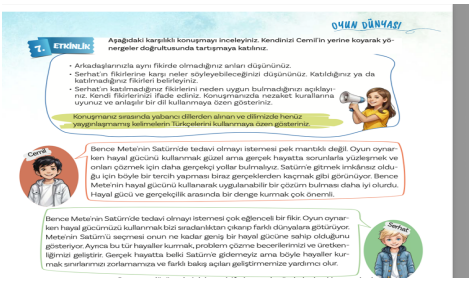
c. Arkadaşlarınızdan birinin konuşmasını aşağıdaki "Akran Değerlendirme Ölçeği"ndeverilen ölçütlere göre değerlendiriniz.

Ölçütler	Evet	Kısmen	Hayır
Konuşmasında anı, gözlem ve deneyimlerinden yararlanarak bunları konuyla ilişkilendirdi.			
Dinleyicilerle göz teması kurdu.			
Konuşmasına göre baş, el, kol ve bacaklarının duruşunu konumlandırdı.			
Konuşma içeriğine uygun yüz ifadelerini (şaşırma, kızgınlık, mutluluk vb.) kullandı.			
İşitilebilir bir ses tonuyla konuştu.			

16

Image 1: Turkish 5th Book

The implementation of the speaking activity at the culminating stage, where the anticipated learning outcomes and activities of the lesson are expected to manifest in behavioral, attitudinal, and character-related outcomes, constitutes a pivotal and advantageous element (K Kılıç, 2009; Koçer, 2024). However, this pedagogical approach enables students to identify their own learning and address their deficiencies, while concurrently acquiring the skills to establish more effective communication (Orhan & Çeviker-Ay, 2023; Öksüz et al, 2025). Additionally, the institution has placed a high priority on cultivating students' character development.


OYUN DÜNYASI

7. ETKİNLİK

Aşağıdaki karşılıklı konuşmayı inceleyiniz. Kendinizi Cemil'in yerine koyarak yönergeler doğrultusunda tartışmaya katılınız.

- Arkadaşlarınızla aynı fikirde olmadığınız anları düşününüz.
- Serhat'ın fikirlerine karşı neler söyleyebileceğinizi düşününüz. Katıldığınız ya da katılmadığınız fikirleri belirleyiniz.
- Serhat'ın katılmadığınız fikirlerini neden uygun bulmadığınızı açıklayınız. Kendi fikirlerinizi ifade ediniz. Konuşmanızda nezaket kurallarına uyunuz ve anlaşılır bir dil kullanmaya özen gösteriniz.

Konuşmanız sırasında yabancı dillerden alınan ve dilimizde henüz yaygınlaşmamış kelimelerin Türkçelerini kullanmaya özen gösteriniz.

Cemil

Bence Mete'nin Satürn'de tedavi olmayı istemesi pek mantıklı değil. Oyun oynarken hayal gücünü kullanmak güzel ama gerçek hayatta sorunlarla yüzleşmek ve onları çözmek için daha gerçekçi yollar bulmalıyız. Satürn'e gitmek imkânsız olduğu için böyle bir tercih yapması biraz gerçeklerden kaçmak gibi görünüyor. Bence Mete'nin hayal gücünü kullanarak uygulanabilir bir çözüm bulması daha iyi olurdu. Hayal gücü ve gerçeklik arasında bir denge kurmak çok önemli.

Serhat

Bence Mete'nin Satürn'de tedavi olmayı istemesi çok eğlenceli bir fikir. Oyun oynarken hayal gücümüzü kullanmak bizi sıradanlıktan çıkarıp farklı dünyalara götürüyor. Mete'nin Satürn'ü seçmesi onun ne kadar geniş bir hayal gücüne sahip olduğunu gösteriyor. Ayrıca bu tür hayaller kurmak, problem çözme becerilerimizi ve üretkenliğimizi geliştirir. Gerçek hayatta belki Satürn'e gidemeyiz ama böyle hayaller kurmak sınırlarımızı zorlamamıza ve farklı bakış açıları geliştirmemize yardımcı olur.

Image 2: Turkish 5th Grade 1st Book

The preliminary speaking activity presupposes that students are already acquainted with each other; the subsequent activity provides illustrative examples and scenarios to accentuate students' attitudes and behaviors during this process (Güven-Demir, 2026). This is of significant importance and value in terms of developing students' sensory and cognitive skills (Balta, 2024a, 2024b). The efficacy of this activity is contingent upon the successful execution of the initial step, which is to assess the students' comprehension of the instructions. This pedagogical approach has proven effective in fostering intellectual engagement, social interaction, and active participation in the learning process through dialogue. This approach is consistent with Bandura's social learning theory, as it fosters a collaborative environment where students can compare their learning experiences with those of their peers (Bandura, 1977). However, this activity, which integrates knowledge level with perception and psychomotor behavior,

will facilitate understanding of the expressive richness of Turkish and promote sensory development in students (Hossain, 2015; Sarıtiken, 2023). This attitude and approach are consistent with Bandura's social learning theory.

CONCLUSION

The capacity for verbal communication, a skill that is inherently dynamic and perpetually evolving, is contingent upon an environment characterized by perpetual motion and mutual trust. For individuals experiencing challenges with verbal communication, an analysis of their speech activities can be conducted in terms of language and expression. The reactions and effects on the other party can be identified in an environment where speech activities are accepted unconditionally, without conditions, and in an empathetic manner, where there is no fear of being misunderstood. Consequently, unbiased, controlled conversations can emerge within this environment, fostering an atmosphere conducive to movement and expression. The Maarif model has allocated a considerable amount of time to reading, writing, listening, and speaking activities, with the objective of attaining comprehensive learning for students. This finding serves as a substantiated assertion that the Maarif Model is predicated upon an educational paradigm that prioritizes the student as the central focus of instruction. Nevertheless, the book provides students with activities and instructions, thereby empowering them to plan their own learning while cultivating their self-confidence and self-regulation. These activities, which are not only about knowledge but also, in a sense, about applying it to social life, are consistent with Bandura's social learning theory and have been designed as a good example of its application. It is imperative that students actively engage in these activities to develop their cognitive abilities, including critical thinking, writing, and reading skills. This, in turn, enhances communication not only for the individual student but also for the broader society. In contemporary society, experiential learning and the communication of shared values with society are of paramount importance. This approach underscores the preservation of personal differences while cultivating mutual understanding and respect. In this context, the contributions of Bandura's social learning theory and Farabi's moral and literary personality transformation into behavior and products assume significant importance. The Maarif Model has effectively addressed this in its Turkish textbook by providing subtexts and direct expressions as guidelines and text topics, thereby facilitating student participation in the process. This finding suggests that the Turkish textbook draws from Bandura's social learning theory and effectively incorporates its principles into its activities. Consequently, it can be concluded that the Maarif Model effectively implements a social learning method in its 5th Grade Turkish 1 textbook, which comprises activities and guidance consistent with Bandura's social learning theory.

REFERENCES

Adıgüzel, A. (2025a). Türkiye Yüzyılı Maarif modeline göre bütüncül öğrenme yaşantılarına ilişkin öğretmen görüşleri. *APJEC - Academic Platform Journal of Education and Change*, 8(2), 110-132. https://doi.org/10.55150/apjec.1818889

Adıgüzel, A. (2025b). Türkiye Yüzyılı Maarif modelinin Cumhuriyet dönemi eğitim programlarıyla karşılaştırmalı olarak incelenmesi: Bir meta sentez çalışması. *The Journal of International Lingual Social and Educational Sciences,* 11(1), 9-21. https://doi.org/10.34137/jilses.1630966

Ahmed, S., & Alamin, A. (2014). Assessing speaking ability in academic context for fourth year Taif University students. *International Journal of English Linguistics*, 4(6), 97-103. https://doi.org/10.5539/ijel.v4n6p97

Andrade, H. L. & Heritage, M. (2018). *Using formative assessment to enhance learning, achievement, and academic self-regulation*. Routledge Taylor&Francis Group.

Aslanargun, E. (2023). Modernite ve postmodernite arasında Türk eğitim yönetiminin açmazları. *Alanyazın Eğitim Bilimleri Eleştirel İnceleme Dergisi,* 21-27. https://doi.org/10.59320/alanyazin.1191412

Backlund, P. M., Brown, K. L., Gurry, J., & Jandt, F. (1982). Recommendations for assessing speaking and listening skills. *Communication Education*, 31(1), 9-17. Doi:https://doi.org/10.1080/03634528209384655

Bağcı Ayrancı, B. (2016). Konuşma, konuşma eğitimi ve Türkçe programlarındaki yeri. *Karaelmas Eğitim Bilimleri Dergisi*, 4(1), 15-24.https://dergipark.org.tr/tr/pub/kebd/article/1049081

Balta, E. E. (2024a). Okuma stratejileri konulu çalışmalar: Bir meta-sentez incelemesi. *Uluslararası Eğitim Bilimleri Dergisi*, 11 (39), 100-127. https://dx.doi.org/10.29228/INESJOURNAL.75837

Balta, E. E. (2024b). Türkçe derslerinde aktif öğrenme: İlgili çalışmaların betimsel içerik analizi. Alanyazın *Eğitim Bilimleri Eleştirel İnceleme Dergisi*, 5(2), 212-223. https://doi.org/10.59320/alanyazin.1463298

Banarlı, N. S. (2008). *Türkçe'nin sırları.* Kubbealtı Neşriyat.

Bandura, A. (1977). *Social learning theory.* Prentice Hall.

Banguoğlu, T. (1995). *Türkçenin grameri*. Türk Tarih Kurumu Basım Evi.

Baş, Ö. & Temizyürek, F. (2022). 7. Cumhuriyet dönemi Türk dili politikaları. *RumeliDE Journal of Language and Literature Studies(29*), 88-100.10.29000/rumelide.1164037.

Bekleyen, N. (2015). *Dil öğretimi.* Pegem Yayınları.

Bergmann, J. & Sams, A. (2014). *Flipped learning: Gateway to student engagement*. International Society for Technology in Education.

Bloom, S. B. (1956). *Taxonomy of educational objectives: The classification of educational goals*. Longmans, Green and Co Ltd.

Boz, E. (2015). *Türkiye Türkçesi: Biçimsel ve anlamsal işlevli biçimbilgisi* (4. baskı). Gazi Kitapevi.

Bruner, J. S. (1997). *The culture of education*. In The culture of education. Harvard University Press.

Bursalıoğlu, Z. (2004). *Okul yönetiminde yeni yapı ve davranış, yirmiüçüncü basım*. Pegem Akademi,

Buzpınar, Ş. T. (2016). *Hilafet ve saltanat: II. Abdülhamid döneminde halifelik ve Araplar*. Alfa.

CEFR (2020). *Common European framework of reference for languages: learning, teaching, assessment. Companion volume*. Strasbourg: Council of Europe Publishing.

Cin et al. (2024). Türkçe 5 1. Kitap. (Y. Uyar et al, eds.). *Türkiye Cumhuriyeti Milli Eğitim Bakanlığı.* https://tymm.meb.gov.tr/upload/kitap/turkce_5_1.pdf

Çeviker Ay, Ş., & Orhan, Ü. G. (2024). Çokkültürlü eğitim kavramı ve öğretmenler için bir çokkültürlü eğitim çerçevesi. *International Journal of Düzce Educational Sciences*, 2(1), 60-70. https://doi.org/10.62195/ijdes.1446084

Dolmacı, A., Evran-Acar, F. (2025). Development of a twenty-first century skills curriculum through the flipped learning approach. *Humanities and Social Sciences Communication,*12**(**1666) . https://doi.org/10.1057/s41599-025-05925-2

Elalmış, S., & Çetinkaya, F. Ç. (2025). Farklı metin türlerinde okuduğunu anlama becerilerinin zihin kuramı becerileri açısından incelenmesi. *Temel Eğitim Araştırmaları Dergisi*, 5(2), 139-158. https://doi.org/10.55008/te-ad.1706385

Er, O & Demir, Ö. (2013). Konuşma becerisinin Türkçe öğretmenleri tarafından kullanılabilirliğine ilişkin Türkçe öğretmeni adaylarının görüşlerinin incelenmesi. *Turkish Studies - International Periodical For The Languages, Literature and History of Turkish or Turkic. 8(1), 1417-1436. http://dx.doi.org/10.7827/TurkishStudies.3696*

Golan, D. (1986). Hadrian's decision to supplant "Jerusalem" by "Aelia Capitolina." *Historia: Zeitschrift Für Alte Geschichte*, *35*(2), 226–239. http://www.jstor.org/stable/4435963

Gökmen, M. (2025a). An aket study: Turkish Language as a soft power instrument contributing to Türkiye's serönity. In. C. Arenas, & Ç. Tan (Eds). April 16-18 2025 3rd International Turkic World Congress on Social, Humanities, Administrative, and Educational Sciences Proceeding Book Ankara, Türkiye, (pp. 424-449). Bzt Turan Publishing House. https://drive.google.com/file/d/16IF0Y47rZfsSmR8KbO-Mk7TN8o2Jz04I/view

Gökmen, M. (2025b). Belirmats of Hatan roles in Turkish 2 course book. In B. Durbilmez (Ed.), June 13-15 2025 1. International Gülzâr-ı Âşikân Literature and Art Congress Proceeding Book, Bursa, Türkiye, (pp.76-122), Academic Sharing Platform Publishing House. https://ubsder.org/wp-content/uploads/2025/12/GULZAR-CONGRESS-BOOK.pdf.

Gökmen, M. (2025c). Serönality of the suffixes in Türkiye's Turkish as Ottoman Turkish's Vasir. In S. Bakır (Ed.), June 27-30 2025 Avrasya 13th International Conference on Social Sciences Proceeding Book, Tashkent, Uzbekistan, (pp. 857- 883). Academy Global Publishing House. https://www.avrasyakongresi.org/_files/ugd/797a84_8c120fd2bfd2406692d9d4cb0ea77849.pdf

Gökmen, M. (2025ç). Medalime: An Eminerten, Gülseyen, Teniz, Belif, Janik, Sebut, Kadmer and Vasir Form of Education Institution and Curriculum Proposing the Babelisation and Nilenerisation of Social and Medical Studies in One Hub. In A. Kırkan & Y. Cengiz (Eds), (pp.161-188). Linguistics and Comparative Literature - Linguistics. Mardin Artuklu Üniversitesi Yayınları. https://www.artuklu.edu.tr/upload/posterler/karsilastirmaliedebiyat/kongre2/Dilbilim%20%20ve%20Karşılaştırmalı%20Edebiyat%20-Dilbilim-.pdf

Gökmen, M. (2025d). *Vasir Bilkadir Abdülhamid II and his Bayt al-Maqdis policies against Jewish Zionists*. (C. C. S. Temana, ed.). Serüven Yayınevi.

Gökmen, M. & Gökmen, S. (2025e). *Bayt al-Maqdis: A ground for mutual respect*. İksad Publishing House. https://iksadyayinevi.com/home/bayt-al-maqdis-a-ground-for-mutual-respect/

Gökmen, M.& Gökmen, S. (2025f). Shylock as the key figure belirmating Elizabethan Christian society in The *Merchant of Venice. In. M. Bulut (ed.). (pp. 47-66). Sosyal Bilimlerde Kuram, Araştırma ve Tartışmalar- V.* Özgür Yayınevi. DOI: https://doi.org/10.58830/ozgur.pub1121.c4547

Gökmen, M. (2025g). *Two in a hub: A method for Turkish learners*. Eğitim Yayınevi.

Gökmen, M. (2025ğ)**.** Analysing the Destan as a historical text in the context of reconstructionism. In. N. M. Baytimur (ed*.). International Research in the Field of New Turkish Literature.* Eğitim Yayınevi.

Gökmen, M. & Gökmen, S. (2025h). A proposal to the conflict in Cyprus Island: Two federated state under a uniter state. In. M. E. Güven (ed.). *International Compilation Of Research and Studies in Political Science, International Relations and Public Administration.* (pp. 119-135). Serüven Yayıncılık. https://www.seruvenyayinevi.com/Webkontrol/uploads/Fck/politicalaralik2025_3.pdf

Gökmen, M. (2025ı). Vasir Bilkadir Abdülhamid II's Vanlis policies against Jewish Zionists In Bayt Al-Maqdis. *Socrates Journal Of Interdisciplinary Social Researches*, *11*(60), 191–221. Https://Doi.Org/10.5281/Zenodo.18104408

Gökmen, M. (2026). Experiences of African students' learning Turkish in Düzce University. *Lejana Journal*, 9(1), https://lejana.ac/volume-9-issue-1-2026/

Gökmen, N.;Demirhan-Gökmen, Y.; Kaya, Es.; Kaya, Er.; Gökmen, M. (2025). An educational application and training method lesson proposal: Bizah. In A. Saylık et al.(Eds). *October 30-31 2025 International Social Sciences Graduate Student Symposium: Family in the Light of Sciences Proceedings Book, Siirt, Türkiye*. (pp. 42-90.). Siirt University Press. https://sbe.siirt.edu.tr/dosya/aktivite/sempozyum-tam-metin-kitapcigi-siirt-20261516549878.pdf

Göksoy, S. (2023). Evaluating the behaviors in the educators school in terms of Kohlberg's moral environment development theory. *Journal of Education, Society and Behavioural Science* 36(1):43-52. https://doi.org/10.9734/jesbs/2023/v36i11202

Göksoy, S. (2025a). Enhancing productivity in educators: strategies for teaching and learning. *An Overview of Literature, Language and Education Research*(10),73–8. https://doi.org/10.9734/bpi/aoller/v10/4290

Göksoy, S. (2025b). Bireyin öz liderlik potansiyelini ortaya çıkarması mümkün müdür?? *Uluslararası Liderlik Eğitimi Dergisi,* 9(1), 1-7.https://dergipark.org.tr/tr/pub/ijolt/issue/90476/164893

Gruber-Miller, J. (2005). Developing listening and speaking Skills: Practical ways to implement the standards with the "Oxford Latin Course." *The Classical Journal*, *101*(1), 87–98. http://www.jstor.org/stable/30038634

Güven- Demir, E. (2026). The moderation role of representational fluency in the effect of mental imagery on scientific creativity. *Thinking Skills and Creativity*(59), 1-17, https://doi.org/10.1016/j.tsc.2025.101966

Harlen, W. (2007). *Assessment of learning*. Sage.

Hossain, M. I. (2015). *Teaching productive skills to the students: a secondary level scenario.* (Unpublished Master's Thesis). BRAC University, Bangladesh.

Heller, H. (2011).The Industrial Revolution: Marxist perspectives. *The Birth of Capitalism: A 21st Century Perspective, Pluto Press*, 176–214. https://doi.org/10.2307/j.ctt183p671.10.

Humboldt, W. V. (1988). *On language: The diversity of human language-structure and its influence on the mental development of mankind*, (P. Heath, ed./trans), (pp. 48-65). Cambridge University.

Inbar-Lourie, O. (2008). Constructing a language assessment knowledge base: A focus on language assessment courses. *Language Testing*, 25(3), 385-402.

Karademir, F. (2013). *Türkiye Türkçesinde iyelik olgusu*. Kesit.

Karaağaç, G. (2013). *Türkçenin dil bilgisi*. Akçağ Yayınları

Karamert, Ö., & Kuyumcu Vardar, A. (2021). The effect of gamification on young mathematics learners' achievements and attitudes. *Journal of Educational Technology and Online Learning,* 4(2), 96-114. https://doi.org/10.31681/jetol.904704

Kavcar, C. (1988). Atatürk ve kültür reformu. *Erdem,* 5(12), 915-924. https://dergipark.org.tr/tr/pub/erdem/issue/44540/552576

Kılıç, A. (2009). Learner-centered micro teaching in teacher education. *International Journal of Instruction*, 3(1), 77-100. https://dergipark.org.tr/en/pub/eiji/article/70086

Knight, B. (1992). Assessing speaking skills: A workshop for teacher development. *ELT Journal,* 46(3), 294-302.

Koçer, Z. (2024). *Maarif Modeli 5. sınıf Türkçe ders kitabındaki okuduğunu anlama etkinliklerinin barrett taksonomisi'ne göre değerlendirilmesi*. (Tez No: 974773) [Yüksek Lisans Tezi, Niğde Ömer Halisdemir Üniversitesi]. Türkiye Cumhuriyeti Yüksek Öğretim Kurumu Tez Merkezi.

Korkmaz, Z. (2003). *Türkiye Türkçesi grameri : Şekil bilgisi (3. ed.).* Türk Dil Kurumu.

Koselleck, R. (1989). Linguistic change and the history of events. *The Journal of Modern History*, *61*(4), 650–666. http://www.jstor.org/stable/1881462

Luoma, S. (2004). *Assessing Speaking* (1st Edition). Cambridge University Press.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396.

Mercan, S., & Temizyürek, F. (2024). Yabancı dil olarak Türkçe öğrenen öğrencilerin konuşma motivasyonunun düşmesinin nedenlerine yönelik görüşleri. *Çukurova Üniversitesi Türkoloji Araştırmaları Dergisi,* 9(2), 931-945. https://doi.org/10.32321/cutad.1532068

Mukminatien, N. (2015). The advantages of using an analytic scoring procedure in speaking assessment. *TEFLIN Journal,* 11(1), 35-46.

Mülk Süresi. (2026, Ocak 13). *Kur'an.* Diyanet İşleri Başkanlığı Resmi İnternet Sayfası. https://kuran.diyanet.gov.tr/mushaf/kuran-meal-2/mulk-suresi-67/ayet-1/diyanet-isleri-baskanligi-meali-1

Orhan,&Çeviker-Ay, (2023). How to teach critical thinking: an experimental study with three different approaches. *Learning Environments Research*(26), 199-217. https://doi.org/10.1007/s10984-022-09413-1

Öğretim Programlarının Temel Yaklaşımı (2026, January 13). *T. C. Milli Eğitim Bakanlığı*. https://tymm.meb.gov.tr/temel-yaklasim

Öksüz, H. İ., Keskin, H. K., & Zengin, A. (2025). Türkçe ders kitaplarındaki metinlerle öğrenci kompozisyonlarının cümle uzunluğu yönünden karşılaştırılması. *International Journal of Düzce Educational Sciences*, 3(2), 117-130. https://doi.org/10.62195/ijdes.1753210

Önal, A., & Maden, S. (2025). Türkiye Yüzyılı Maarif Modeli Türkçe ders kitaplarının yenilenmiş bloom taksonomisine göre incelenmesi (5. Sınıf Örneği). *Milli Eğitim Dergisi*, 54(1), 905-940. https://doi.org/10.37669/milliegitim.1705014

Öztürk, N. (2011). Türkçe anadil tartışmaları üzerinde bir değerlendirme. In İ. Yazar (Ed.), *16 – 18 Aralık 2010 Dokuz Eylül Üniversitesi III. Uluslararası Dünya Dili Türkçe Sempozyumu Bildiri Kitabı, İzmir, Türkiye,* (pp. 747-753). Kanyılmaz Matbaası.

Özkan, F. & Bağdagül, M. (2004). Yabancı dillerin Türkçe'nin sözdizimine etkisi. *Bilig*(30), 97–120.

Pınar, M. A. (2025). Türkiye Yüzyılı Maarif Modeli erdem-değer-eylem çerçevesi bağlamında 5. sınıf fen bilimleri ders kitabının incelenmesi. International Journal of Düzce Educational Sciences, 3(2), 92-116. https://doi.org/10.62195/ijdes.1701554

Roever, C., & Kasper, G. (2018). Speaking in turns and sequences: Interactional competence as a target construct in testing speaking. *Language Testing,* 35(3), 331-355.

Ruddell, R. B. (1966). Oral language skills and the development of other language Skills. *Elementary English*, *43*(5), 489–517. http://www.jstor.org/stable/41386030

Sapancı, A. & Kuyumcu-Vardar (2018). Öğretim elemanlarının sınıf içinde karşılaştıkları istenmeyen davranışlar. *Turkish Studies Social Sciences.* 13(18), 1095-1118. http://dx.doi.org/10.7827/TurkishStudies.14076

Sarıtiken, H. (2023). Türkçe öğretmeni adaylarının ortaokul Türkçe derslerinde drama tekniğinin kullanılmasına yönelik görüşlerinin değerlendirilmesi. *Uluslararası Türkçe Edebiyat Kültür Eğitim (TEKE) Dergisi*, 12(3), 1221-1236. https://doi.org/10.7884/teke.1354185

Sultana, N. (2019). Language assessment literacy: An uncharted area for the English language teachers in Bangladesh. *Language Testing in Asia,* 9(1), 1-14.

Suluk, B., & Yıldırım, O. (2025). Türkiye Yüzyılı Maarif Modeli'ne göre hazırlanan ders kitaplarındaki değerlerin gelişimsel dönemler açısından incelenmesi. Kocaeli Üniversitesi Eğitim Dergisi, 8(1), 157-177. https://doi.org/10.33400/kuje.1606487

Şahin, Ö., & Balta, E. E. (2024). Türkçe ders kitaplarının halk bilimi unsurları bakımından değerlendirilmesi. *Uluslararası Türkçe Edebiyat Kültür Eğitim (TEKE) Dergisi*, 13(2), 589-613. https://doi.org/10.7884/teke.1410216

Şahin, S. (2011). *American English, Turkish and Interlanguage Refusals: A cross-cultural communication and interlanguage pragmatics study*. [Unpublished Master's Thesis]. Middle East Technical University, Ankara.

Temizkan, M. (2007). *İlköğretim ikinci kademe Türkçe derslerinde okuma stratejilerinin okuduğunu anlama üzerindeki etkisi.* (Tez No: 211829) [Doktora Tezi, Gazi Üniversitesi]. Türkiye Cumhuriyeti Yüksek Öğretim Kurumu Tez Merkezi.

Temizkan, M. (2010). Öğrenci merkezli öğrenme yaklaşımına göre düzenlenen Türk Dili II dersinin konuşma becerisine yönelik tutumlarına etkisi. *Milli Eğitim Dergisi*, 40(187), 86-103.https://dergipark.org.tr/tr/pub/milliegitim/article/407031

Temizkan, M., & Atasoy, A. (2016). Konuşma becerisinde aşamalı gelişim modelinin etkililiği üzerine bir değerlendirme. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi,* 13(34). https://dergipark.org.tr/tr/pub/mkusbed/article/259959

Thornbury, S. (2005). *How to teach speaking.* Pearson-Longman.

Tozlu, S. (2010). Anadolu Türk Tarihi ve Anadoluculuk. *Atatürk Üniversitesi Kazım Karabekir Eğitim Fakültesi Dergisi*(9), 397-410. https://dergipark.org.tr/tr/pub/ataunikkefd/issue/2768/37009

Ülkütaşır, M. Ş. (1972). *Büyük Türk dilcisi: Kaşgarlı Mahmut*. Ankara Üniversitesi. https://www.turkceogretimi.com/dil-uezerine/turkcenin-guncel-sorunlari-prof-dr-cahit-kavcar

Yıldırım, N. (2024). *Stratejiye dayalı konuşma etkinliklerinin ortaokul öğrencilerinin konuşma becerisi ve konuşma kaygısına etkisi.* (Tez No: 876514) [Yüksek Lisans Tezi, İnönü Üniversitesi]. Türkiye Cumhuriyeti Yüksek Öğretim Kurumu Tez Merkezi.

Ülker, V. (2017). The design and use of speaking assessment rubrics. Journal of Education and Practice, 8(32).

RELIGIOUS NATIONALISM SERBIAN ORTHODOX CHURCH AND THE MYTH OF KOSOVO

Urtak Hamiti[1]

Abstract

Religious nationalism is often perceived as a manifestation of a certain nation, such as a nation being a community of ancestors and those living presently, both dead and alive, sharing a common religion. In this case, nationalism incorporates within its territory all past and current markers of nationhood, religious monuments, religious tales, and, in the case of Serbian religious nationalism, even the self-perpetuating myth of "Kosovo as the Jerusalem of Serbian faith and birthplace of Serbian country". The correlation between the Serbian Orthodox Church and the Serbian State, inspired by religious nationalism, bent on disintegrating former Yugoslavia and creating a "Greater Serbia," has been explained and presented historically. However, nowhere better than in the conflict of Kosovo and in the aftermath of the creation of Kosovo as an independent and sovereign state, has the Serbian Orthodox Church taken such a strong stance of inspiring and defending Serbian religious nationalism, failed to condemn Serbian state's fascist and genocidal tendencies and crimes against Kosovo Albanians (a majority of whom are Muslims, practicing or non-practicing) and remains opposed to any political solution that would settle the relations between the two countries, Kosovo and Serbia. This paper aims to explain how false myths can fuel religious nationalism, and religious nationalism is then used as a means in political and military actions that result in crimes against humanity bordering on genocide itself.

Keywords: religious nationalism, the Serbian Orthodox Church, Kosovo War, Kosovo Statehood, Kosovo Albanian Muslim heritage

The complete restructuring of nations in the area of the Western Balkans (more specifically in the area of former Yugoslavia), which foresees settled disputes between nations and countries and no open issues, that began three decades ago, is still an ongoing and unfinished business. Ethnic tensions fueled by nationalism that destroyed former Yugoslavia began with the annulment of

1 PhD, Associate Professor, University "Kadri Zeka", Gjilan, Fakülte, Kosovo, urtak.hamiti@uni-gjilan.net, ORCID: orcid.org/0000-0002-2187-7595

Kosovo's autonomy within the Yugoslav Federation by Serbian state authorities on March 23rd, 1989. The Serb nationalist movement began its plan to create a "Greater Serbia", a country that would encompass all areas in the former Yugoslavia with a Serb population, exactly by suspending Kosovo's autonomy, where the majority of the population were and still are Albanians of mostly Muslim religion, who had previously demanded even greater autonomy within Yugoslav Federation through massive demonstrations in 1981. Although religion was not officially banned in socialist Yugoslavia Federation, it did not play a significant role in the society and identity of the nations that lived alongside each other in the Federation. The Serbian Orthodox Church was the first Serb institution that dared, in the early 1960's and later in 1982, to publicize that Kosovo Albanians allegedly planned and executed the expulsion of Kosovo Serbs as well as persecution of the Church itself.[2]

Unable to deny the historical truth that Kosovo has always been a majority Albanian- populated area, both as part of the Ottoman Empire or the Yugoslav Federation, Serb nationalists have always laid claim to Kosovo on historical grounds. Serb nationalists and the Serbian Orthodox Church have posited Kosovo as the cradle of their culture and religion emphasizing the battle that took place in 1389 between a Christian Coalition and Turkish Ottoman forces, at the Fushe Kosova/Kosovo Polje or Field of Black Birds, and the fact that Patriarchate of Peja/Pec has always been in Kosovo even during five centuries of Ottoman rule.

In the Yugoslav Federation, the Serbian Orthodox Church offered a different mythical and historically distorted narrative for Serb nationalists by stating that Serbia has always been sacrificed and in defense of Christian values; therefore, the Serb nation has every right to lay claim to territories it once controlled, according to the Church. The Serbian Orthodox Church coined the phrase "Kosovo is the Serbian Jerusalem" precisely aiming to back a stance where the Serbian nation and religion are one in defense of Christendom. This discourse was applied by Serb nationalists in pursuit of their of "Greater Serbia". However, this was an invented tradition. As in many other cases of religious nationalisms, modern nationalist practices often use historical materials and events to construct an invented tradition for immediate purposes mainly to mobilize their nationalist base.[3]

Serb religious nationalists used other historical events to enhance their position such as the retreat of the defeated Serbian army that was almost obliterated by Austrian-Hungarian forces in the First World War. The retreat took place through present-day Kosovo and Albania to the island of Corfu,

2 Vjekoslav Perica, *Balkan Idols: Religion and Nationalism in Yugoslav States*, Oxford University Press, New York:, 2002, pp. 43-55 and pp.123-165.

3 Eric Hobsshawn, Terence Ranger, *The Invention of Tradition*, (Cambridge: University Press, 1983) pages 6-7

Greece. This retreat was branded as "Serbian Golgotha"[4] and after the war, in 1918 while commemorating it as martyrdom and comparing it with the heroism of Serbs at the Battle of 1389, Patriarch Dimitrije Pavlovic used the phrase of "Serbian Jerusalem", urging Serbs for holy journeys to the island of Corfu that has memorials and Serbian military cemetery, as pilgrims go to Jerusalem[5]

The first published quote of Kosovo as "Serbian Jerusalem" was used by Serbian general and Nazi Collaborator Milan Nedic in June of 1939, marking the 550th anniversary of the Battle of 1389 in daily "Politika" in which he stated "that as dark clouds gather in the skies of Europe, Serbs are again returning to Kosovo, Serbian Jerusalem". This discourse was replicated in 1989 by Serbian nationalists aiming to mobilize and militarize its base seeking "Greater Serbia". However, it also proves that the phrase "Serbian Jerusalem" itself exemplifies the nationalist practice of the invention of tradition and distortion of history.[6]

Not only Serb religious nationalists where using the phrase "Kosovo is Serbian Jerusalem", but also prominent intellectuals and Communists further developed the Serb-Jewish parallel. One of the most prominent Serbian writers, Dobrica Cosic, who was also was the first President of the Federal Republic of Yugoslavia (from 1992 to 1993) and considered by his admirers as the Father of the Nation due to his influence on modern Serbian politics and the national revival movement in the late 1980s, resorted to the same rhetoric. In an interview in 1983 Cosic stated that "Serbs are the new Jews at the end of 20th century eternally in search of their promised Holy Land"[7] Another Serb nationalist and prominent writer Vuk Draskovic in 1985 published an open letter to Israeli writers outlining a new history according to which both Serbs and Jews were hated and have historically suffered because of their identity, religion, and tradition. Draskovic went further to claim that Serbs are the thirteenth lost tribe of Israel, that traces of ancient Serb and Jewish kingdoms can be found in two holy lands of Kosovo and Israel-Palestine, hence Kosovo is "Serbian Jerusalem"[8].

The relationship between religion and nationalism is still a subject of debate. In theory nationalism can be understood as both a secular and religious phenomenon. For instance, Albanian nationalists have historically been of Muslim, Christian Roman Catholic, and Orthodox backgrounds, respectively. Rogers Brubaker separates four approaches or categories of religion and

4 Thomas Emert, *Serbian Golgotha, Kosovo 1389 (New York: Columbia University Press, 1990*)

5 "Serbian Jerusalem are Vido and Corfu" article by Dragisa Draskovic published in Serian daily Blic online published on 14.06.2009, accessed on April 25th 2019 https://www.blic.rs/vesti/reportaza/srpski-jerusalim-su-vido-i-krf/1lnxc4f

6 Vjekoslav Perica, *"Serbian Jerusalem: Religious Nationalism, Globalization and the Invention of a Holy Land in Europe's Periphery, 1985-2017",* in *Occasional Papers on Religion in Eastern Europe* (Portland: George Fox University Press Volume 37 (2017), Issue 6, p. 39.

7 Vjekoslav Perica, *Balkan Idols: Religion and Nationalism in Yugoslav States*, Oxford Scholarship, Oxford:, 2002, p.124.

8 "*The Wish to be a Jew: The power of Jewish Trope in the Yugoslav Conflict*", article by Marko Zivkovic, published on 06.03.2000, accessed on April 25th 2019https://journals.openedition.org/urmis/323?file=1

nationalism, which are not mutually exclusive.[9] One of the categories states that religion is imbricated or intertwined with nationalism. In Serbia, this phenomenon is further strengthened by the fact that the founder of the Serbian State was Stefan Nemanja, the brother of Saint Sava, who managed to gain autocephaly for the Church of Serbia from the Patriarch of Constantinople in 1217[10]. After the fall of the Serbian State under Ottoman rule, according to the Serbian version of history, "Ottoman occupation was characterized by the destruction of Serbian Orthodox Churches and monasteries"[11]. However, in the same article the author explains how under Ottoman rule the responsibilities of Patriarchate of Peja/Pec were enhanced and expanded geographically to include Northern Macedonia, Montenegro, and Orthodox Dioceses of Bosnia and Herzegovina, Dalmatia, Slavonia, Croatia and parts of Hungary[12]This was the basis for the forgers of the idea of "Greater Serbia" as the territories that these religious nationalists were seeking basically were under Serbian Orthodox Church jurisdiction and this proves even more the correlation between Serbian Orthodox Church and Serbian nationalists, religious and secular.

The beginning of the disintegration of Yugoslavia and the rising idea of "Greater Serbia", in the beginning of 1990s in Serbia proper, was also the start of a race between Slobodan Milosevic, an atheist and former Communist who rose to prominence and power on a party-nationalism card, and the Serb Orthodox Church, as the only guardian of Serbian national identity. As nationalisms rose in former Yugoslavia so did the role of the Serb Orthodox Church in war mobilization. The war that started in the early 1990s was depicted by most of the clergymen as a war of defense. In October of 1991, a document of the Holy Synod declared that " the Serbian State and the Serbian people must protect them (Serbs living on the territory of Croatia) with all legitimate means including also the armed defense of Serbia lives of all Serbian provinces"[13] In 2005 a video recording, believed to be made in 1995, appeared in the Serbian press, showing an Orthodox priest blessing members of Serbian paramilitary forces, the so-called "Scorpions".[14] In this video, members of the Scorpions are shown killing Bosnian Muslim civilians near the city of Sarajevo. The same unit will replicate their war crimes, this time killing Kosovo Albanian men, women, and children, on March 28th, 1999, in the town of Podujevo during the Kosovo war.[15]

The basis of secular Serbian nationalism was a document, later to be used by Slobodan Milosevic as a blueprint for his program of destruction and ethnic

9 Rogers Brubaker "Religion and Nationalism", article published on 03.11.2011, accessed on April 25th 2019 https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1469-8129.2011.00486.x
10 Radomir Popovic, "*Serbian Church in History*" (Novi Sad: Artprint, 2005) page 24
11 Vasa Cubrilovic, "Serbian Orthodox Church under the Turks from XV-XIX" article published in 1960 and in online edition https://www.rastko.rs/istorija/spc/vcubrilovic-crkva-turci_c.html, accessed on April 27th 2019
12 Ibid
13 Peter Palmer, *"The Churches and the Conflict in Former Yugoslavia"*, in *Religion and International Relations,* Palgrave, New York, 2000, p. 94.
14 Patrick More, "Serbia and Montenegro/Bosnia: A Video Shocks Serbia", Radio Free Europe, June 9th 2005
15 Radio Free Europe "Serbia Jails Ex-Paramilitaries for killings", https://www.rferl.org/a/Serbia_Jails_ExParamilitaries_For_Killings/1757489.html accessed on April 27th 2019

cleansing of non-Serbs, a Memorandum of the Serbian Academy of Arts and Sciences called "Current Social Question in Yugoslavia, 1986"[16] This document purported that "genocide (against Serbs) was taking place in Kosovo"[17] also arguing that Serbia has every right to "return to its own historical roots", and declared that "the establishment of complete Serbian national and cultural integrity, regardless of which Republic or Province in Yugoslavia they might be living in, is their historical and democratic right"[18]

Religious nationalism influenced secular Serbian nationalism by positing a common goal, i.e. "Greater Serbia", and common enemies, Kosovo Albanians and Bosnians of Muslim religion and Croats, that from religious point of view represented a threat that for centuries questioned Orthodox ideals and culture, also seen as a the spearhead of Catholic Rome's ambition to extend its jurisdiction to the Orthodox areas in the Balkans. Kosovo Albanians were especially targeted by religious nationalist also for not being of Slavic origin and allegedly aiming to, in the words of Bishop Atanasije Jeftic, "exterminate the Serbian people in Kosovo."[19] Both the Serbian Orthodox Church and Milosevic's Serbia, the army and police, were seeking a just solution for themselves and Serbs in general. However, their just solution during disintegration of Yugoslavia included the aspiration toward an ideal one-state "Greater Serbia" and Serb majority only, but in both cases the etalons they aimed to return to were man-made myths and propaganda rather than verified historical truths.

What followed was a brutal genocidal campaign firstly against Bosnia and Herzegovina (1992-1995), by Bosnian Serb forces aided by Serbian State, and later a large scale Serbian State planned and executed genocidal and ethnic cleansing campaign against Kosovo Albanians (1998-1999). According to international figures verified by human rights organizations, Serbian state police and army forces were responsible for the murder of more than 12.000 Kosovo Albanian civilians, a campaign of raping of more than 20.000 women, and a campaign of expulsion of more than 1 million from their homes either to Albania or Northern Macedonia.[20] During this military genocidal campaign, Serb forces introduced another dimension of ethnic cleansing, a religious one, and targeted the Muslim cultural heritage of Kosovo Albanians. Approximately 225 of Kosovo's 600 mosques were completely destroyed, damaged, or vandalized. Also, most commonly, there were writings in the walls of the mosques, Serbian traditional sign of the cross with Cyril Cs, "Kosovo is Serbia", "This is Serbia".[21] The Cross with Cyrillic Cs is the Serbian national symbol and was also used by Serbs in Kosovo to identify their property, houses, and apartments

16 http://chnm.gmu.edu/1989/items/show/674 accessed on April 27th 2019
17 Ibid
18 Ibid
19 Radmila Radic "*The Church and the "Serbian Question*". (Budapest:Central European University Press, 2000) page 249
20 https://www.britannica.com/event/Kosovo-conflict accessed on April 27th 2019
21 Andrew Herschner, *Violence taking place:the architechture of Kosovo conflict*, Stanford University Press Stanford:, 2010, pp. 87-88.

as Serb-occupied, so that military and paramilitary forces passed over them as they passed through towns, villages, and cities to expel Kosovo Albanians.[22] In other words, the same symbols were graphitized on Serb property and on mosques appropriating a clear representation of ethnic identity, ethnic space and inscribing it on representation of ethnic alterity.

After the end of the Kosovo war and the withdrawal of all Serbian military, police, and paramilitary forces from Kosovo in June 1999, a new opportunity was brought forward for the Serbian Orthodox Church to once more reinforce its role as "the only Serbian authority among Serbs now living in Kosovo". Regime change in Belgrade, in October 2000, Slobodan Milosevic being arrested in 2001, him and the top Serbian political and military brass facing charges for crimes committed against Kosovo Albanians at the International Criminal Tribunal for the former Yugoslavia (ICTY) in the following years, offered a chance for all Serbs to see what has been done in their name in pursuit of "Greater Serbia". While many in Serbia chose to face the past and begin to live with the new reality, especially in relation to Kosovo and Kosovo Albanians, this was not the case with the Serbian Orthodox Church. The Serbian Orthodox Church refused to acknowledge its role in the wars of former Yugoslavia but opted to contribute to the expansion of anti-Semitism in Serbia as a reaction and opposing the West and what it perceived as globalization. Serbian far-right political organizations such as Obraz, Dveri, Nomokanon, still act with the blessing and in close cooperation with the Serbian Orthodox Church. The Holy Assembly of Bishops of the Serbian Orthodox Church canonized Bishop Nikolaj Velimirovic (1880-1956), who was a notorious anti-Semite and Nazi-collaborator, on 19th of May 2003.[23]

Politically the Serbian Orthodox Church remained active against Kosovo's ambitions to achieve its independence. At the time when the talks for Kosovo's final status were in preparation, sponsored by the international community, the Serbian Orthodox Church was involved in a campaign to prevent any possible legal outcome that would include Serbia's recognition of Kosovo as a sovereign and independent state. The Serbian Orthodox Church issued a Memorandum in 2003 stating that "the Serbian Constitution must include a provision stipulating that no one shall ever ne allowed to give up Kosovo". So, while the "sanctity" of Kosovo is an integral part of Serbian nationalism and mythology, the idea to incorporate it in the Constitution was for the first time spelled out by the Serbian Orthodox Church.[24] The Preamble of the Serbian Constitution, passed in 2006, stipulates that "Kosovo is an integral part of the territory of Serbia

22 Ibid

23 *Serbian Orthodox Church and the New Serbian Identity*, Helsinki Committee for Human Rights in Serbia (Belgrade 2006)page 10 https://www.helsinki.org.rs/doc/Studija-Kupres-eng.pdf accessed on April 28th 2019

24 Rada Drezgic "*Religion, Politics, and Gender in Serbia*", (Institute for Philosophy and Social Theory, University of Belgrade September 2009) page 25 http://www.unrisd.org/80256B3C005BCCF9/(httpAuxPages)/3C57C157BE2D09D18025790D004F8E82/$file/WebSerbiaRev.pdf accessed on April 28th 2019

(and that) all state bodies (are obligated) to uphold and protect state interests of Serbia in Kosovo in all internal and foreign political relations."[25]

After the Declaration of Independence of Kosovo and its recognition by 115 states, members of the UN, a process of dialogue for normalization of relations between Prishtina and Belgrade was initiated in 2010 and is still ongoing. Tangible results of this dialogue are still debatable since the sides remain positioned against each other on the one main issue: recognition of Kosovo by Serbia and Kosovo's acceptance as a full UN member state. The Serbian Orthodox Church, for the most part, opted to stay out of the issue of dialogue because it was considered that it would be a failed matter.

However, in 2018, both Kosovo's President Hashim Thaci and Serbia's President Aleksandar Vucic publically, in open international forums and statements and, in some cases, meeting with foreign diplomats, stated that they are close to reaching a deal that would put an end to hostilities between two nations in what was coined in EU Brussels as "a legal binding comprehensive final agreement". The Serbian Orthodox Church was quick to react. Around 200 intellectuals in Serbia, academics, but also Bishops and clerics of the Serbian Orthodox Church, issued a public statement calling for "the halt of dialogue through which Kosovo will secede from Serbia" and opting for the return of the issue of Kosovo to the UN and preferring a "frozen conflict" scenario such as the one in Cyprus as the best solution.[26] In May 2018, the Serbian Orthodox Church held its gathering, issuing a statement rejecting any compromise when it comes to Kosovo, forcing President Vucic himself to state that "Serbia is a secular country, but he also recognizes the position of the Church."[27]

To stress further its Kosovo links, the Serbian Orthodox Church announced in March 2018 that it is planning to change its original name to the Serbian Orthodox Church - Pec-Patriarchate, which was considered a clear sign that the Church is opposing the Serbian government's position of dialogue with Kosovo, which could include, in the final agreement, Kosovo's recognition by Serbia.[28] About one year later, in April 2019, Patriarch Irinej visited Kosovo to send a message that the Serbian Orthodox Church is opposed to any recognition, division, or partition of Kosovo along ethnic lines, and that Kosovo is and will remain part of Serbia. "Kosovo is our home, it is a gift from God, and no one gives away its home", stated Patriarch Irinej openly, adding another message for Kosovo Serbs, "to endure since no occupation lasts forever".[29] It is clear that

25 Ibid

26 "Internal dialogue about Kosovo and external consequences" Observatorio Balkani e Caucaso Transeuropa, 12.01.2018 http://www.unrisd.org/80256B3C005BCCF9/(httpAuxPages)/3C57C157BE2D09D18025790D004F8E82/$file/WebSerbiaRev.pdf, accessed on April 28th 2019

27 "Kosovo is distancing Vucic from the Church" Radio Free Europe, 28.05.2018 https://kossev.info/rse-kosovo-udaljava-vucica-od-crkve/ accessed on April 28th 2019

28 "Serbia's Orthodox Church to change name to stress Kosovo link", Aleksandar Vasovic "Reuters" 08.03.2018 https://www.reuters.com/article/us-serbia-church-kosovo/serbias-orthodox-church-to-change-name-to-stress-kosovo-link-idUSKCN1GK1XX accessed on April 18th 2019

29 "Who gives away its own home", Kossev, 16 April 2019, https://kossev.info/ko-poklanja-kucu-svoju/ accessed on April 2019.

the Serbian Orthodox Church is back at its core idea of religious nationalism and prefers to, if not lead, then at least deal with the matters of the State when it comes to Kosovo.

CONCLUSION

The Serbian Orthodox Church has for centuries used myths of "Serbian martyrdom in defense of Christianity" and "Kosovo as the cradle of Serbian civilization and its Jerusalem" as a tool to spiritually guide its believers. However, the Church has also been an inspiration for religious Serb nationalists to harbor fascist ideas towards Kosovo's Albanians as the enemy, both of their nation and religion. The Serbian Orthodox Church has never taken a public stance against horrible crimes committed against Kosovo Albanians, at the end of the 20th century, nor has it condemned the policies of the Serbian State in this regard to this date. In the past three decades, religious nationalism and state fascism in Serbia have always found common ground in the denial of the reality that Kosovo has been inhabited by an Albanian majority (mostly of Muslim, practicing or non-practicing) or such cultural heritage, and oppose any kind of autonomous or independent Kosovo that would enhance its statehood apart from Serbia.

The Serbian Orthodox Church offers only the answer of self-preservation and isolation. This has proven to gradually always convert into hatred toward Kosovo and Kosovo Albanians. The most recent April 2019 Easter Message of the Serbian Orthodox Church Patriarch Irinej that "Serbia without Kosovo is not Serbia, it is nothing but a headless corpse" sends a daunting message to all familiar with the history of the Serbian Orthodox Church, especially Kosovo Albanians. However, it is completely along the lines of the rhetoric used by the Church for hundreds of years, when it comes to Kosovo, which has been to deny the reality, never fully separate the Church from the Serbian State, and never to accept that Kosovo has its own path defined by the people of Kosovo.

The Serbian Orthodox Church chooses to live in such denial because it has been its modus operandi, and it has proven successful, especially among religious nationalists who, on the other hand, choose to use such rigid stances of the Church, especially those represented in the Government of Serbia, to advance their own political agendas regarding Kosovo. The Church and the State in Serbia are therefore currently locked down and share quite a similar stance when it comes to Kosovo. Accepting that Kosovo is independent and a self-run state would mean that Serbian Religious Nationalists and the Serbian Orthodox Church would give up on their myths about Kosovo and false ideology.

REFERENCES

"Internal dialogue about Kosovo and external consequences" Observatorio Balkani e Caucaso Transeuropa, 12.01.2018 http://www.unrisd.org/80256B3C005BCCF9/(httpAuxPages)/3C57C157BE2D09D18025790D004F8E82/$file/WebSerbiaRev.pdf, accessed on April 28th 2019

"Kosovo is distancing Vucic from the Church" Radio Free Europe, 28.05.2018 https://kossev.info/rse-kosovo-udaljava-vucica-od-crkve/ accessed on April 28th 2019

"Serbian Jerusalem are Vido and Corfu" article by Dragisa Draskovic published in Serian daily Blic online published on 14.06.2009, accessed on April 25th 2019 https://www.blic.rs/vesti/reportaza/srpski-jerusalim-su-vido-i-krf/1lnxc4f

"*Serbian Orthodox Church and the New Serbian Identity*", Helsinki Committee for Human Rights in Serbia (Belgrade 2006)page 10 https://www.helsinki.org.rs/doc/Studija-Kupres-eng.pdf accessed on April 28th 2019

"*The Wish to be a Jew: The power of Jewish Trope in the Yugoslav Conflict*", article by Marko Zivkovic, published on 06.03.2000, accessed on April 25th 2019https://journals.openedition.org/urmis/323?file=1

Andrew Herschner "*Violence taking place:the architechture of Kosovo conflict*" (Stanford:Stanford University Press 2010) paqe 87-88

Eric Hobsshawn, Terence Ranger, *The Invention of Tradition*, (Cambridge: University Press, 1983) pages 6-7

https://www.britannica.com/event/Kosovo-conflict accessed on April 27th 2019

Patrick More, "Serbia and Montenegro/Bosnia: A Video Shocks Serbia", Radio Free Europe, June 9th 2005

Peter Palmer, "*The Churches and the Conflict in Former Yugoslavia*", in Religion and Internatio nal Relations (New York: Palgrave, 2000) page 94

Rada Drezgic "*Religion, Politics, and Gender in Serbia*", (Institute for Philosophy and Social Theory, University of Belgrade September 2009) page 25

Radio Free Europe "Serbia Jails Ex-Paramilitaries for killings", https://www.rferl.org/a/Serbia_Jails_ExParamilitaries_For_Killings/1757489.html accessed on April 27th 2019

Radmila Radic "*The Church and the "Serbian Question*". (Budapest:Central European University Press, 2000) page 249

Radomir Popovic, "*Serbian Church in History*" (Novi Sad: Artprint, 2005) page 24

Rogers Brubaker "Religion and Nationalism", article published on 03.11.2011, accessed on April 25th 2019 https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1469-8129.2011.00486.x

Thomas Emert*, Serbian Golgotha, Kosovo 1389 (New York: Columbia University Press, 1990*)

Vasa Cubrilovic, "Serbian Orthodox Church under the Turks from XV-XIX" article published in 1960 and in online edition https://www.rastko.rs/istorija/spc/vcubrilovic-crkva-turci_c.html, accessed on April 27th 2019

Vjekoslav Perica, "*Serbian Jerusalem: Religious Nationalism, Globalization and the Invention of a Holy Land in Europe's Periphery, 1985-2017*, (Portland: George Fox University Press Volume 37/ Issue 6 page 39

"Serbia's Orthodox Church to change name to stress Kosovo link", Aleksandar Vasovic "Reuters" 08.03.2018 https://www.reuters.com/article/us-serbia-church-kosovo/serbias-orthodox-church-to-change-name-to-stress-kosovo-link-idUSKCN1GK1XX accessed on April 18th 2019

"Who gives away its own home" Kossev, 16 April 2019, https://kossev.info/ko-poklanja-kucu-svoju/ accessed on April 2019

http://chnm.gmu.edu/1989/items/show/674 accessed on April 27th 2019

http://www.unrisd.org/80256B3C005BCCF9/(httpAuxPages)/3C-57C157BE2D09D18025790D004F8E82/$file/WebSerbiaRev.pdf accessed on April 28th 2019

Vjekoslav Perica, *Balkan Idols: Religion and Nationalism in Yugoslav States* (New York: Oxford University Press, 2002) pages 43-55 and 123-165

ORTA DOĞU JEOPOLİTİĞİNDE SURİYE İÇ SAVAŞI: ADİL SAVAŞ SÖYLEMİ VEKÂLETAĞLARI VE REJİM DEĞİŞİMİ ÜZERİNE BİR İNCELEME

Elçin Mürseloğlu[1]

GİRİŞ

Orta Doğu, jeopolitik konumu, jeokültürel mirası ve enerji rezervleriyle, modern uluslararası ilişkilerin en kırılgan ama aynı zamanda en belirleyici coğrafyalarından biri olarak öne çıkmaktadır. İbrahimi dinlerin doğuşuna, kadim ticaret yollarına, stratejik deniz geçitlerine ve "dünya petrol sömürüsü sahası" olarak tanımlanan havzalara ev sahipliği yapan bu bölge, etnik, mezhepsel ve sınıfsal fay hatlarının küresel ve bölgesel güç rekabetiyle iç içe geçtiği bir çatışma alanına dönüşmüştür. Bu bağlamda Arap Baharı, yalnızca otoriter rejimlere karşı yönelmiş yerel adalet ve temsil taleplerini değil, aynı zamanda küresel güçlerin "demokratikleşme", "insani müdahale" ve "terörle mücadele" söylemleri etrafında yürüttükleri jeopolitik pozisyon alma mücadelelerini görünür kılmıştır. Özellikle Suriye iç savaşı, söz konusu tarihsel birikimin üzerinde yükselen hibrit ve asimetrik savaş biçimlerinin, "Adil savaş" doktrini ve "vekâlet savaşları" kavramı üzerinden nasıl meşrulaştırıldığına ve uygulanabilir hale getirildiğine dair çarpıcı bir örnek sunmaktadır.

Bu çalışma, Orta Doğu'nun jeopolitik ve jeokültürel kırılganlıklarından hareketle, Suriye iç savaşını ve sonrasında ortaya çıkan yeni siyasal-denklemi, hem teorik (adil savaş, yeni savaşlar, vekâlet savaşı) hem de aktör-merkezli (İran, Türkiye, Suudi Arabistan, Mısır, İsrail, ABD, Rusya ve Çin) bir çerçevede ele almaktadır. İran'ın "direniş ekseni" söylemi üzerinden Esad rejimiyle kurduğu kriz koalisyonu, Suriye'nin bölgesel ve küresel güçler arasındaki rekabetin düğüm noktası haline gelişinde belirleyici bir rol oynamıştır. Buna karşılık Sünni elitlerin hâkim olduğu ülkelerin Esad karşıtı pozisyonlanışları, mezhepsel ayrışma ile jeopolitik hesapların birbirine nasıl eklemlendiğini göstermiştir. Esad rejiminin 2024 sonunda çöküşü ve Ahmed Hüseyin eş-Şara'nın 2025'te resmen iktidara gelişi, Suriye'nin hem İran'la ilişkilerinde keskin bir kırılmayı hem de bölgesel ve küresel güçlerle kurduğu ittifak ve çatışma desenlerinin yeniden tanımlandığı bir geçiş sürecini beraberinde

1 Dr. Öğr. Üyesi, Balıkesir Üniversitesi, Burhaniye Uygulamalı Bilimler Fakültesi, Uluslararası Ticaret Bölümü, Balıkesir. E-mail: elcinsakirov@icloud.com. ORCID: 0000-0003-4340-3566.

getirmiştir. Bu bağlamda makale, Şara dönemi Suriye'sinin geleceğini, "toprak bütünlüğünü koruyan fakat egemenliği parçalı, biçimsel olarak normalleşmiş fakat vekâlet ilişkileri ve jeopolitik pazarlıklarla kuşatılmış" hibrit bir devlet modeli perspektifinden çözümlemeyi amaçlamaktadır. Böylece çalışma, Suriye örneği üzerinden savaş, meşruiyet, vekâlet ağları ve rejim değişimi arasındaki karmaşık ilişkiyi tartışarak, Orta Doğu'da kalıcı barış ve istikrar arayışlarının hangi yapısal ve normatif engellerle karşı karşıya olduğunu ortaya koymayı hedeflemektedir.

Jeopolitik Yapısıyla Orta Doğu

Orta Doğu'nun etnik, dini ve coğrafi yapısı: ABD'li deniz istihbaratçısı ve deniz politikası teorisyeni A. Thayer Mahan, 1902'de yazdığı *The Persian Gulf and International Relations* başlıklı çalışmasında, Arap yarımadasının Batı'sından Hindistan'a kadar olan bölge için Orta Doğu ismini ilk kez kullanmıştır. National Review adlı dergide yayınlanan bu makalede, denizler hâkimiyeti ve dünya ekonomisi için Basra Körfezi'nin öneminden bahsedilmektedir (Şimşek; 2005, 10). Dar anlamda Mezopotamya ve Nil havzalarını kapsayan (Davutoğlu; 2002, 324), Türkiye, İran, Umman, Yemen, Mısır gibi ülkelerle çevrelenmiş bölgeye, Orta Doğu denmektedir (Özey; 2012, 4). Geniş anlamda ise Fas'tan Pakistan'a, tersten tanımlayacak olursak Ganj havzasından Atlantik'e uzanan alan, Orta Doğu adıyla anılmaktadır. Rimland kuşağının merkezinde yer almakla, Jeokültür olarak İbrahimi geleneğe odaklanan Orta Doğu, İslam'ı, petrolü, bozkırı ve dolayısıyla Avrasya'yı temsil etmektedir. Stratejik deniz havzaları, iç deniz ve körfezleriyle Orta Doğu, Afro-Avrasya'nın kesiştiği yerde konumlanmaktadır. Dünyadaki en zaruri dokuz deniz geçiş yolunun beşi ve bir kıyısıyla Cebelitarık bu bölgenin içinde yer almaktadır (Davutoğlu; 2002, 324). Kadim medeniyetlerin ve semavi dinlerin köklerinin bu topraklarda olması, stratejik konumu ve sahip olduğu enerji kaynakları, bölgeyi, bölgesel ve küresel aktörler nezdinde kıymetli yapmakta ve çıkarları için birbiriyle mücadeleye sevk etmektedir (Yüce; 2016, 11). Museviliğin, Hıristiyanlığın ve İslam'ın vuku bulduğu kutsal toprakların barındığı yer olan Orta Doğu, çok milletli, çok kültürlü, çok dinli ve mezhepli yapısıyla her kesin ve özellikle küresel güçlerin hak iddia ettiği, kaosa açık bir bölgedir. Örneğin dini kapsamda İslam burada Sünni ve Şii olarak bölünmekle kalmamış, Şii'likteki Nusayri, İsmailiye gibi alt mezheplere de bölünmüştür. Musevilik ve Hıristiyanlık dinlerinin ve bunların mezhep ve alt mezheplerinin doğduğu ve çoğunun kümelendiği yer de burasıdır. Orta Doğu'da Farslar, Araplar ve Türkler etnik olarak başat topluluklardır. Günümüzde adını sıkça duyduğumuz Kürtler ise saydığımız toplulukların yanında azınlığı teşkil etmektedirler (İyiat; 2018, 4). Dünyadaki dinler haritasıyla, zengin petrol kaynaklarının bulunduğu coğrafyalar kıyaslandığında, İslam dinine inananların

petrol rezervleri olan bölgede yoğunluk teşkil ettiği görülecektir. Orta Doğu ülkeleri petrolün en çok üretildiği ve en az tüketildiği yerlerdir. Orta Doğu'dan, özellikle Basra Körfezi'nden çıkartılan petrol, dünyanın en kaliteli petrolüdür ve burası "Dünya petrol sömürüsü sahası" olarak adlandırılmaktadır. Dolayısıyla burası, küresel güçlerin çıkarlarının çarpıştığı yerdir (Özey; 2003, 185). 2010'lu yıllar boyunca bu bölgede yaşanan trajik ve kanlı çatışmaların temeli de buraya kadar anlatılan faktörlere dayanmaktadır.

Arap Baharı'nın Başlangıcı

Arap Baharı denilen iç savaşlardaki halkın isyanları, amacını aşmıştır: Otoriter, baskıcı ve hakkaniyet olmayan yönetimlerin yüzünden bunalan Orta Doğu halkları, 2010 yılı itibariyle yönetimde söz sahibi olma ve demokratik rejim talepleriyle isyan etmişlerdir. Bu isyanlar ilgililerce Arap İsyanı, Arap Uyanışı, Arap Baharı gibi isimlerle anılmışlardır (Doğan&Durgun; 2012, 62). İlk defa Tunus'ta görüldüğünde bu halk hareketleri, iç ve dış faktörlere dayandırılmıştır. İç faktörün esas örnekleri, ekonomik eşitsizlik ve yolsuzluktur. Öyle ki isyanlardaki "*Günümüzde 22 Arap ülkesinin milli gelirlerinin toplamı, İspanya'nınkinden daha azdır*" ifadesi, bu isyanların nedenini anlatan en etkili cümlelerdendir (Yeltin&Işık; 2017, 42).

2010 yılının Aralık ayında Tunus'lu Muhammed Buazizi'nin seyyar satıcılık yaptığı sırada zabıtalarla tartışması, bir kadın polisten de tokat yemesi sonrasında kendisini yakması, annesinin dramatik protesto videolarının yakınları tarafından sosyal medyada yayılması, benzer kaygılar taşıyan Tunusluları sokaklarda gösteri yapmaya sevk etmiş, olaylar Tunus yönetimini yıkmıştır. Başkanı Zeynelabidin bin Ali'nin ülkeden kaçmasıyla sonuçlanan protestolar, Orta Doğu'da "domino etkisi" yaratınca, 2011 yılı itibariyle Mısır'da, Yemen'de, Libya'da ve Suriye'de yönetim karşıtı gösterileri tetiklemiştir. Bu kriz Suriye'de bir iç savaşa dönüşmüş, bu savaş günümüze kadar sürmüştür. Daha çok Arap Baharı olarak telaffuz edilen bu isyanlar sebebiyle dünya petrol fiyatları altüst olmuş, Mısır'da baş veren olaylar neticesinde petrolün varil fiyatı 100 doların üzerinde seyretmiştir (Bayram; 2016, 89). Bu isyanları kimileri erken demokratikleşme süreci, kimileri ise İslamlaşma olarak algılamıştır. Fakat dış faktörlerin, sonucun ne olacağını umursamayan, doğrudan ya da dolaylı olan müdahaleleri, Orta Doğu'nun kimyasını bozmuştur. Suriye ise vekâlet savaşlarının en aktif yaşandığı ülke olmuştur. Küresel ve bölgesel güçler Suriye'nin yapısını kendi çıkarları doğrultusunda yeniden şekillendirmek için buradaki savaşan aktörlere yardımlar akıtmışlardır. Suriye'de savaş başlarken muhaliflerin hareketlerinde çok az bir koordinasyonun olması, onlar arasındaki düzensizliğe ve de kendi aralarında çatışmalara sebep olmuştur. Muhalif gurupları destekleyen bölgesel ve küresel güçlerin farklı çıkarlarının olması ise savaşların zaman zaman kesintiye uğramasına ve uzamasına sebep olmuştur

(Alterman; 2013, 1). Böylece Arap Baharı, yerli halkların isteklerinin dışında ve üstünde, Batılı güçlerin Orta Doğu'daki çıkarlarını gerçekleştirme uğrunda, politik ortam yaratmak için yapılan savaşlara verilen ad olmuştur. Bir takım küresel ve bölgesel güçler, stratejik amaçları doğrultusunda, Orta Asya'daki renkli devrimlerin tekniklerini, Orta Doğu'da da kullanarak, haz etmedikleri rejimleri değiştirmenin savaşını yapmışlardır (Allıson; 2013, 817). Peki küresel ve bölgesel güçlerin bu savaşlara dolayalı veya doğrudan müdahalelerindeki kullandıkları yöntem ne idi?

Savaş'ın Uluslararası Sistemdeki Yeri (Adil Savaş)

Diğer güç odaklarının Suriye ve bölge ile temasına geçmeden önce, ABD silahlı kuvvetlerinin bir ülkeye ve bölgeye gireceği zaman, kendi savaşına haklılık kazandırmak adına kullandığı "Haklı savaş" veya "Adil savaş" konularına değinmemiz ABD'yi ve diğer güç odaklarının hamlelerini ve uluslararası sistemi anlamamız açısından faydalı olacaktır.

Britannica Ansiklopedisi savaşı, "siyasi topluluklar arasında, belli bir süre ve sıklıkta yaşanan arbede" olarak tarif etmektedir. H. Grotius ise savaş, "uyuşmazlıklarını zor kullanma yolu ile çözmeye çalışanların düştükleri durumdur" der. Çiçero, "haklı bir nedene dayanan ve savaş ilanı prosedürüne uyan güç çatışmasına" savaş demektedir. S. Augustine ise savaşı, "haksız veya haklı, nedenine bakılmaksızın insanlığın kaçamadığı kader olarak" değerlendirmektedir. C. V. Clausewitz da savaşı "iradenin düşmana kabul ettirilmesi için güç kullanımı" olarak tanımlamıştır (Erol&Çelik; 2018, 17).

İlk çağlardan beri şehir devletleri, imparatorluklar ve ulus devletlerarasında cereyan ettiği için savaş, uluslararası ilişkiler alanında, siyasi otoriteler arasındaki çatışmalar olarak tanımlanmıştır. Bu çerçevede Orta Çağ'ın sonuna kadar vuku bulmuş savaşlar, paralı askerlerden oluşan gruplar arasında, yerel düzeyde gerçekleşmiştir. Barutun savaşlarda kullanılmaya başlamasıyla yani Orta Çağ'ın sonu itibariyle paralı askerler, düzenli ordularla yer değiştirmişlerdir. XVI ve XVII. yy'da düzenli ordular arasında gerçekleşen savaşlara klasik devletlerarası savaşlar denmektedir. Bu dönemin savaşları sınırlıdır ve amaç ufak bir hedefi ele geçirmek ve kontrolünde tutmaktır (Eker; 2015, 34-35). Savaşın bu türü de 1789 Fransız İhtilali sonrasında ortadan kalkmıştır. Bu dönem itibariyle zorunlu askerlik sistemi ortaya çıkmaya başlamış, böylece ordular milli kimlik kazanmıştır. Yani paralı askerler ve düzenli ordular devrinden sonra, milli ordular devri başlamıştır ki bu devir, XIX. yy boyunca devam etmiştir (Erol&Çelik; 2018, 19-20). C. V Clausewitz'e göre ise savaşın esas aktörü devlettir ve bu yüzden savaş, siyasetin farklı bir uzantısıdır ki bunun en iyi örneği Napolyon Savaşları'dır (Eker; 2015, 37). 1928 yılındaki Kellogg-Briand Antlaşması ise devletlerarasındaki kuvvet kullanımını yasaklayan ilk antlaşma olmuş ve bu yasak, 1945'teki BM Antlaşması'nda da yerini bulmuştur. Yine fikri temelini

batıdan alan "Adil Savaş Teorisi" ise hangi koşullarda kuvvet kullanımını gösteren, savaşı yasaklamayan fakat sınırlandıran öğreti olarak ortaya çıkmıştır (Özlük; 2015, 18-19). Hıristiyanlıkta meşru olarak görülen iki savaş türünden ilki "Kutsal savaş (holy war)", ikincisi ise "Adil savaş (just war)"tır. "Adil savaş" felsefesinin temeli Protestan Hıristiyan düşünceye dayanmaktadır. Yani "Adil Savaş"ın karakteri yine Batı'nın düşü ve kültürüyle örtüşmektedir (Özlük; 2015, 19). Karakteristik özelliğini Teoloji'den alan "Adil savaş", savaşın şeytani bir eylem olduğunu savunurken, masumlara saldırılırken savaşmamak, savaşmaktan daha kötüdür anlayışını da kendinde barındırmaktadır. Bu anlayış, bazı savaşların zorunlu olduğu için şeytani olmadığını ve meşru olduğunu da savunur (Kegley&Wittkopf; 1993, 488).

Aquinas'a göre bir savaş, egemen bir otoritenin emriyle sürdürülüyorsa veya dayanağı haklı neden ise ya da savaşanlar doğru niyete sahipse, meşrudur. Böylece iyiliğin ilerlemesi ve engelinin kalkması sağlanmış olur. Aquinas'a göre gerçek din, kötülük yapanları cezalandırmak ve iyileri yüceltmek ve korumak adına yapılan savaşları günahkâr görmez. Hele hele savaş, kötü niyet içermiyorsa, haklı bir sebepten, meşru bir otoritenin ilanı ile yapılıyorsa meşru sayılabilir (Knutsen; 1992; 197-198). Fakat bütün semavi dinler, savaşın başvurulması gereken son yol veya bir araç olacağına dair her zaman bir atıfta bulunur ve kendinde öğretiler barındırır (Keegan; 2001, 13). İslamiyet'teki Cihat anlayışı, bunun en önemli örneğidir. İslam harp hukuku, meşru müdafaa halinde, antlaşmayı bozdukları halde ve Müslümanlara zulüm edildiğinde meşru ve "Adil" sayar (Zavati; 2001, 5).

Güvenlik ve korku faktörleri sebebiyle uluslararası ilişkiler, savaşı bir tedbir veya sakınma olarak kabul etmektedir. Realist anlayışa göre ise bir devlet eğer potansiyel düşmansa ve gittikçe güçlenmekteyse, buna karşı sessiz kalmaktansa savaşmak en iyi çıkış yoludur ve bu savaş meşrudur, "Adil"dir (Arı; 2013, 159-160). Soğuk Savaş'ın ardından Körfez çatışması, Bosna ve Kosova savaşları, 2000'lerin başındaki Afganistan ve hemen ardından Irak savaşı, "Adil savaş" söylemleriyle gerçekleşmiştir. Hem etik hem de hukuki alanda karşılık bulan "Adil savaş"ın söylemlerinden olan "İnsani müdahale" sloganı ise 1990 sonrasının en çok kullanılan sloganı olmuş, savaşların süresi ve sayısı artınca da "Adil savaş" doktrini tartışılmaya açılmıştır. ABD, 1990'lı yılların başı itibariyle "Adil savaş"ın "meşru müdafa", "önleyici savaş", gibi bütün söylemlerini, sloganlar ve propagandalarla gündemde tutarak, yani "Adil" nedenlere dayandırdığını iddia ederek, yukarıda sayılan savaşları gerçekleştirmiştir. ABD'ye göre "haydut devletler"in etkinliklerinin durdurulması, demokrasi, özgürlükler ve de kitle imha silahlarının üretiminin ve kullanımının engellenmesi adına bu savaşlar zorunludur. Neticede, nükleer silah ürettiğini öne sürerek Irak'a giren ABD, bir tek örnek bile bulamamıştır (Özlük; 2015, 28, 38-40).

II. Dünya Savaşı sonrası oluşturulmuş olan Birleşmiş Milletler de savaşı yasaklamış fakat "savaş" kavramı yerine, "kuvvet kullanımı" kavramını yeğlemiştir (Erol & Çelik; 2018, 18). Bu tercihin sebebi, I. Dünya Savaşı'nın ardından kurulmuş olan Milletler Cemiyeti'nin (MC) sınırlandırmalarından kurtulmak ve uyguladığı şiddeti, "savaş" teriminin kapsamında olmadığını iddia eden devletleri engellemek için daha kapsayıcı terim kullanmaktır (Güdek; 2017, 81). "Meşru müdafaa" hali dışında gerektiğinde "Kuvvet kullanımı" kararını almakla yetkilendirilmiş tek organ olan BMGK, onay vermediği halde koalisyon güçlerinin Irak'a girmesine engel olamamıştır/olmamıştır. Zaten böyle bir kararın alınmasına yetkisi de bulunmayan koalisyon güçleri, bu savaşın "adil savaş" olduğunu iddia etmiştir. Neticede "Adil savaş", savaşların yasaklanmasını değil, hangi durumda kuvvet kullanılmasının doğru ve meşru olduğunu göstermektedir (Özlük; 2015, 20, 40-41). Yani "Adil savaş", hukuki ve gerçekçi değildir.

"Kuvvet kullanımını", antlaşmasının 2/4 bendinde yasaklayan BM, gerekçesi ne olursa olsun BM sistemine dayanmayan savaşları, meşru ve "Adil savaş" saymamaktadır (Özlük; 2015, 29, 43-44). Savaş, temel insan haklarını korumak ve gerekli koşulların sağlanması için gerçek tehlikeyle karşılaşıldığında, "Adil" sayılabilir. Uluslararası ilişkilerde, "fütuhat veya eski hataların giderilmesi gibi amaçlarla başlatılan savaşlar" ya da saldırılar ne meşrudur ne de etik. 2003 yılında Irak'ta başlatılan savaşın sebebi, bu ülkenin nükleer silah barındırması idiyse, Batın'ın bu operasyonlarına karşı, bu silahları Irak neden kullanmadı? Çünkü Irak, böyle bir silaha sahip değildi ve bu, savaşı başlatmak için bir bahaneydi. 30'a yakın koalisyon güçlerinin ABD önderliğinde meşru müdafaa söylemi ile başlattığı, "Irak'ı Özgürleştirme Operasyonu (!)", "Adil savaş" olarak değerlendirilemez, uluslararası hukuka da uygun değildir.

1990'lı yıllarla birlikte "Adil savaş" anlayışını reddeden, yeni yaklaşımlar ortaya çıkmaya başlamıştır. M. Kaldor, hibrit "savaş, üçüncü türle savaşlar", "özel savaşlar", "modernite sonrası savaşlar" gibi isimlendirmelerle "Yeni savaşlar"ı anlamlandırmaya çalışmıştır (Kaldor; 2013, 1-2). "Yeni savaşlar" kavramının ortaya çıkmasıyla savaş sanatı yeni bir evrim sürecine girmiştir. "Yeni savaşlar"ın karakteristik özelliklerinden bazıları şunlardır: daha çok başarısız devletlerde dini ya da etnik temelli iç savaşlar şeklinde cereyan etmektedirler. Şiddet kontrolsüz ve sınırsız şekilde kullanılırken, hedef kamu otoritesinin çökmesi ve sivil katliamlar olur. Siviller çatışmanın tarafları haline getirilirken, şiddet devletin tekelinden çıkar. Savaşların vuku bulduğu yerde bir belirsizlik ortamı vardır (çünkü bu savaşta yerli, yabancı, sivil, asker gibi faktörler vardır) ve silahlar küresel güçler tarafından temin edilir. Asimetrik olan bu "yeni savaşlar"da, sosyal medya ve internet platformları önemli araçlardır ki bunlar aktif olarak da kullanılmaktadırlar (Erol & Çelik; 2018, 20-21).

Bir diğer savaş türü ise "Vekalet savaşı" olarak adlandırılan, küresel güç odaklarının kontrolündeki yerel aktörler arasında yapılan çarpışmalardır. Yani bu savaşta devletler ya da odak güçler doğrudan yer almamaktadır. Bir diğer deyişle, saldırıyı organize edenler ile saldırıyı gerçekleştirenlerin farklı aktörler olması, bu savaş tipinin esas özelliğidir. Bu savaş türünde güç odakları, vekil aktörleri kullanarak çıkar edinmek veya olan çıkarın devamlılığını sağlamak için düzensiz ya da düzenli, başka küresel güç odakları veya hedef ülke ya da gruplara saldırı tertip etmektedir. Bu savaşın savaşçıları devlet dışı aktörler ve terör örgütleridir. Bu aktörler kendi aralarında olduğu gibi herhangi bir devlete karşı da savaşmaktadırlar. Asimetrik savaş türlerinden olan "Vekalet savaşı"nda, devlet ile terör örgütleri işbirliği içindedir (Erol & Çelik; 2018, 21-22).

2020 itibariyle Orta Doğu'daki vekâlet savaşları, küresel güçlerin rekabeti ile birlikte kalıcı bir güvenlik rejimine dönüşmüştür. ABD, Rusya ve Çin, doğrudan işgal maliyetlerini azaltırken nüfuz alanlarını milisler, paramiliter yapılar, özel güvenlik şirketleri ve "ortak güçler" üzerinden korumaya yönelmiş, bu süreçte İran'ın Şii milis ağları, İsrail'in kendisi ve Körfez monarşilerinin Yemen, Libya ve Doğu Akdenizdeki vekil aktörleri, büyük güç stratejilerinin taşıyıcıları hâline gelmiştir (Dadparvar&Parto; 2025, 1-22). ABD-İran hattında 2020'de Süleymani suikastı ve sonrasındaki "düşük yoğunluklu misilleme döngüsü", düzensiz savaşın (irregular warfare) vekâlet savaşı kalıbını nasıl beslediğini göstermiştir. Rusya ve Çin ise enerji, silah satışı ve liman/altyapı anlaşmalarıyla "arka cephe" oluştururken, yerel silahlı grupları mali ve teknolojik araçlarla desteklemektedir (Lumbaca; 2025).

2020 sonrası dönemde İran-Suudi Arabistan rekabeti, Yemen'den Irak ve Suriye'ye uzanan geniş bir hatta mezhepçi söylemler, siber operasyonlar ve bilgi savaşı teknikleriyle hibrit bir vekâlet çatışmasına evrilmiştir (Lal; 2025, 49-58). Bu rekabete eşlik eden 2023 sonrası Gazze-Lübnan savaşı ve 2025'te tırmanan İsrail-İran gerilimi, büyük güçlerin "vekiller üzerinden karşı karşıya gelme" modelinin artık bölgesel savaş eşiğine yaklaştığını ortaya koymaktadır (Alakel&Arab; 2025, 203-240). Sonuç olarak, küresel güçler güvenlik söylemini terörle mücadele, deniz yolu güvenliği ve nükleer yayılmanın önlenmesi gibi normatif çerçevelerle meşrulaştırsa da sahada devlet dışı silahlı aktörlere yapılan selektif destek, çatışmaların süresini uzatmakta, devlet egemenliğini parçalara ayırmakta ve Orta Doğu'yu 2020'ler boyunca "kontrol edilebilir kaos" mantığına hapseden çok katmanlı bir vekâlet savaşları düzeni üretmektedir (Dadparvar & Parto; 2025, 1-22).

Orta Doğu ve Suriye'de İran Faktörü

Bir yanda Esad yönetiminin gitmesiyle bölgenin istikrara kavuşacağına inanan ve Orta Doğu'da bölgeyi yeniden yapılandırmak isteyen ABD'nin başını çektiği, Batılı güçlerin yansıra S. Arabistan, İsrail ve Türkiye, diğer yanda ise

Çin ve birkaç bölge ülkesinin desteklediği, Esad'ın gitmesiyle demokrasinin ve istikrarın gelmeyeceğine inanan, devlet dışı aktörlere ve diğer güçlere karşı çıkan Rusya Federasyonu olmak üzere, günümüzde de Suriye'de ikili gruplaşma varlığını devam ettirmektedir. Suriye konusunda İran da Rusya'nın yanında yer almaktadır ki İran, meseleye mezhepsel açıdan bakmakta (Sağlam; 2014, 211), Orta Doğu'da mezhep üzerinden güçlü şekilde misyonerlik yürüterek, en geniş etkiye sahip olmaktadır.

1979'da İran'da Şah rejiminin devrildiği dönemde Suriye Irak'la bozuşmuş, 1978'de de zaten Mısır ve İsrail arasında "Camp David" barış antlaşması yapılmıştır. İsrail karşısında savunmasız kalan Suriye'nin imdadına, Siyanizm-yani İsrail ve ABD-yani Batı karşıtı olan yeni İran İslam rejimi yetişmiştir. Suriye, Filistin davasına da sahip çıkan yeni İran İslam Cumhuriyeti'ni tanıyan Araplar arasında ilk, dünya genelinde ise SSCB ve Pakistan'ın ardından üçüncü ülke konumundadır (Köroğlu; 2012, 45). Düşmanları ortak olan bu iki dost ülke, 1984'te Amerikan güçlerini Lübnan'dan çıkararak, Lübnan'ı İsrail etkisinden kurtarmış, bölgede Hamas, Hizbullah ve İslami cihat anlayışını benimsemiş birçok Şii dinci radikal grupları korumuşlardır. Bu iki ülkenin dostlukları, ortak özellikleri sebebiyle uzun sürmüştür. Örneğin, ikisi de otoriterdir ve Batı ile ilişkilerde çok maliyetli olmasına rağmen bağımsızdırlar. İran nüfusunun çoğu Şii'dir. Suriye'yi onlarca yıldır yöneten Esad ailesi Şii mezhebinin Alevi/Nusayri koluna bağlıdır. Bunun yanı sıra Suriye sıkı bir seküler, sosyalizm sistemiyle idare edilirken, İran ise sıkı bir Şeriat rejimiyle yönetilmektedir fakat bu iki ülkenin ittifakı son 30 yıldır kesintisiz sürmekteydi (Kazdal; 2018, 2-3). Bu iki ülke savunma temelli ittifak yapmaktaydılar ve uluslararası ilişkilerde savunma temelli ittifaklar, saldırı temelli ittifakların aksine uzun yaşarlar. Saldırı temelli ittifaklar galibiyet sonrası dağılma eğilimi gösterirler. Önceliklerinin farklı olması, örneğin; Levant bölgesi Suriye'nin, Pers Körfezi de İran'ın önceliğinde olması da bu ittifakın koordine edilmesinde kolaylık sağlamıştır (Goodarzi; 2013, 35-36).

İran-Irak Savaşı 1998'de sona ermiştir fakat 1990'da Irak, Küveyt'i işgal etmişti. S. Hüseyin'in gücünü artırarak kurduğu orduyla körfez bölgesinde baskın ve müdahaleci politika izlemesi, Suriye-İran ittifakını pekiştirmiştir. Lübnan'da General Michel Aoun önderliğinde Suriye'ye karşı isyanlar başlayınca da Saddam, isyancılara silah tedarik etmiştir. İran ise isyancılara karşı Hizbullah ve diğer grupları mobilize ederek Suriye'ye destek olmuş, Irak'ın desteklediği Aoun'un güçleri 1989'da yenilmiştir. 1991'de Irak Körfez savaşını kaybetmiş, Sovyetler çökünce Rusya, Orta Doğu'dan çekilmeye başlamıştır. Bu coğrafyada tek güçlü statüsüne erişen ABD ve belirsiz, hızlı şekilde değişen siyasi atmosfer, Suriye ve İran'ı siyasi, askeri ve ekonomik alanda işbirliğine mecbur etmiştir. Ayrıca Suriye, Hizbullah'ı kontrol ederek Lübnan'daki

İsrail güçlerine saldırmasını sağlamak için İran'a ihtiyaç duymuştur. İran da S. Hüseyin'in veya Irak'ının bölgedeki gücünü kırmak ve kontrol etmek için Suriye'ye ihtiyaç duymuştur (Goodarzi; 2013, 45-47).

11 Eylül 2001 olayı sonrasında ABD'nin Afganistan'da Taliban rejimini, 2003'te de Saddam rejimini ortadan kaldırmasıyla, yani rakiplerinin saf dışı edilmesiyle İran, bölgedeki nüfuzunu hızla artırmıştır. İran'ın bölgedeki popülerliğinin artmasının bir diğer sebebi de İsrail karşıtı olması nedeniyle, Araplar tarafından takdir edilmesiyle olmuştur (Şen; 2012, 98).

Saddam'ın ABD önderliğindeki koalisyon güçleri tarafından saf dışı edilmesi, İran ve Suriye'yi memnun etmiştir fakat özünde Anti-Amerikan olan bu iki ülkenin ittifakı, bölgedeki artan ABD tehditleri karşısında vazgeçilmez olmuştur. Lübnan'ın eski başbakanı Refik Hariri'nin öldürülmesi sonrasında Suriye'ye artan baskılar paralelinde, İran'da M. Ahmedinejad'ın İsrail/Siyonizim karşıtı politikalara ağırlık vermesi ve nükleer silah geliştirmeye başlamasıyla İran'a olan baskılar, bu iki ülkenin işbirliğinin devamı için önemli faktörler olmuştur (Sinkaya; 2012, 7).

Irak savaşındaki yıkıcı tecrübe, İran'ın düşmanını sınırlarının dışında karşılamasına itmiştir. İran için Filistin, Lübnan ve Suriye'deki müttefikleri hayati önem taşımaktadır. Bunların ortadan kalkması İsrail'in güçlenmesi demektir. Dolayısıyla İran'ın Suriye'de Esad rejimine isyan edenlere karşı çıkmasının sebebi de buydu (Sinkaya; 2012; 9-10). İran, Suriye'de Arap Baharı'nın başladığı yıl itibariyle, Esad'a olan desteğini artırmıştır. Suriye'ye asker, askeri teknoloji ve büyük rakamlı paralarla yardım etmiştir. İran, Ulusal Savunma Gücü adlı gurup ile Esad rejiminin ayakta kalmasına önayak olmuştur. Kudüs Gücü komutanlarından Kasım Süleymani gibi Şam'ı düzenli olarak ziyaret eden yüksek rütbeli İranlı askerlerin birçoğu da Suriye ve bölge topraklarında öldürülmüşlerdir. İran'ın Suriye'de bu denli ısrarının bir diğer sebebi de S. Arabistan ile bölgedeki mücadelesini kaybetmek istememesidir (Kazdal; 2018, 5-6). Başka bir altı çizilmesi gereken mesele de aslında İran'ın kaygısı, "Şii Hilali" ya da Şii jeopolitiğinin kaybından ziyade, bizzat jeopolitik ve jeostratejiktir. İran, Esad yönetimine güvenmekteydi ve Suriye'de iktidara gelecek olan herhangi bir muhalefet, İran'ın rakipleriyle işbirliğine gireceği için İran'ın Suriye'deki yatırımları suya düşecektir. Ahmedinejad'ın İran'da 2005 yılında iktidara geldikten sonra Anti-Siyonist ve Batı karşıtı politika izlemesi, Ürdün kralı Abdullah'ın 2004'te ortaya attığı "Şii Hilali" söylemini de desteklemektedir. "Şii Hilali", Orta Doğu'da Suriye, Lübnan, Irak ve Körfez ülkelerinde yaşayan Şiilerin birbirine bağlanmasını içeren, İran'ın mezhebe dayalı bir dış politika anlayışına atfedilen addır. İranlı yetkililer ise bu söylemin iftira olduğunu ileri sürerek reddetmekte ve Suriye'nin Araplar içinde İsrail'e direnen tek ülke olduğunu öne sürerek, Suriye yönetimini destekleyen "direniş

eksenli" bir dış politika izlediklerini vurgulamışlardır. İşte İran Devrimi Rehberi Hamaney'e göre ABD'nin amacı, kökten dinciler aracılığıyla bu direnişi kırmak ve Suriye rejimini ortadan kaldırmaktır. O'na göre Esad yönetimi bu kökten dinci gruplarla savaştığı için Batı tarafından istenmemiştir (Sinkaya; 2017, 36-37, 19-22, 54)

İran'a göre bölgede bulunan bütün küresel güç odakları, Arap devletlerinin daveti üzerine buradadırlar. Bu güçler ile konvansiyonel olarak mücadele edemeyeceğini bilen İran, asimetrik savaş yürütmektedir. Bu yüzden Arap Baharı'nın Suriye'de başlamasıyla S. Arabistan ile İran arasındaki yumuşak güç mücadelesinin yerini, vekâlet savaşları almıştır. Bu dönemde İran Suriye'yi elinde tutmak, S. Arabistan ise elde etmek istemiştir. Her iki taraf için Suriye'nin kaybı büyük jeopolitik kayıptır. Diğer bir deyişle kazanan hem bölgesel güç statüsüne erişecek ve hem de İslam âlemine liderlik yapacaktır. Bu yüzden İran Esad rejimini, S. Arabistan ise ÖSO gibi örgütleri desteklemiştir. İran, Arap Baharı'nın başlamasıyla Suriye'ye ekonomik olarak da destek verdiğini göstermiştir. 17 Aralık 2011'de İran-Suriye arasında ticaretin 5 yıllığına serbestleşmesini gösteren, anlaşma imzalanmıştır ki bu karar Batı'ya bir tepki niteliği taşımıştır (Kazdal; 2018, 8-9,11-12).

Bu dönemde diplomatik olarak da İran'ın Suriye'ye desteği azımsanmayacak boyutta olmuştur. İran, Suriye'nin iç işlerine dışardan gelen müdahalelerin engellenmesinde ve Suriye'yi yalnızlaştırma politikasının boşa çıkartılmasında büyük çaba göstermiştir (Kazdal; 2018, 11). İran, 2012'nin Ocak ayında BMGK'de Suriye'ye müdahale önerisine şiddetle karşı çıkmış, Rusya ve Çin'in bu öneriyi veto etmesiyle önerinin gerçekleşmemesi, İran'ı memnun etmiştir (Sinkaya; 2012, 17-18).

İran'ın, Orta Doğu'daki iç savaşlarda aktif rol almasının sebepleri arasında, Orta Doğu'da yükselişine ve stratejik kazanımlarına zeval gelmesinin engellenmesi ve İran'ın içindeki muhaliflerin, Orta Doğu'daki aktörlerden güç almasının önüne geçilmesi gibi faktörler de vardır. Bu bağlamda İran, Tunus iktidarı Zeynel Abidin ile Mısır iktidarı Hüsnü Mübarek rejimlerinin düşüşünü memnuniyetle karşılamış, bunu demokrasi ve özgürlük mücadelesinin bir neticesi olmasının yansıra, 1979'daki İran İslam Devrimi'nden ilham alınan Batı ve Siyonizm karşıtı bir uyanış olarak yorumlamıştır. İran'a göre bu rejimlerin düşmesi, baskıcı olmaları sebebiyle değil, ABD ve İsrail yanlısı siyaset izledikleri içindir. Çünkü buradaki iç savaşın demokrasi mücadelesi diye lanse edilmesi, İran'a stratejik ve ideolojik kazanç sağlamayacaktır. Yani İran, bölgedeki iç savaşları kendi Batı karşıtı ideolojisiyle uzlaştırırken, diğer taraftan da kendine yönelen baskıları dengelemeye çalışmıştır (Şen; 2012, 100-102).

Beşar Esad'ın 8 Aralık 2024'te iktidardan düşüşüne kadar geçen dönemde İran-Suriye ilişkileri, uzun süredir devam eden "kriz koalisyonu" biçiminde tanımlanabilecek bir safhadır. Tahran, 2012'de iç savaşın tam kontrolden çıkmasını, yalnızca dost bir rejimin değil, Tahran-Bağdat-Şam-Beyrut hattında kurulan yukarıda bahsi geçen hilalin bir kısmının çöküş ihtimali olarak okumuştur. Bu nedenle rejimin devamını İran'ın güvenliği, İsrail'e yönelik caydırıcılık ve Hizbullah'a kara koridorunun korunması açısından varoluşsal önemde görmüştür (Yolcu; 2016, 63-65). Bu bağlamda Devrim Muhafızları Kudüs Gücü'nün sahaya inmesi, 2012 sonrasında Lübnan Hizbullah'ı, Irak ve Afganistan kökenli milislerin Suriye'ye kaydırılması ve rejim yanlısı Ulusal Savunma Güçleri'nin inşası, ikili ilişkileri klasik diplomatik ittifaktan asimetrik, güvenlik merkezli bir bağımlılık ilişkisine dönüştürmüştür (Cappelletti; 2018, 44-47).

2013–2018 arasındaki safhada İran'ın Suriye politikası literatürde genellikle iki evreli destek olarak tanımlanabilir. İlk evrede Tahran, Esad rejimine verdiği desteği statükonun korunmasına dönük "savunmacı realizm" çerçevesinde gerçekleştirmeye çalışmış, askeri varlığını "danışmanlık" söylemiyle görünmez kılmaya gayret etmiştir (Goodarzi; 2019, 37-38). Ancak özellikle 2013 sonrası savaş dengelerinin rejim aleyhine bozulması ve 2015'te Rusya'nın doğrudan müdahalesiyle birlikte İran'ın sahadaki rolü giderek daha saldırgan ve mezhepsel nitelik kazanmış, Kudüs Gücü koordinasyonunda Şii milis ağları üzerinden rejime "ön cephe" savaş kapasitesi sağlanmıştır (Cappelletti; 2018, 63-67). Bu dönemde Rusya Suriye'ye hava gücü ve diplomasi desteği sağlarken, İran kara savaşını milisler ve yerel vekiller üzerinden yürüten aktör olarak öne çıkmış, böylece Tahran'ın Şam üzerindeki nüfuzunun seviyesi klasik müttefiklikten çok, güvenlik-vesayet ilişkisine evrilmiştir (Lees Weiss; 2022, 145-149).

2019 sonrasındaki görece "çatışma sonrası" evrede İran–Suriye ilişkilerinin karakteri, bu iki ülkenin ilişkilerinin sağlam zemin üzerine kurumsal ve ekonomik temelde yerleşme çabaları olarak nitelendirilebilir. Bu döneminde Tahran Esad rejimini ayakta tutarken İran'ın Suriye'de yaşadığı "pirus zaferi", ciddi mali kaynak tüketimine, ağır insan kaybına ve ekonomik yaptırımlar görmesine sebep olmuştur (Juneau; 2020, 26-30). Bu maliyetlere rağmen İran, rejimin yeniden ele geçirdiği bölgelerde milis ağları, dini-kültürel kurumlar ve güvenlik bürokrasisi ile kalıcı bir mevzi inşa etmeye yönelmiş, Suriye ordusu ve istihbarat kurumlarıyla iç içe geçmiş hibrit bir güvenlik mimarisi yaratmıştır (Etana Syria; 2023, 24-27). Eşzamanlı olarak Tahran, savaş boyunca açtığı kredi kanalları, petrol sevkiyatları ve yeniden inşa projeleri üzerinden Şam'ı kendisine şeffaf olmayan bir dış borçla bağlamıştır. 2010'lar boyunca büyüyen İran-Suriye ticareti ve finans kanalları, 2020'lerin ortasına gelindiğinde Suriye'yi İran'a derin biçimde borçlu ülke konumuna getirmiştir (Khajehpour; 2024).

2023–2024 döneminde, Rusya'nın Ukrayna savaşı nedeniyle Suriye'deki askeri varlığını görece azaltması, Esad rejiminin güvenlik ve bölgesel stratejisinde İran'a bağımlılığını daha da artırmıştır. Kudüs Gücü ve bağlı milisler özellikle güney Suriye ve Golan çevresinde İsrail'e karşı saldırılar için Suriye topraklarını bir "ileri üs"e dönüştürmüştür. Bununla birlikte, İran'a yönelik ""demografik mühendislik" suçlamaları ve İran milislerinin uyguladığı şiddet nedeniyle Esad rejiminin kontrol ettiği bölgelerde dahi anti-İran söylemleri güçlendirmiş, savaş döneminde İran'ın Esad yanlılarına yaptığı ekonomik yardım da cılız kalınca toplum nezdinde Şam–Tahran ortaklığının meşruiyeti aşınmıştır (Etana Syria; 2023, 25-27, 66-69). Aralık 2024'te muhalif güçlerin on günlük ani taarruzuyla Esad rejiminin çökmesi ve Tahran'ın on yılı aşkın süre boyunca bölgeye olan stratejik yatırımlarının korunamaması uluslararası ilişkiler literatüründe İran açısından ciddi bir jeopolitik gerileme olarak yorumlanmıştır. Esad'ın gidişi İran'ın "direniş eksenini" zayıflatmış, Suriye üzerinden Hizbullah'a uzanan lojistik hatların geleceğini belirsizleştirmiş ve Tahran'ı yeni geçiş yönetimiyle ilişkilerini yeniden oluşturmaya zorlamıştır (Hamdach; 2025, 96-132).

Ahmed Hüseyin eş-Şara'nın 8 Aralık 2024 tarihinde Esad iktidarının çöküşüyle fiilen, 29 Ocak 2025'te resmen iktidara gelişi, İran–Suriye ilişkilerinde keskin bir kopuşa yol açmıştır. Esad döneminde Suriye, İran'ın "direniş ekseni"nin merkez halkası ve Devrim Muhafızları ile Hizbullah için başlıca lojistik hat konumundayken, yeni dönemde Şam yönetimi İran bağlantılı milis güçlerin ülkeden çıkarıldığını ve Suriye'nin artık İran'ın bölgesel projelerine ev sahipliği yapmayacağını ilan etmiştir. Şara bu hamleyi, ABD ile ilişkileri normalleştirme ve İsrail'in İran kaynaklı tehdit söylemini geçersizleştirme stratejisinin parçası olarak yorumlarken, Esad'ın devrilmesini izleyen günlerde İran'la diplomatik ilişkiler de resmen kesilmiştir (Iran International; 2025). Bununla birlikte Şara, Tahran'la ilişkinin "karmaşık ve yarası derin" olsa da tamamen geri dönülmez olmadığını vurgulamış, İran Dışişleri Sözcüsü Esmail Bakai de Suriye yönetimi bunu halkının yararına gördüğü anda bağları yeniden kurmaya hazır olduklarını açıklamıştır (SANA; 2025). Savaş yıllarının kurumsallaşmış ittifakı, Esad sonrasında askeri kopuş ve karşılıklı güvensizlikle niteliğini değişmiş fakat koşullu bir normalleşme ihtimalini tamamen dışlamayan kırılgan bir ilişki rejimine dönüşmüştür. Şunu eklemekte fayda vardır ki İran'ın Suriye sahasındaki milis ve ekonomik ağların varlığını sürdürmesi, İran-Suriye ilişkilerinin Şara dönemde de tamamen ortadan kalkmayacağını, fakat artık daha asimetrik ve tartışmalı bir zeminde seyredeceğini göstermektedir.

Suriye'nin Bölgede Etkin Olan Bazı Bölgesel ve Küresel Aktörlerle İlişkileri

1. Suriye-İran İlişkileri: İsrail ve ABD'ye karşı Hamas'ı Filistin'de ve Hizbullah'ı Lübnan'da destekleyen İran ve Suriye, rejimlerinin devamlılığı için istihbarat ve askeriye konularında sıkı bir işbirliği içinde olmuşlardır. İran, Alevi Esad rejiminin düşmesi halinde, bölgesel ve dolayısıyla uluslararası alanlarda güç kaybedeceğini, bu olasılığın hayallerine ket vuracağını bilmekteydi. Neticede Esad yönetimi iki önemli güçten, İran ve Rusya'dan beslenerek, varlığını devam ettirmiştir (Özdemir, Ç; 2016, 93-94). 2018 sonrası dönemde İran, Esad rejimini ayakta tutmak için parasal desteğini de artırmış, Devrim Muhafızları ve milis ağları aracılığıyla rejimin kara üstünlüğünü pekiştirmiştir (Juneau; 2020). Bu destekle, İsrail'in Suriye'de hedef aldığı füze ve üs yapılanmalarının korunması sağlanmış, İran'ın gücü karşısında İsrail'in gücü dengelenmiş, Lübnan'daki Hizbullah'a kara koridoru sağlama işlevi derinleşmiştir (Risseeuw; 2018). Ancak 2024 sonundaki muhalif taarruzları ve Esad rejiminin çöküşü, İran'ın yerel vekil ağlarını yeniden ölçeklendirmeye zorlamıştır. Böylece 2024Suriye-İran ittifakının zirveye çıktığı fakat aynı zamanda sürdürülebilirliğinin sınırlarına ulaştığı bir evre olmuştur. Şara döneminde İran-Suriye ilişkileri, yeni yönetimin İran'ı "bölgesel tehdit" olarak niteleyen söylemiyle keskin biçimde gerilemiş, Tahran'ın askerî varlığı hızla çekilirken, ilişkiler asgarî diplomatik temas ve sınırlı ticarete indirgenmiştir (Myre; 2025).

2. Suriye-Türkiye İlişkileri: Suriye-Türkiye ilişkilerinde Soğuk Savaş'ın ardından zaman zaman Suriye'nin PKK'yı desteklemesi, Hatay'ın statüsü, Fırat ve Dicle nehrinin suyu gibi meseleler nedeniyle tansiyon yükselmiş, 2011, yani Arap Baharı'nın Suriye'de de başlaması itibariyle R.T. Erdoğan'ın Esad'a iktidarı bırakması talebi, ilişkileri tamamen koparmıştır. Suriye'de iç savaş devam ederken Erdoğan'ın, PKK ve diğer terörist grupların ve Türkiye'ye göç eden mültecilerin engellenmesi amacıyla Esad'dan sınırda tampon bölge istemesinin karşılıksız kalması neticesinde, BM ve NATO'dan bölgeye askeri müdahale istemesi de tarafları neredeyse düşman duruma getirmiştir fakat Erdoğan'ın Batı'dan bu isteği de karşılık bulmamıştır (Özdemir, Ç; 2016, 94-95). 2018 yılı itibariyle Türkiye'nin Suriye politikası, Suriye rejiminin değişikliğini önceleyen güvenlik merkezli bir strateji ile Fırat Kalkanı parolasıyla başlayarak Zeytin Dalı, Barış Pınarı ve Barış Kalkanı adlı sınır ötesi harekâtlar, İdlib'de gözlem noktaları ve muhalif yapılarla kurumsallaşan işbirliği üzerinden şekillenmiştir Ankara bu süreçte PYD/YPG'yi çevrelemeyi ve Astana süreci gibi platformlarda Rusya ile İran'la taktik uyumu sürdürmeyi hedeflemiştir (Ataman&Özdemir; 2018). Esad rejiminin 2024 sonundaki çöküşüne giden çizgide Türkiye'nin askeri mevcudiyeti ve muhalif gruplar üzerindeki etkisi,

Ankara'yı geçiş sürecinin ana aktörlerinden biri hâline getirmiştir. Böylece ikili ilişkiler, düşmanlıktan "kontrollü normalleşme ve güvenlik işbirliğine" evrilen hibrit bir karakter kazanmıştır (Yıldırım&Ercan; 2025). Şara döneminde Suriye-Türkiye ilişkileri, post-Esad geçiş sürecinin mantığına uygun biçimde güvenlik-endeksli işbirliği ile sınırlı kurumsal normalleşmenin iç içe geçtiği bir çerçevede ilerlemiştir. Ankara, sınır güvenliği, mülteci dönüşü ve PKK oluşumlarının çevrelenmesi hedeflerini korurken, yeni rejimin istikrarını desteklemek için ekonomik entegrasyon ve yeniden inşa alanlarında kademeli açılım arayışına girmiştir (Çevik; 2025).

3. Suriye-ABD İlişkileri: Resmi olarak 1944 yılında başlayan Suriye-ABD ilişkileri, 1967 yılındaki Arap-İsrail savaşları nedeniyle durma noktasına gelmiş, 1974 yılı itibariyle ancak normalleşe bilmiştir. 1990 yılında Irak'ın Kuveyt'i işgaliyle Suriye, ABD ile birlikte Irak'a operasyon çekmiş, sonrasında iyi giden ilişkiler, 2000 yılının başı itibariyle Suriye'nin Lübnan'ı tamamen işgal için operasyonları ile son bulmuştur. Washington, Suriye'yi Lübnan'ı işgal için terörist gruplara destek olmakla suçlayarak, BM'den Suriye'ye müdahale etmesini istemiş, ABD Suriye'ye 2004 yılından bu yana ekonomik yaptırımlar uygulamaya başlamıştır. İç savaş başladığı Ocak 2011'den beri ABD, Esad hükümetinin istifasını istemiştir (Özdemir, Ç; 2016, 95). Suriye'de iç savaş başladığında Türkiye, Amerika, Suudi Arabistan ve Katar ılımlı muhalifleri, İran ve Hizbullah da Esad hükümetini desteklemiştirler. Zamanla ABD'nin muhaliflere olan desteği zayıflarken, IŞİD ve Rusya faktörü ortaya çıkmıştır (Duran&Yalçın; 2016, 8).

2010'ların son çeyreği itibariyle Suriye-ABD ilişkileri, Washington'un sahadaki askeri varlığını asgari düzeye indirmesiyle Esad rejimini ne tam meşrulaştıran ne de doğrudan devirmeyi hedefleyen ikircikli bir stratejiye dönüşmüştür. ABD'nin Suriye'ye angajmanı, Trump dönemindeki pragmatik geri çekilme ve Biden yönetiminin seçici çok taraflılık arayışı arasında salınan, normatif iddialarla realist çıkar hesaplarını birleştirmeye çalışan dalgalı bir seyir izlemiştir (Fauzi; 2025, 990). Biden yönetimi, bölgede sınırlı askeri mevcudiyetle DEAŞ'la mücadele ve ülke çapında ateşkes için diplomatik baskı gibi önceliği olan politika izlemiştir. ABD, Esad'ın 2024 sonundaki düşüşüne kadar yaptırımları rejim ve destekçileri üzerinde baskı aracı olarak sürdürmüştür (Lister; 2022, 315). Şara döneminde Suriye-ABD ilişkileri, Esad sonrası "fırsat–risk" ikilemi çerçevesinde ihtiyatlı bir yakınlaşma ile tanımlanmıştır. Washington, HTŞ kökenli yeni yönetimle angajmanı aşamalı yaptırım gevşetmeleri, DEAŞ'la mücadele ve İran'ın nüfuzunun sınırlandırılması gibi performans kriterlerine bağlamış, ilişkilerde İsrail'in güvenliğini çıkarlarının merkezine yerleştirmiştir (Singh; 2025, 157).

4. Suriye-Mısır ilişkileri: Mısır iç meselesi yüzünden son üç dönem boyunca (Silahlı Kuvvetler, Mursi ve Sisi) Suriye'ye yönelik politikalarında köklü bir değişikliğe gitmemiştir. Mursi iktidarı Suriye'de bir devrim istemekle yetinmiş (Duran&Yalçın; 2016, 20), devlet olarak Suriye'nin toprak bütünlüğünü desteklediğini beyan etmiştir. 2020 yılı sonrasında Suriye-Mısır ilişkileri, Kahire'nin Esad rejimini bütünüyle meşrulaştırmadan yeniden Arap sistemine entegre etmeye dönük temkinli normalleşme çizgisiyle şekillenmiştir. Mısır bu dönemde Suriye ilişkilerini, İran ve Türkiye'nin nüfuzunu dengeleme, savaşın ardından Suriye'nin yeniden inşasında piyasadan pay alma ve BM gözetiminde Suriye'de siyasal çözüm fikrini koruma şeklinde formüle etmiştir (Henkel; 2020, 184-185). Sisi döneminde Kahire'nin Esad yönetimine verdiği açık desteğin içeriği, "ulusal orduların" istikrar sağlayıcı rolüne olan inanç ve Suriye'nin toprak bütünlüğünün korunmasına verilen önem bağlamında olmuştur. 2023'te Kahire'den Şam'a yapılan üst düzey ziyaretin anlamı, Esad İktidarının Arap Birliği'ne yeniden dönüşünü onaylayan bir hareket olarak yorumlanmış (Oron; 2025, 219-225), bu süreç, Esad'ın 2024 sonundaki düşüşüne dek ihtiyatlı ama artan bir işbirliği ekseni yaratmıştır. Şara döneminde Suriye-Mısır ilişkileri, Esad sonrası "yeni Suriye"nin İslamcı referansları nedeniyle derin güvensizlik ve şüpheci yakınlaşma olarak tanımlanmıştır. Kahire, rejimi devrimci dalganın Mısır'a sıçrama riski üzerinden okumuş, angajmanı dışişleri bakanları düzeyinde telefon diplomasisi, sınırlı insani yardım ve Suriyelilere yönelik sıkı vize rejimiyle sınırlamıştır (Hassan; 2025).

5. Suriye-S. Arabistan İlişkileri: Amerika ile İngiltere 2003'te Irak'a girerek bir savaş başlatmış, İran'ın Batılı ülkelere karşı mukavemeti neticesinde bölgede etkisi artmıştır. Suriye'de iç savaş başladığında S. Arabistan, bölgede devam eden İran'ın etkisini bozmak için İran'la rekabeti buraya taşımıştır. (Asseburg&Wimmen; 2012, 3). Suriye-S. Arabistan ilişkileri Arap Baharı nedeniyle, Riyad'ın Esad rejimine karşı mesafeli ancak giderek daha pragmatik hale gelen bir çizgi izlemesiyle yeniden tanımlanmıştır. Suudi karar vericiler, İran'ın Suriye'deki nüfuzunu sınırlama, Captagon kaçakçılığı ve mülteci baskısını yönetme, aynı zamanda ABD'nin bölgedeki taahhüdlerini dengeleme hedefleri çerçevesinde Şam'la diplomatik kanalları kademeli biçimde yeniden açmıştır (Roebuck; 2023, 4-6). 2023, Suudi Arabistan öncülüğünde Suriye'nin Arap Birliği'ne dönüşünün ve "Esad'ı tecritten yönetilebilir ortaklığa dönüştürme" hamlelerinin, öbür taraftan Arap normalleşme dalgasının zirve yaptığı yıl olmuştur (Kardas & Aras; 2023, 72-75). 2024 sonundaki rejim değişimi öncesinde Riyad, yeniden açılan büyükelçilikler ve ekonomik öntemaslar üzerinden savaş sonrası geçiş sürecinde söz sahibi olmayı ve İran ve Türkiye etkisini dengelemeyi hedefleyen ve gittikçe artan artan bir angajmana yönelmiştir. Şara döneminde Suriye-Suudi Arabistan ilişkileri, Riyad'ın "yeni Suriye"ye yönelik yapıcı pragmatizm stratejisi etrafında şekillenmiştir. 2025'te

Şam'da düzenlenen Suriye-Suudi Yatırım Forumu'nda imzalanan milyarlarca dolarlık anlaşmalar, Şara liderliğindeki geçiş hükümetinin meşruiyetini pekiştirirken, Suudi Arabistan'a da Suriye'nin yeniden inşası üzerinden nüfuz alanını genişletme imkânı tanımıştır (Ulrichsen; 2025, 2-3).

6. Suriye-İsrail İlişkileri: Suriye iç savaşında İsrail bir denge politikası yürüterek, taraflar arasında güç bir tarafa kaymadıkça müdahil olmamıştır. İsrail aslında düşman olmasına rağmen İran destekli Esad rejiminin, dolayısıyla bölgede Hizbullah'ın kalmasını tercih etmiştir. Diğer türlü Esad giderse, Hizbullah'ın ve dolayısıyla İran'ın bölgedeki etkisi en aza inecek, yerine gelecek olanlar iç meselelerle boğuşacağından, İsrail'e bölgede daha fazla hareket alanı açılacaktır. Fakat Esad'ın yerine gelecek olanların (kestirilemez olması ki İsrail'in en korktuğu kökten dinci guruplardır) İsrail'e nasıl davranacağı belirsiz olduğundan, İsrail karar vericileri tercihini Esad'dan yana kullanmışlardır (Duran & Yalçın; 2016, 20-21). 2015'sonrası yıllarda Suriye-İsrail ilişkileri, diplomatik kanalların kapalı olduğu ve düşük yoğunluklu çatışma biçiminde seyretmiştir. İsrail, 2018–2022 arasında İran'ın ve rejim yanlısı milislerin Suriye'deki tahkimatını sınırlamak amacıyla ortalama ayda üç hava saldırısı olmak üzere 145 civarında operasyon yürütmüş, bunların önemli kısmını güney cephesine yoğunlaştırmıştır (Kaduri; 2023). Bu süreçte Tel Aviv, Esad rejimini devirmeyi resmen hedeflemediğini, ancak İran'ın çekilmesini ve Golan sınırında bir adreste "sorumluluk" istemini vurgulamıştır. 7-8 Aralık 2024'teki Şam Savaşı ve Esad rejiminin çöküşü sırasında İsrail, yüzlerce hava saldırısı ve kara birlikleriyle UNDOF tampon bölgesine ilerleyerek Suriye'nin güneyinde kalıcı bir güvenlik kuşağı tesis etmeye yönelmiştir (Israel-Syria relations; 2024). Şara döneminde Suriye-İsrail ilişkileri, İsrail'in Esad sonrası güney Suriye'de kurduğu askerî üstünlüğü koruma kaygısıyla eşzamanlı gerilim ve sınırlı diyalog atmosferi içinde olmuştur. İsrail, 2025'te ilk füzeli saldırıları, yeni yönetimi sorumlu tutarak sürdürürken, Washington arabuluculuğunda yaptırım gevşemeleri ve doğrudan temaslar üzerinden tansiyonu düşürmeye çalışmıştır (Taha vd.; 2025).

Bu çalışma şunu gösteriyor ki Şara'nın yönetimi ele geçirdiği tarihe kadar bölge ülkelerinin Şii ve Alevi iktidarları ve toplulukları, Suriye'de Esad iktidarını desteklerken, Sünni olanları Esad'ın gitmesini ve çıkarlarına uygun herhangi bir Sünni gurubun iktidara gelmesini istemişlerdir. Bu arada dünya genelinde 90'ın üzerinde ülke, Esad hükümetine muhalif olanlara destek vermek amacıyla 2012 yılında, Suriye Halkının Dostları Platformu'nu kurmuşlardır (Demir & Rijnoveanu; 2013, 59). 11 esas ülkeden oluşan bu platform içinde Orta Doğu'dan, Türkiye, Mısır, S. Arabistan, BAE, Katar ve Ürdün gibi 6 ülke vardır. Amerika ile birlikte Batı Avrupa'nın en güçlü ülkeler de bu platformda Batı'yı temsil etmişlerdir. Bu platformun üyelerinin bölgedeki

çıkarlarının farklı olması, Suriye konusunda farklı ajandalarının bulunması da çalışmalarında bir uyumsuzluk yaratmıştır. Fakat Esad yönetimini destekleyen İran ve Rusya, pragmatizm temelinde, bölgedeki çalışmalarını uzun süre uyum içinde sürdürmüşlerdir (Ulutaş & Hoca; 2014, 10). Şara'nın Suriye'de yönetimi ele geçirmesinin ardından, Orta Doğu'da iktidarı Sünni elitlerin elinde bulunan ülkeler, Suriye politikalarını güvenlik paradigmasından, kontrollü normalleşme ve bölgesel istikrar arayışına dayalı daha esnek bir çerçeveye evirmişlerdir. Bölge ülkelerinin Suriye politikası, ideolojik düzlemde mezhepsel yakınlık veya uzaklık söylemini korumakla birlikte, pratikte güvenlik meselelerinin çözümü, ekonomik entegrasyon ve İran etkisinin çevrelenmesi gibi faktörler temelinde çok katmanlı bir stratejik denge arayışına dönüşmüştür.

SONUÇ

Orta Doğu'da çatışan devletlerin ve örgütlerin sayısı sürekli değişmektedir. Buradaki ülkeler hem çevresindeki ülkelerle hem de içlerindeki örgütlerle savaşmaktadırlar. Ayrıca bu örgütler de kendi aralarında kanlı hesaplaşmalar peşindedirler. Orta Doğu'da olaylar başladığında Arap Baharı, ekonomiden memnun olmayan muhaliflerin seküler anlamda bir iktidar savaşı iken, bu savaşlar varoluşsal meseleye dönüşmüştür. Yani savaş, dini ve etnik grupların var olma savaşına dönüşmüştür. Savaş uzadıkça demokrasi arayışı tamamen unutulmuştur. Küresel ve bölgesel güçlerin kontrolünde savaşan aktörler, etnik, dini ve ideolojik motivasyonla edilgenleşmeye başlamışlardır. Gruplar, onlara para verip destekleyenlere bağımlı hale gelmişlerdir. Esad dâhil bütün Şii, Sünni, Alevi ve diğer ideolojik guruplar, kendi varlığını korumanın dışında, kendine destek veren ülkelerin ajandasıyla hareket etmeye başlamışlardır. Adına muhalifler veya terör örgütleri, her ne dersek diyelim bunlar, maaliyetleri arttığında veya şartlar değiştiğinde, güç odaklarının hemen vazgeçtiği değersiz oluşumlar haline gelmişlerdir. Diğer taraftan büyük güçlerce her tarafına nifak mayını döşeli Orta Doğu'nun sürekli artan sosyal, siyasi, ekonomik ve güvenlik maliyeti, bu bölgenin çevresine ve hatta dünyaya yansımaya devam etmiştir.

Bu çalışma, Orta Doğu'nun jeopolitik, jeokültürel ve enerji temelli kırılganlıklarının, Suriye örneğinde nasıl çok katmanlı bir kriz rejimine dönüştüğünü ortaya koymuştur. İbrahimi dinlerin ve kadim ticaret yollarının kesişiminde yer alan, petrol ve stratejik boğazlarla çevrili Orta Doğu, etnik, mezhepsel ve sınıfsal fay hatlarının küresel güç rekabetiyle iç içe geçtiği bir coğrafya halini almıştır. Arap Baharı, bu tarihsel birikim üzerinde hem yerel adalet ve temsil taleplerini görünür kılmış, hem de küresel ve bölgesel aktörlerin "demokratikleşme", "insani müdahale" ve "terörle mücadele" gibi normatif söylemler altında nüfuz alanlarını yeniden tanzim ettiği bir laboratuvara dönüşmüştür. "Adil savaş" doktrini, insani müdahale ve meşru müdafaa kavramlarıyla birlikte, özellikle ABD ve Batılı müttefikler tarafından

uluslararası sistemi adilleştiren değil esnekleştiren, hukukî meşruiyet ile jeopolitik çıkar arasındaki gerilimi maskeleyen bir araç olarak işlev görmüştür. Batı'nın ruhani temelleri üzerine oturtulmuş "Adil savaş" anlayışı, "güçlü (Batılı) devletlerin uygulamaları, barışı yansıtır" düşüncesini dünyaya empoze etmek amacıyla, güçlü devletlerin insani müdahalelerine(!) onay almak içindi. Fakat XX yy'da Sekülerizm revaçtaydı ve "Adil savaş" anlayışını dünyanın tamamına kabul ettirebilmek için uluslararasılaştırılması gerekiyordu. İşte "barışı tesis etmek için savaşa onay veren veya vermeyen bu (kutsal) görev" BM'ye yüklenmiştir. ABD ve Batı, üzerinde kontrol sahibi olmak istediği enerji bölgelerinde, itiraz eden bölge ve çevre faktörlerini cezalandırmaya başlamıştır. Gittikçe keyfileşen Batılı ülkelerin diğer ülkelere olan müdahaleleri ise barışı tesis eden BM'nin işlevinin, sorgulanmasına sebep olmuştur.

Suriye iç savaşı, klasik devletlerarası savaşlardan farklı olarak, hibrit ve asimetrik "yeni savaşlar"ın tipik özelliklerini bünyesinde toplamıştır ve Suriye, küresel ve bölgesel güçlerin vekilleri üzerinden hesaplaştığı bir "kontrol edilebilir kaos" sahasına dönüşmüştür. İran'ın Esad rejimiyle kurduğu kriz koalisyonu, "direniş ekseni" söylemi üzerinden şekillenmiştir. Rusya'nın Suriye'ye askeri ve diplomatik desteği ise Tahran'a belirli jeopolitik kazanımlar sağlamış ama aynı zamanda yüksek ekonomik, askerî ve diplomatik maliyetler üretmiştir. Diğer aktörlerle kurulan çok katmanlı ilişkiler ise Suriye'yi, yalnızca bir iç savaş sahası değil, aynı zamanda bölgesel güç hiyerarşisinin yeniden dağıtıldığı bir jeopolitik düğüm noktası hâline getirmiştir. Ahmed Hüseyin eş-Şara'nın iktidarı ele geçirdiği günden bugüne izlediği dış politika, Suriye'nin geleceğinin yine tek başına Şam'daki karar vericiler tarafından değil, Orta Doğu'daki bölgesel dengeler ile küresel güçlerin rekabet ve uzlaşı ilkeleri tarafından belirleneceğini göstermektedir. Yani bu günkü sürecin devamında da siyasal reform ve geçiş adımlarının büyük ölçüde dış aktörlerin birbirleriyle kurduğu pazarlıkların seyrine bağlı kalacağı bir Suriye ufku öne çıkmaktadır. Suriye'yi orta ve uzun vadede bekleyen genel tablo, tam bir normalleşmeden ziyade, kademeli istikrarlaşma ile ülkenin geneline yayılmış olan rövanşizmin iç içe geçtiği hibrit bir rejim görünümüdür. Dolayısıyla Şara döneminde Suriye'nin geleceği, "toprak bütünlüğünü koruyan ama egemenliği parçalı", biçimsel olarak normalleşmiş ama yapısal olarak vekâlet ilişkileri ve jeopolitik pazarlıklarla kuşatılmış bir devlet modeli ile tanımlanabilecek türden olacaktır. Suriye, Orta Doğu'da savaş, meşruiyet, vekâlet ağları ve rejim değişimi arasındaki karmaşık ilişkinin hem sonucu hem de laboratuvarı olarak, bölgesel düzen tartışmalarının merkezinde kalmaya devam edecektir. Bu da kalıcı barış ve istikrarın ancak kapsayıcı bir siyasal çözüm, bölgesel güvenlik inşası ve dış müdahaleleri sınırlayan yeni normatif çerçevelerle mümkün olabileceğini göstermektedir.

KAYNAKÇA

Kitap

Arı, T. (2013), *Uluslararası İlişkiler ve Dış Politika*, 608 Sayfa, 10. Baskı, MKM Yayıncılık, Bursa.

Asseburg, M. ve Wimmen, H. (2012), Civil War in Syria, External Actors and Interests as Drivers of Conflict, pp.1-7, SWP Comments, December-2012/C 43.

Davutoğlu, A. (2002), *Stratejik derinlik. Türkiye'nin Uluslararası Konumu*, 584 Sayfa, Küre Yayınları, İstanbul.

Keegan, J. (2001), *İkibinbeşyüz Yıllık Savaş Tarihi*, 396 Sayfa, Çev: Ali Çakıroğlu, Aykırı, İstanbul.

Kegley, C. W. ve Wıttkopf, E. R. (1993), *World Politics: Trend and Transformation*, 614 Pages, St. Martin Press, New York.

Knutsen, T. L. (1992), *A History of International Relations Theory*, 298 Pages, Manchester University Press, Manchester.

Özey, R. (2003), *Küresel İşgal*, 215 Sayfa, Aktif Yayınevi, İstanbul.

Özey, R. (2012), *Dünya ve Türkiye Ölçeğinde Siyasi Coğrafya*, 446 Sayfa, Aktif Yayınevi, İstanbul.

Sinkaya, B. (2012), *Arap Baharı Sürecinde İran'ın Suriye Politikası*, SETA Analiz, Sayı. 53, 40 Sayfa, Turkuvaz Matbaacılık Yayıncılık, İstanbul.

Şimşek, E. (2005), *Türkiye'nin Ortadoğu Politikası*, Sayfa. 247, Kum Saati Yayınları, İstanbul.

Ulutaş, U. ve Hoca, H. (2014), *Suriye Devrim mi, Bölünme mi?*, SETA Analiz, Sayı.95, 36 Sayfa, Turkuvaz Matbaacılık Yayıncılık, İstanbul.

Yalçın, H. B. ve Duran, B. (2016), 'Suriye'de İç Savaş, Vekalet ve Yıpratma', Hasan Basri Yalçın-Burhanettin Duran, ed., *Küresel ve Bölgesel Aktörlerin Suriye Stratejileri*, ss. 7-25, Seta Kitapları, İstanbul.

Zavatı, H. (2001), *Is Jihad a Just War?: War, Peace, and Human Rights Under Islamic and Public International Law*, 218 Pages, Edwin Mellen Press, New York.

Dergi Makalesi

Alakel, M. ve Arab, A. N. A. (2025). *The changing power and security dynamics in the Middle East*. İmgelem, 16, 203-240.

Allison, R. (2013), Russia and Syria: Explaining Alignment with a Regime Crisis, *International Affairs*, 89 (4): 795-823.

Ataman, M. ve Özdemir, Ç. (2018). Turkey's Syria policy: Constant objectives, shifting priorities. *Turkish Journal of Middle Eastern Studies, 5*(2), 13-35.

Bayram, M. (2016), Değişen Enerji Jeopolitiği ve Afrika'daki İç Savaşlar, *Munzur Üniversitesi Sosyal Bilimler Dergisi*, 4 (8): 88-100.

Dadparvar, S. ve Parto, A. (2025). Great powers, the arming of non-state groups, and the prolongation of armed conflicts in the Middle East. *Asian Review of Political Economy, 4*(1), 1-22.

Doğan, G. ve Durgun, B. (2012), Arap Baharı ve Libya: Tarihsel Süreç ve Demokratikleşme Kavramı Çerçevesinde Bir Değerlendirme, *Süleyman Demirel Üniversitesi SBE Dergisi*, 1 (15): 61-90.

Eker, S. (2015), Savaş Olgusunun Dönüşümü: Yeni Savaşlar ve Suriye Krizi Örneği, *Türkiye Ortadoğu Çalışmaları Dergisi*, 2 (1): 31-66.

Erol, M. S. ve Çelik, K. E. (2018), ABD'nin Suriye Politikasında Vekil Aktör Olarak Terör Örgütleri: YPG Örneği, *ANKASAM, Bölgesel Araştırmalar Dergisi*, 2 (2): 14-45.

Fauzi, W. (2025). Policy volatility and normative challenges: American engagement in Syria (2011–2024) and the reconfiguration of global governance. *Society, 13*(2), 985-998.

Goodarzi, J. (2013), Syria and Iran: Alliance Cooperation in a Changing Regional Environment, *Ortadoğu Etütleri*, 4 (2): 31-54.

Güdek, Ş. (2017), 20. Yüzyılı Aşırılaştıran ve Aşırılaşan Savaş Algısı Pratiği, *BEU Akademik İzdüşüm*, 2 (2): 79-103.

İyiat, B. (2018), Suriye İç Savaşında Kürtler ve PYD Terör Örgütü, *AUSBD*, 1 (2): 2-10.

Juneau, T. (2020). Iran's costly intervention in Syria: A pyrrhic victory. *Mediterranean Politics,25*(1),26-44.

Kaldor, M. (2013), In Defence of New Wars, Stability:, *International Journal of Security and Development*, 2 (1): 1-16.

Kardas, S. ve Aras, B. (2023). What drove Syria back into the Arab fold? *Middle East Policy, 30*(3), 70-80.

Kazdal, M. (2018), İran'ın Arap Baharı Sonrası Suriye Politikasını Anlamak, *Artuklu Kaime UA İktisadi ve İdari Araştırmalar Dergisi*, I (I): 1-15.

Köroğlu, U. (2012), *İran'ın Suriye Politikası*, (Editör: B. Akgün), Suriye Krizinde Bölgesel ve Küresel Aktörler, *SDE Analiz*, ss. 44-52.

Lal, M. S. (2025). The Iran-Saudi cyber and hybrid warfare: Analyzing the strategic implications for Pakistan. *Journal of Political Stability Archive, 3*(1), 49–58.

Özdemir, Ç. (2016), Suriye'de İç Savaşın Nedenleri: Otokratik Yönetim mi, Bölgesel ve Küresel Güçler mi?, *Bilgi,* Kış (33): 81-102.

Özlük, E. (2015), Adil Savaş ve Irak Savaşı: Anakronik Bir Öğretiyi 21. Yüzyılda Yeniden Okumak, *Selçuk Ün. İİBF Sos. Ek. Ar. Dergisi*, 15 (30): 15-58.

Rıjnoveanu, C. ve Demir, S. (2013), The Impact Of The Syrıa Crısıs On The Global And Regıonal Polıtıcal Dynamıcs, *Journal of Turkish World Studies*, XIII (1) 55-77.

Sağlam, M. (2) (2013), İnadın Ötesinde: Rusya'nın Suriye Politikası, *Ankara Üniversitesi SBF Dergisi*, (68-4): 211-217.

Sinkaya, B. (2017), İran'ın Suriye Stratejisi, *Akademik Ortadoğu*, 11 (2): 49-64.

Şen, G. (2012), İran ve Arap Baharı:Bağlam, Söylem ve Siyaset, *Ortadoğu Etütleri*, 3(2):95-118.

Yeltin, H. ve Işık, K. (2017), Rekabetten İşbirliğine Giden Süreçte Türkiye-Rusya İlişkilerinde Bir Test: Suriye Krizi, *Uluslararası Politik Araştırmalar Dergisi*, 3 (3): 39-50.

Yıldırım, K. E. ve Ercan, M. (2025). Geopolitical and strategic analysis of the Syrian problem after regime change. *Akademik Hassasiyetler, 12*(27), 616-631.

Yolcu, F. H. (2016). Iran's involvement with Syrian civil war: Background, reasons and alternatives. *Bilgi, 33*(Kış), 35-64.

Yüce, Samet, (2016), Rusya'nın Suriye'deki Varlığının Nedenleri, *Kastamonu Üniversitesi İİBF Dergisi*, (11): 269-289.

İnternet Sitelerinde Yayınlanmış Makaleler ve Haberler

Çevik, S. (2025, 8 August). *Moderation without transformation: Why Turkey is failing Syria's postwar transition*. Arab Center Washington DC, Policy Analysis. https://arabcenterdc.org/resource/moderation-without-transformation-why-turkey-is-failing-syrias-postwar-transition/

Etana Syria. (2023). *Explainer: Iran in Syria Today*. Etana Syria. https://etanasyria.org/explainer-iran-in-syria-today/

Goodarzi, J. M. (2019). Iran and the Syrian civil war. In C. Phillips & M. Valter (Eds.), *The War for Syria* (1. bs.). Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9780429201967-9/iran-syrian-civil-war-jubin-goodarzi

Hamdach, W. (2025). The fall of Bashar al-Assad: Winners, losers, and challenges ahead. *Georgetown Journal of International Affairs*. https://gjia.georgetown.edu/2025/05/07/the-fall-of-bashar-al-assad-winners-losers-and-challenges-ahead/

Hassan, M. (2025, 7 Ocak). *Egypt and the new Syria: Concerns about the spread of revolution*. Middle East Monitor. https://www.middleeastmonitor.com/20250107-egypt-and-the-new-syria-concerns-about-the-spread-of-revolution/

PERSONA, GÖLGE VE BİREYLEŞME: *CARL GUSTAV JUNG'DA KENDİLİK YABANCILAŞMASI PROBLEMİ*

Murat Kaplan[1]

GİRİŞ

Kendilik Sorunu ve Modern Birey

Modern toplumda bireyin yaşadığı psikolojik sorunların önemli bir kısmı, yalnızca klinik semptomlarla değil; bireyin kendilik deneyimi ile kurduğu ilişkinin niteliğiyle de yakından ilişkilidir. Carl Gustav Jung'un analitik psikolojisi, bu bağlamda, insanın ruhsal bütünlüğünü tehdit eden temel yapısal gerilimleri açıklamak için güçlü bir kuramsal çerçeve sunar. Bu çerçevenin merkezinde ise persona, gölge ve bireyleşme kavramları yer alır.

Jung'a göre insan, kendisini tanımadan ve içsel gerçekliğiyle yüzleşmeden yaşadığında, dış dünyayla kurduğu uyum bedeli karşılığında öznel bütünlüğünü kaybetme riskiyle karşı karşıya kalır. Bu durum, bireyin varoluşunu kendi merkezinden değil, toplumsal beklentilerin belirlediği bir eksenden sürdürmesine yol açar.

Persona Kavramı: Toplumsal Uyumun Psikolojik Mekanizması

Jung, persona kavramını ilk kez sistematik biçimde Two Essays on Analytical Psychology adlı eserinde ele alır. Persona, bireyin toplumsal çevreyle kurduğu ilişkinin zorunlu bir ürünü olarak ortaya çıkan, işlevsel fakat sınırlı bir psikolojik yapıdır.

"Persona, bireyin toplumla kurduğu bir uzlaşmadır; bireyin dış dünyaya sunduğu işlevsel yüzdür." - (Jung, 1953)

Bu bağlamda persona, bireyin mesleki kimliği, aile içindeki rolü, toplumsal statüsü ve kültürel normlara uyum biçimlerinden oluşan bir sosyal arayüz işlevi görür. Persona sayesinde birey, sosyal dünyada tanınabilir, kabul edilebilir ve işlevsel hale gelir.

Ancak Jung, personanın yalnızca araçsal bir yapı olduğunu vurgular. Persona, bireyin tamamı değildir; yalnızca dış dünyaya dönük yönünü temsil eder.

1 Dr.

Persona ile Özdeşleşme ve Kendilik Yabancılaşması

Jung'un kuramında kritik eşik, bireyin persona ile özdeşleşmesidir. Persona başlangıçta koruyucu ve düzenleyici bir işlev görürken, birey onu kendi gerçek benliği olarak deneyimlemeye başladığında psikolojik bir sapma ortaya çıkar.

"Persona ile özdeşleşme, bireyin kendini toplumsal rolüne indirgemesi anlamına gelir." - (Jung, 1959)

Bu durumda birey, kendi arzularını, duygusal ihtiyaçlarını ve içsel yönelimlerini ikinci plana iter. 'Ben kimim?' sorusu, yerini 'Benden ne bekleniyor?' sorusuna bırakır. Böylece bireyin yaşamı, içsel merkezden uzaklaşarak dışsal onay mekanizmalarına bağımlı hale gelir.

Jung bu durumu radikal bir ifadeyle açıklar:

"İnsan personayla özdeşleştiğinde, ruhunu kaybetme tehlikesiyle karşı karşıyadır." - (Jung, 1953)

Bu ifade, psikopatolojik bir çöküşten ziyade, varoluşsal bir boşalmaya işaret eder.

Gölge Kavramı: Bastırılanın Psikodinamik Yapısı

Carl Gustav Jung'un analitik psikolojisinde gölge (shadow), bilinçli benliğin (ego) tanımadığı, kabul etmek istemediği ya da toplumsal ve ahlaki nedenlerle reddettiği psikolojik içeriklerin bütününü ifade eder. Gölge, yalnızca 'olumsuz2 ya da 'ahlaki açıdan sorunlu' özellikleri değil; aynı zamanda bireyin gerçekleştirilmemiş potansiyellerini, yaratıcı dürtülerini ve bastırılmış yaşam enerjisini de kapsar (Jung, 1959).

Persona ile özdeşleşme süreci, gölgenin oluşumunu hızlandıran temel dinamiklerden biridir. Birey, toplumsal beklentilere uyum sağlama çabasıyla, personaya uymayan özelliklerini bilinçdışı alana iter. Bu bağlamda gölge, personanın yapısal bir karşıtı olarak ortaya çıkar.

Jung bu ilişkiyi şu şekilde formüle eder:

"Persona ne kadar katı ve tek boyutlu hale gelirse, gölge o ölçüde yoğun ve ilkel bir nitelik kazanır." - (Jung, 1959)

Bu ifade, gölgenin patolojik bir oluşumdan ziyade, bilinçli tutumun dengesizliğine verilen telafi edici bir yanıt olduğunu gösterir.

Bastırma, Bilinçdışı ve Semptom Oluşumu

Jungcu kuramda bastırma, yalnızca Freudcu anlamda cinsel ya da saldırgan dürtülerin geri itilmesiyle sınırlı değildir. Bastırılan her psikolojik içerik – duygular, ihtiyaçlar, yönelimler – bilinçdışında otonom bir enerji kazanır.

"Bilinçdışına itilen hiçbir şey etkisiz kalmaz; yalnızca denetimimizden çıkar." - (Jung, 1964)

Bu denetim kaybı, bireyin yaşamında dolaylı ve sembolik biçimlerde kendini gösterir. Jung, bu süreci psikopatolojinin merkezî açıklama ilkelerinden biri olarak görür. Kronik kaygı, anlamsızlık hissi, tekrarlayan ilişki örüntüleri, tükenmişlik sendromu ve bazı nevrotik belirtiler, gölge içeriğin bilinçle bütünleşememesinin klinik yansımaları olarak değerlendirilir.

Bu noktada Jung, semptomu ortadan kaldırılacak bir bozukluk olarak değil; bilinçdışının bilinçle iletişim kurma girişimi olarak ele alır.

Toplumsal Normlar, Etik ve Persona İnşası

Persona yalnızca bireysel bir psikolojik yapı değil, aynı zamanda tarihsel ve kültürel olarak belirlenen etik normların içselleştirilmiş biçimidir. Bireyin 'iyi', 'doğru' ve 'kabul edilebilir' olarak tanımladığı özellikler, büyük ölçüde yaşadığı toplumun değer sistemi tarafından şekillendirilir.

Bu durum, Jung'a göre etik bir gerilim doğurur: Toplumsal ahlak ile bireysel psikolojik gerçeklik her zaman örtüşmez. Persona, bu örtüşmezliği görünmez kılarak bireye geçici bir uyum sağlar; ancak bedel olarak gölgenin yoğunlaşmasına yol açar.

Jung, modern toplumlarda bu gerilimin özellikle arttığını belirtir. Endüstriyel ve bürokratik yapılarda birey, işlevsel bir role indirgenir ve bu rol, kişiliğin tamamıymış gibi deneyimlenmeye başlanır. Böylece etik uyum, psikolojik bütünlük pahasına sürdürülür.

Bireyleşme Süreci: Persona ile Mesafelenme

Bireyleşme, Jung'un kuramında bireyin psikolojik gelişiminin merkezi eksenini oluşturur. Bu süreç, personanın terk edilmesi değil; onun sınırlı ve araçsal bir yapı olduğunun bilinçli olarak fark edilmesiyle başlar.

"Bireyleşme, kişinin toplumsal maskesini yok etmesi değil; onun ötesine geçebilme cesaretini göstermesidir." - (Jung, 1959)

Bireyleşme süreci, gölgeyle yüzleşmeyi zorunlu kılar. Bu yüzleşme, bireyin kendine dair idealize edilmiş imgeleri terk etmesini gerektirir. Dolayısıyla süreç, yoğun kaygı, suçluluk ve belirsizlik duygularıyla birlikte seyreder. Jung, bu sancıyı patolojik değil; gelişimsel olarak kaçınılmaz kabul eder.

Bireyleşmenin Klinik ve Varoluşsal Boyutları

Klinik bağlamda bireyleşme süreci, semptomların tamamen ortadan kalkmasından ziyade, bireyin semptomlarıyla kurduğu ilişkinin dönüşmesini hedefler. Jungcu terapi, bireyin 'normal' hale getirilmesini değil; psikolojik bütünlüğünü artırmasını amaçlar.

Varoluşsal düzeyde ise bireyleşme, bireyin yaşamını başkalarının beklentileri doğrultusunda değil, kendi içsel yönelimiyle şekillendirebilme kapasitesini ifade eder. Bu noktada Jung, psikolojiyi yalnızca tedavi edici değil; etik ve varoluşsal bir disiplin olarak konumlandırır.

SONUÇ

Psikolojik Bütünlük Olarak Kendilik

Jung'un analitik psikolojisi, insanın temel sorununun 'uyum eksikliği' değil; kendilikten kopuş olduğunu ileri sürer. Persona, toplumsal yaşam için vazgeçilmezdir; ancak bireyin tüm varlığını kapsadığında psikolojik bir indirgemeye dönüşür.

Bu bağlamda ruhsal olgunluk, personanın yok edilmesi değil; onun sınırlı doğasının bilinçli olarak tanınması ve gölgeyle entegrasyonun sağlanmasıyla mümkün olur. Jung'a göre gerçek yaşam, ancak bu bütünleşme gerçekleştiğinde başlayabilir.

KAYNAKÇA

Jung, C. G. (1953). Two Essays on Analytical Psychology. Princeton University Press.
Jung, C. G. (1959). The Archetypes and the Collective Unconscious. Princeton University Press.
Jung, C. G. (1964). Man and His Symbols. Doubleday.
Samuels, A., Shorter, B., & Plaut, F. (1986). A Critical Dictionary of Jungian Analysis. Routledge.
Stevens, A. (1994). Jung: A Very Short Introduction. Oxford University Press.

DİN ÖZGÜRLÜĞÜ BAĞLAMINDA TÜRKİYE'DE DİNÎ GRUPLARIN HUKUKİ KONUMU

Hasan Toman[1]

GİRİŞ

Dinî gruplar, tarih boyunca yalnızca inanç alanında değil, aynı zamanda toplumsal örgütlenme, kimlik oluşumu ve kamusal yaşam üzerinde de etkili olan kolektif aktörler olarak varlık göstermiştir. Bu nedenle dinî gruplar ile devlet arasındaki ilişki, hukuk sistemleri açısından sürekli düzenleme ve denetim konusu olmuştur. Devletlerin dinî gruplara yönelik yaklaşımları; laiklik anlayışı, din ve vicdan özgürlüğünün kapsamı, kamu düzeninin korunması ve güvenlik kaygıları gibi unsurlara bağlı olarak ülkeden ülkeye farklılık göstermektedir.

Uluslararası insan hakları hukuku, bireysel din özgürlüğünün yanı sıra dinin kolektif boyutunu da koruma altına alarak dinî grupların örgütlenme, ibadet etme ve faaliyet yürütme haklarını güvence altına almayı amaçlamaktadır. İnsan Hakları Evrensel Beyannamesi (United Nations, 2026), Medeni ve Siyasi Haklar Uluslararası Sözleşmesi (Jospeh & Castan, 2013) ve Avrupa İnsan Hakları Sözleşmesi (Harris, O'Boyle, Bates, & Buckley, 2023) bu alandaki temel normatif çerçeveyi oluşturmaktadır. Bununla birlikte, uygulamada dinî grupların hukuki statüsü, kurumsal özerkliği ve yasal tanınma düzeyi konusunda devletlerarasında önemli farklılıklar bulunduğu, hatta bazı durumlarda ciddi sınırlamaların söz konusu olduğu görülmektedir.

Dini çeşitlilik, çağdaş toplumların belirleyici bir özelliği haline gelmiş ve dini grupların korunmasını uluslararası insan hakları hukukunun temel bir meselesi yapmıştır. Dini kimlikle ilgili çatışmalar, azınlıklara karşı ayrımcılık ve toplu ibadete getirilen kısıtlamalar, bireysel inanç özgürlüğünün tek başına dini yaşamı korumak için yeterli olmadığını göstermektedir. Dini uygulama genellikle toplumsal kurumlara, ortak ritüellere ve kolektif kimliğe bağlıdır. Bu nedenle, dini özgürlüğün etkin bir şekilde korunması, bireysel hakların yanı sıra grup boyutlarının da tanınmasını gerektirir (Witte & Green, 2012).

Toplumsal düzenin sağlanması açısından din ile seküler hukuk arasındaki ilişki, tarih boyunca önemli bir tartışma alanı olmuştur. Dinî inançların yaygın

1 Dr. Öğrt. Grv. İnönü Üniversite, Yabancı Diller Yüksekokulu, Malatya, hasan.toman@inonu.edu.tr, ORCID: orcid.org/0000-0002-4011-5019

olduğu toplumlarda dahi, seküler hukuk kuralları dinî kurallardan bağımsız olarak küresel normlar çerçevesinde sistemleştirilmiş ve geliştirilmiştir (Uslu, 2004, s. 236). Geçmişte toplum düzeninin belirlenmesinde etkili olan resmî dinî kurumlar ile formel olmayan (informel) dinî grupların hukuki statüleri, seküler sistemler içinde yasalarla belirlenmiş; hak ve sorumlulukları bu çerçevede sınırlandırılmıştır.

Modern hukuk sistemlerinde dinî gruplar genellikle din ve vicdan özgürlüğü kapsamında ele alınmakta; ancak bu özgürlük mutlak olmayıp kamu düzeni, genel ahlak ve başkalarının hakları gibi sınırlandırma ölçütlerine tâbi tutulmaktadır. Bu durum, dinî grupların hukuki statüsü, tüzel kişilik kazanma süreçleri, mali ve idari denetimleri gibi pek çok konuyu gündeme getirmektedir. Özellikle laiklik ilkesini benimseyen devletlerde, dinî grupların kamusal alandaki varlığı ve faaliyetleri hassas bir denge çerçevesinde düzenlenmektedir (Özbudun, 2025).

Kanunlar, varlıklar arasındaki ilişkiler düzenini sağlayan kurallardır. Bu anlamda, tüm varlıkların kendilerine özgü kanunları bulunmaktadır. Montesquieu'nun kanunlara ilişkin yaptığı sınıflandırma incelendiğinde, kanunların yalnızca toplumu ilgilendiren kurallarla sınırlı olmadığı görülmektedir. Montesquieu, kanunları; ilahî kanunlar, maddi dünyanın kendi kanunları, insandan üstün ruhani varlıkların kanunları, hayvanlar âleminin kanunları ve insanın kendi kanunları şeklinde sınıflandırmaktadır. (Montesquieu, 2017, s. 3). Pozitivist düşüncenin çağı olarak bilinen 18. Yüzyılda rasyonalizmden ampirizme, metafizik düşünceden sosyolojik bir hukuk anlayışına geçişler yaşanmış ve bu geçiş dönemi Aydınlanma Çağının tüm özelliklerini toplumsal yapılara yansıtmaya başlamıştır. Aydınlanma Çağında gözlem ve deneysel yöntemler kullanılarak, doğayı, insanı, toplumu anlama rasyonalist yaklaşımlarla ele alınmıştır. Dogmatik yaklaşımlarım, uygulamaların yerine daha sofistike bir tarih kültürüne sahip filozofların rasyonalist yaklaşımları toplum düzenini ve sorunlarını yeniden ele alınmasına neden olmuştur (Gürkan, 1988, s. 10).

Toplumların içinde bulundukları koşullardaki değişkenlikler tüm toplumlarda aynı olmamaktadır. Her coğrafyanın, kıtanın kendine özgün toplumsal özellikleri bulunmaktadır. Bu yönüyle, dünyanın farklı yerlerinde farklı toplumsal olaylar, yaşam biçimleri; örfler, gelenek-görenekler, ahlak, din anlayışları görülmektedir. Çok uluslu, kültürlü, dinli topluluklarda (ülkelerde), ülkelerin toplumsal mozaiğine göre tasarlanmış ve yürürlüğe konulmuş kanunların olması gelişmiş toplumların en önemli özelliklerinden biridir. Toplumsal barışı sağlamak, herkesin birbiri kadar özgür olmasını sağlamak adına ortaya konulan kanunların sınırlayıcı içerikleri bulunmak zorundadır.

Bireysel ruhu değil "genel ruhu"[2] yansıtması beklenilen kanunların mükemmel olması mümkün değildir. Bununla birlikte, yasalarda olması gereken şey toplumsal düzeni sağlamada genel amaçları gözeten içerikte olmalıdır. Bir gruba, sınıfa, ya da bireye imtiyaz tanıyacak içerikte olmamalıdır. Toplumun genel istencelerine uygun olan yasalar toplumsal kabul görür. Yasalar birkaç kişinin bir araya gelerek belirlediği bir içerikte olmaması gerekir, yoksa onlara uyacak halklar olmaz. Toplumsal mozaiği en iyi şekilde yansıtan halk yönetimi (Cumhuriyet Yönetimi) bu yönüyle halkın taleplerini karşılamada, toplumsal barışın sağlanmasında en ideal bir yönetim biçimi olarak görülmektedir (Rousseau, 2012, s. 35-36).

Bu çalışmada, uluslararası ve ulusal hukuki metinler ile Avrupa İnsan Hakları Mahkemesi içtihadı ışığında, Türk hukuk sisteminde dinî grupların hukuki tanınması ile toplumsal barış, çoğulculuk ve hukuk devleti arasındaki ilişki ele alınmaktadır.

Dini Gruplar

Din, varlığını çoğunlukla bir topluluk, cemaat, ümmet ya da belirli bir grup içinde sürdürmektedir. Bu durum, dinin toplumsal işlevselliğiyle açıklanabilir; zira din, inananlar arasında bağ kurarak bütünleşmeyi teşvik eder (Günay, 2010, s. 255). Dinin sürekliliği, toplumun ihtiyaçlarına ne ölçüde karşılık verdiğiyle yakından ilişkilidir ve bu süreklilik, dini pratikleri canlı tutan örgütlü dini gruplar aracılığıyla mümkün olmaktadır.

"Dinî grup" kavramı, genel olarak ortak inanç ve dinsel yönelimler etrafında şekillenen toplulukları ifade eder. Bu gruplar, diğer toplumsal oluşumlarda olduğu gibi yapı, işlev, temel inançlar ve üye sayısı gibi ölçütler dikkate alınarak sınıflandırılabilmektedir. Dinî grupların ortaya çıkışı ve çeşitlenmesi ise toplumsal, siyasal ve kültürel yapıların farklılaşmasıyla birlikte bireysel ve kolektif dinsel deneyimlerin artmasına bağlı olarak gelişmektedir (Cezayirli, 1997, s. 370).

Uluslararası hukuk, "dini grup" için kesin bir yasal tanım sağlamamaktadır. Genellikle, ortak inançlar, ibadet uygulamaları ve kurumsal yapılarla birleşmiş bireyler topluluğunu ifade eder (Berger, 2016, s. 3). Dini gruplar, resmi örgütler veya gayri resmi topluluklar nitelenebilmektedir. Bu yönüyle dini gruplar Kiliseler, mezhepler, tarikatlar ve kültler şeklinde sınıflandırabilir (Voas, 2015, s. 362). Başka bir yönüyle tipolojik olarak dini gruplar yaygın dini gruplar ve azınlık dini gruplar olarak da ele alınabilir. Yaygın dini gruplar içinde bulundukları toplumlarda genel kabul görmüş dini gruplardır. Azınlık dini gruplar ise genellikle bir toplumun baskın dini geleneğinden farklı, az bir

2 Montesquieu'nun "Genel Ruh" kavramı, bazı yorumcular tarafından Alman Tarihçi Okulu'nun "Halk Ruhu" anlayışına benzer, metafizik nitelikli bir kolektif bilinç olarak değerlendirilmiştir. Ehrlich bu kavramı doğrudan toplumun kendisiyle özdeşleştirirken, Hüseyin Nazım *Ruh'ül Kavanin*'de terimi "temayülât-ı umumiye", yani "genel eğilimler" şeklinde çevirmiştir. Aron, "Genel Ruh"u bir toplumun davranma, düşünme ve hissetme tarzı olarak tanımlarken; Topçuoğlu ise bunun toplumda uzun süre devam eden özellikleri ifade ettiğini vurgulayarak kavramı "millî seciye" biçiminde karşılamıştır (Gürkan, 1988, s. 13) .

nüfuza sahip gruplardır. Hukuksal boyutuyla azınlıktaki dini gruplar toplumun genelinde kabul gören yüksek nüfuzlu dini gruplar gibi dinlerini yaşamakta ve korumakta aynı haklara sahiplerdir (Wallace, 1997, s. 145).

Dinî gruplar; inanç, ibadet ve aidiyet temelinde şekillenen sosyal yapılar olarak, bireylerin din özgürlüğünü kolektif düzeyde yaşama imkânı sunmaktadır (Berger, 2016, s. 6-10). Ancak bu grupların faaliyet alanları, devletin hukukî düzenlemeleriyle doğrudan ilişkilidir.

Türkiye Yasalarında Dini Gruplar

Toplumun her kesimini ilgilendiren yasaların çeşitliliği içerisinde din ve dini gruplar ile ilgili yasalar bulunmaktadır. Demokratik hukuk devletlerinde din ve vicdan özgürlüğü, Türkiye dâhil, Avrupa Konseyi'ne üye olan bütün ülkeler tarafından demokratik çoğulculuk anlayışının korunması ve geliştirilmesi amacıyla anayasal düzeyde garanti altına alınmıştır (Ağırbaşlı, 2012, s. 84). Din veya inanç özgürlüğü, uluslararası belgelerde ve AGİT taahhütlerinde tanınan temel bir haktır. Uluslararası standartlar, herkesin düşünce, vicdan ve din özgürlüğü hakkına sahip olduğunu belirtir. Bu hak, kişinin dinini veya inancını tek başına veya topluca, kamuya açık veya özel olarak, ibadet, öğretim, uygulama ve ayin yoluyla açıklama özgürlüğünü içermektedir. (Buquicchio & Link, 2014, s. 9).

Uluslararası İnsan Hakları Hukuku dini grupların yasal bir kimliği olup olmadığına bakmaksızın onların korunmasıyla ilgili kanunlar içermektedir. Bununla birlikte, dini gruplar, topluluklar yasal olarak çalışmalarını yapabilmek için tüzel bir kimlik üzerinden kendilerini resmi kayıt altına almaktadırlar. Edindikleri tüzel kimlikle ulusal hukuk düzeni içerisinde müstakil tüzel bir dini kuruluş olarak tanınmaları mümkün olmaktadır. Din grupların istekleri üzerine tüzel kişiliğe sahip olmaları aslında onlara bazı ayrıcalıklar tanımakta olduğu görülmektedir. Yasal bir kimlik kazanmış olmaları faaliyet alanlarının çeşitlenmesine imkân sağlamaktadır. Müstakil oldukları ülkelerin yönetimleri onlara dair ulusal mevzuatlarını taraf oldukları uluslararası insan hakları belgelerine ve diğer uluslararası taahhütlere paralellik gösterecek şekilde düzenlemeleri gerekmektedir. Birçok dünya ülkesinde dini grupların tüzel kimliğe sahip olduğu ve bu kimlik üzerinden sadece bir sivil toplum örgütü gibi değil aynı zamanda ticari faaliyetler içinde bulunmalarına da müsaade edildiği görülmektedir. Amerika'da yasal kimlikle faaliyet gösteren dini grupların kar amacı gütmeyen kuruluşlar gibi görülmeleri vergi muafiyeti gibi avantajlardan faydalanmaları söz konusudur. 2014 yılında, AGİT'in dini grupların yasalardaki yerine dair farklı ülkelerde (Amerika, İtalya, İspanya, Estonya, Letonya, Hollanda, İrlanda, İsveç, Almanya) yaptığı çalışmada dini grupların haklarının yasalarla tanımlandığı görülmektedir. Dini grubun bir ya da birkaç üyesinin hatalarından dolayı dini grubun bir bütün olarak temel hak ve özgürlüklerden

mahrum edilemeyeceği şeklinde yaklaşımı yasalarla güvence altına alınmıştır (Blitt, 2005, s. 19-31).

Türkiye, Birleşmiş Milletler ve Avrupa Konseyi düzeyinde temel insan hak ve özgürlükleri konusunda milletlerarası sözleşmeleri kabul etmiş bir ülkedir. İç hukuk bu sözleşmede geçen maddelere uygun olarak tasarlanmıştır ve mahkemelerin milletlerarası sözleşme maddelerini uygulanması zorunludur. Milletlerarası sözleşmeler arasında Avrupa İnsan Hakları Sözleşmesi de (AİHS) önemli, bağlayıcı bir özelliğe sahiptir. Çünkü, bu sözleşemeye dahil olmuş devletlerin AİHS'de belirtilen kurallara göre hareket etmeleri gerekmektedir. Avrupa Konseyi'nin din ve vicdan özgürlüğüyle ilgili 9, 10 ve 11. (Ağırbaşlı, 2012, s. 89-91) maddeleri üye devletlerin uyması gereken evrensel hukuk maddelerindendir. Türkiye Cumhuriyeti Devleti bu maddelere uygun olarak Anayasanın 24,25. ve 26. maddelerini oluşturmuştur:

Din ve Vicdan Hürriyeti

Madde 24 *– Herkes, vicdan, dini inanç ve kanaat hürriyetine sahiptir. 14 üncü madde*[3] *hükümlerine aykırı olmamak şartıyla ibadet, dini ayin ve törenler serbesttir. Kimse, ibadete, dini ayin ve törenlere katılmaya, dini inanç ve kanaatlerini açıklamaya zorlanamaz; dini inanç ve kanaatlerinden dolayı kınanamaz ve suçlanamaz. Din ve ahlak eğitim ve öğretimi Devletin gözetim ve denetimi altında yapılır. Din kültürü ve ahlak öğretimi ilk ve ortaöğretim kurumlarında okutulan zorunlu dersler arasında yer alır. Bunun dışındaki din eğitim ve öğretimi ancak, kişilerin kendi isteğine, küçüklerin de kanuni temsilcisinin talebine bağlıdır. Kimse, Devletin sosyal, ekonomik, siyasi veya hukuki temel düzenini kısmen de olsa, din kurallarına dayandırma veya siyasi veya kişisel çıkar yahut nüfuz sağlama amacıyla her ne suretle olursa olsun dini veya din duygularını yahut dince kutsal sayılan şeyleri istismar edemez ve kötüye kullanamaz.*

İlgili anayasa hükmü, din ve vicdan özgürlüğünü herkes için güvence altına alırken, bu özgürlüğün hem bireysel hem de kolektif (grup halinde) kullanımını dolaylı biçimde koruma altına almaktadır. Zira ibadet, dini ayin ve törenlerin serbest olması, dini inancın yalnızca bireysel vicdan alanıyla sınırlı kalmadığını, aynı zamanda dini gruplar tarafından toplu biçimde yaşanabilen bir pratik alanı da kapsadığını göstermektedir. Bu yönüyle madde, dini grupların ibadetlerini organize edebilme ve inançlarını kamusal alanda görünür kılabilme hakkını anayasal güvenceye bağlamaktadır.

Bununla birlikte, hükümde yer alan "kimsenin ibadete veya dini törenlere katılmaya zorlanamayacağı" ve "inancını açıklamaya mecbur

3 Madde 14 – (Değişik: 3/10/2001-4709/3 md.) Anayasada yer alan hak ve hürriyetlerden hiçbiri, Devletin ülkesi ve milletiyle bölünmez bütünlüğünü bozmayı ve insan haklarına dayanan demokratik ve lâik Cumhuriyeti ortadan kaldırmayı amaçlayan faaliyetler biçiminde kullanılamaz. Anayasa hükümlerinden hiçbiri, Devlete veya kişilere, Anayasayla tanınan temel hak ve hürriyetlerin yok edilmesini veya Anayasada belirtilenden daha geniş şekilde sınırlandırılmasını amaçlayan bir faaliyette bulunmayı mümkün kılacak şekilde yorumlanamaz. Bu hükümlere aykırı faaliyette bulunanlar hakkında uygulanacak müeyyideler, kanunla düzenlenir.

bırakılamayacağı" yönündeki düzenleme, dini grupların faaliyetlerinin bireyin negatif din özgürlüğünü ihlal edemeyeceğini ortaya koymaktadır. Dolayısıyla dini topluluklar, üyelik, katılım ve aidiyet konusunda ancak gönüllülük esasına dayanabilir; sosyal baskı, dışlama ya da zorlayıcı yöntemlerle bireyin tercih alanını daraltmaları anayasal koruma kapsamında değerlendirilemez.

Madde, din eğitim ve öğretiminin devletin gözetim ve denetimi altında yapılacağını öngörerek, dini grupların eğitim alanındaki faaliyetlerini de kamusal denetime açık kılmaktadır. Zorunlu din kültürü ve ahlak bilgisi dersleri dışında kalan din eğitiminin kişisel talebe bağlanması, dini grupların eğitim faaliyetlerinin ancak isteğe bağlı katılım temelinde meşru kabul edildiğini göstermektedir. Bu düzenleme, bir yandan çoğulculuğu korumayı amaçlarken, diğer yandan devletin laiklik ilkesi gereği dini alan üzerinde düzenleyici rolünü sürdürdüğünü ortaya koymaktadır.

Öte yandan, maddenin son fıkrasında yer alan ve dinin devletin temel düzenini belirleyici bir araç haline getirilmesini veya siyasi ve kişisel çıkar amacıyla istismar edilmesini yasaklayan hüküm, dini grupların kamusal ve siyasal alandaki etkisine açık bir sınır getirmektedir. Bu çerçevede dini topluluklar, sivil toplum alanında faaliyet gösterebilmekle birlikte, devlet düzenini din kurallarına dayandırmaya yönelik örgütlü girişimlerde bulunamazlar. Bu sınırlama, dini grupların varlığını değil, siyasal iktidar üzerinde belirleyici rol üstlenmelerini engellemeye yöneliktir.

Düşünce ve Kanaat Hürriyeti

Madde 25 *– Herkes, düşünce ve kanaat hürriyetine sahiptir. Her ne sebep ve amaçla olursa olsun kimse, düşünce ve kanaatlerini açıklamaya zorlanamaz; düşünce kanaatleri sebebiyle kınanamaz ve suçlanamaz.*

İlgili hüküm, düşünce ve kanaat özgürlüğünü mutlak bir ilke olarak güvence altına almakta ve bireyin inanç, dünya görüşü ve değer yargılarının devlet veya toplum baskısıyla açıklanmaya zorlanmasını açık biçimde yasaklamaktadır. Bu düzenleme, dini gruplar bakımından da önemli sonuçlar doğurmakta; bireylerin herhangi bir dini topluluğa mensup olup olmadıklarını, hangi inancı benimsediklerini ya da bir inancı reddettiklerini açıklamaya zorlanamayacaklarını ortaya koymaktadır. Böylece bireyin dini aidiyeti, kamusal otoriteler kadar sosyal çevre ve dini gruplar karşısında da koruma altına alınmış bir vicdan alanı olarak tanınmaktadır.

Bu hüküm aynı zamanda, dini grupların kendi inanç sistemlerini yayma ve temsil etme faaliyetlerini, bireyin düşünce ve kanaat özgürlüğünü ihlal etmeyecek şekilde yürütmeleri gerektiğini ima eder. Zira düşünce özgürlüğünün korunması, yalnızca devletin müdahalesine karşı değil, toplumsal ve kolektif baskılara karşı da bireyin korunmasını gerektirir. Bu bağlamda, dini grupların

telkin, davet ve eğitim faaliyetleri meşru kabul edilse bile, bu faaliyetlerin bireyin özgür iradesini zedeleyecek nitelikte baskıya dönüşmesi anayasal koruma ile bağdaşmaz.

Öte yandan hüküm, düşünce ve kanaatler nedeniyle kınama ve suçlamayı yasaklayarak, çoğulcu bir inanç ve görüş ortamının anayasal temelini oluşturur. Bu durum, farklı dini yorumlara, mezheplere veya inançsızlığa sahip bireylerin, hem devlet hem de çoğunluk inancı temsil eden dini gruplar karşısında eşit saygı görmesi gerektiği ilkesini güçlendirmektedir. Dolayısıyla anayasa, dini gruplara tanınan kolektif ifade alanını korurken, bu alanın bireylerin düşünce özgürlüğünü bastıracak bir sosyal baskı mekanizmasına dönüşmesini de engellemeyi amaçlamaktadır.

Düşünceyi Açıklama ve Yayma Hürriyeti

Madde 26 *– Herkes, düşünce ve kanaatlerini söz, yazı, resim veya başka yollarla tek başına veya toplu olarak açıklama ve yayma hakkına sahiptir. Bu hürriyet Resmî makamların müdahalesi olmaksızın haber veya fikir almak ya da vermek serbestliğini de kapsar. Bu fıkra hükmü, radyo, televizyon, sinema veya benzeri yollarla yapılan yayımların izin sistemine bağlanmasına engel değildir.*[4]

İlgili anayasa hükmü, düşünce ve kanaatlerin sözlü, yazılı, görsel ya da diğer iletişim yollarıyla bireysel veya kolektif biçimde açıklanmasını ve yayılmasını güvence altına alarak, dini grupların inançlarını topluca ifade edebilme ve kamusal alanda görünür kılabilme imkânını anayasal koruma kapsamına almaktadır. "Tek başına veya toplu olarak" ifadesi, bireysel ifade özgürlüğünün yanı sıra, dini cemaat ve toplulukların da örgütlü biçimde görüş açıklama ve inançlarını yayma hakkına sahip olduğunu açıkça ortaya koymaktadır.

Hükmün, resmi makamların müdahalesi olmaksızın haber veya fikir alma ve verme serbestliğini de kapsaması, dini grupların yalnızca kendi inançlarını duyurma değil, aynı zamanda farklı dini ve felsefi görüşlere erişebilme hakkını da güvence altına almaktadır. Bu yönüyle madde, dini alanda çoğulculuğun korunmasına hizmet eden karşılıklı iletişim ve tartışma ortamını anayasal düzeyde desteklemektedir. Devletin bu alandaki rolü, ilke olarak müdahale etmeme ve ifade alanını açık tutma yükümlülüğüyle sınırlandırılmıştır.

Bununla birlikte, radyo, televizyon, sinema ve benzeri kitle iletişim araçları bakımından izin sistemine olanak tanıyan istisna hükmü, ifade özgürlüğünün mutlak olmadığını ve özellikle geniş kitlelere ulaşan yayın faaliyetlerinin kamu düzeni, çoğulculuk ve teknik sınırlılıklar gerekçesiyle idari denetime tabi tutulabileceğini göstermektedir. Bu durum, dini grupların medya yoluyla yürüttükleri faaliyetlerin, içerik yönünden değilse bile, yayın yapma usulü

4 Bu Anayasa, Kurucu Meclis tarafından 18/10/1982'de halkoylamasına sunulmak üzere kabul edilmiş ve 20/10/1982 tarihli ve 17844 sayılı Resmî Gazete'de yayımlanmış; 7/11/1982'de halkoylamasına sunulduktan sonra 9/11/1982 tarihli ve 17863 Mükerrer sayılı Resmî Gazete'de yeniden yayımlanmıştır.

bakımından kamu otoritelerinin düzenleyici yetkisine tabi olabileceği anlamına gelmektedir.

Ancak bu tür düzenleyici mekanizmaların, dini grupların belirli görüşlerini bastırmaya veya inanç temelli ifadeleri dolaylı biçimde engellemeye yönelik ayrımcı uygulamalara dönüşmesi, ifade özgürlüğünün özüne dokunacak nitelikte kabul edilmelidir. Dolayısıyla izin sistemleri, anayasal güvence altında bulunan düşünce açıklama ve yayma hakkını fiilen işlevsiz kılacak şekilde kullanılmamalı, yalnızca demokratik toplum düzeninin gerekleriyle sınırlı ve ölçülü müdahalelerle uygulanmalıdır.

Türkiye Anayasanın 24,25,26. maddelerinden de anlaşılacağı gibi Türkiye'de din ve kanaat özgürlüğü, din ve vicdan özgürlüğü Avrupa Konseyi ülkelerinde olduğu gibi demokratik çoğulculuğun korunması ve geliştirilmesi amacıyla anayasal güvence altına alınmıştır (Ağırbaşlı, 2012, s. 84).

Yasalarda dini gruplarla ilgili ortaya konulan haklar ve sınırların dışına çıkılma durumlarını meşrulaştırmak adına, özellikle Türkiye'de dini grupların sivil toplum örgütlenmeleri modellerini de görmek mümkündür. Bu yöntemle (dini grupların sivil toplum örgütlenmeleri) devlet erklerine karşı grubun asıl teşekkülünü vesayet gibi etkilerden uzak tutabilen bir ara kurum işlevinde oldukları görülmektedir. Böylelikle, Türkiye'deki dini grupların sivil toplum kuruluşu şeklinde (dernek, vakıf) yapılanmaları olası hukuki yasakları aşmak istemelerinden kaynaklanmaktadır. Bu tür sivil toplum örgütlenmeler dini grupların hareket alanlarını daha fazla açmasına, kitlelere daha rahat ulaşmasına imkan tanımaktadır. Türkiye'de dini gruplar bünyesinde teşekkül eden sivil toplum örgütler legal form aracılığıyla devlet yapılarıyla ilişki kurabilmekte ve hem üyelerinin özgürlüğünün korunmasını sağlamakta ve hem de pragmatik bir anlayış çerçevesinde otoriteye ortak olma amacı vardır (Mardin, 2010, s. 53).

SONUÇ VE ÖNERİLER

Dinî grupların yasalardaki konumu, modern hukuk devletlerinde din ve vicdan özgürlüğünün kolektif boyutuyla doğrudan ilişkilidir. Kanunlar yalnızca normatif metinler değildir; toplumların tarihsel, kültürel ve siyasal gerçekliklerini yansıtan düzenleyici araçlardır. Montesquieu, Rousseau ve Aydınlanma düşüncesi çerçevesinde ele alındığında, yasaların temel amacının "genel irade"yi ve toplumsal barışı korumak olduğu; bu bağlamda dinî gruplara yönelik düzenlemelerin de bireysel veya grupsal imtiyazlardan ziyade eşitlik ve özgürlük ilkeleri temelinde şekillenmesi gerektiği anlaşılmaktadır.

Uluslararası insan hakları hukuku, dinî grupların yasal statülerinden bağımsız olarak korunmasını öngörmekte; buna karşın pratikte dinî grupların faaliyetlerini sürdürebilmeleri için tüzel kişilik edinme yoluna gittikleri görülmektedir. Bu durum, dinî gruplara hem hukuki görünürlük hem de faaliyet alanı genişliği sağlamakta; ancak aynı zamanda devletin denetim ve sınırlandırma yetkisini

de gündeme getirmektedir. Dinî gruplara yönelik yaklaşımların demokratik kurallar çerçevesinde uygulanması gerekmektedir.

Bununla birlikte, İnsan Hakları Evrensel Beyannamesi (United Nations, 2026), Medeni ve Siyasi Haklara İlişkin Uluslararası Sözleşme (Jospeh & Castan, 2013) ve Avrupa İnsan Hakları Sözleşmesi (Harris, O'Boyle, Bates, & Buckley, 2023) kapsamında, devletlerin üzerinde uzlaştığı din, inanç ve dinî gruplara ilişkin hak ve özgürlükleri tanımlayan hükümler evrensel nitelik taşımaktadır. Ancak bazı devletlerin kendilerine özgü toplumsal, demografik ve etnik özellikleri nedeniyle bu hakların uygulanmasında farklı yaklaşımlar benimsemeleri, toplumsal dayanışma ile hak ve özgürlüklerin korunması açısından sorunlu sonuçlar doğurabilmektedir.

Farklı uygulamaların ortaya çıkardığı sorunlar bağlı oldukları uluslararası mahkemelerce değerlendirilmekte ve duruma göre antlaşma maddelerine uyulmamasında durumunda, hukuksal ve siyasal gerginliklere neden olmaktadır. Kimi ülkelerin dini gruplara yaklaşımı olumlu iken, kimi ülkelerin dini gruplar yaklaşımı olumsuz olabilmektedir. Mesela, Amerika Birleşik Devletleri'nin birçok eyalet yasaları dini grupların korunması için daha kapsamlı içerikler barındırmasına, daha pozitif yaklaşımlar sergilemesine rağmen, bazı devletler, özellikle Ortadoğu, Afrika ülkelerinde dini gruplara yönelik sınırlayıcı, dışlayıcı uygulamaları bulunmaktadır. Dini inançların yaşanılmasına, dini grupların oluşumlarına ya da faaliyetlerine karşı devletlerin, toplumların tutumlarına yönelik 2009 yılında Pew Research Center's Forum on Religion & Public Life (Brian J. Grim, 2009) tarafından dünya çapında bir araştırma yapılmış ve bu araştırmada 'Devletlerin (Dini Gruplara/ Dini Yaşamlara Yönelik) Sınırlamalar Indeksine' göre dini gruplara farklı şekillerde tutumları olduğu görülmektedir. Ülkelerin çoğunluğunun baskın mezhebi dışındakilere doğrudan ya da dolayı olarak sınırlamalar getirdiği, kimi ülkelerin daha demokrat, ılımlı, kimilerinin daha baskıcı politikalar uyguladıkları raporda belirtilmektedir. Kimi ülkelerde dini gruplara maddi yardımda bulunurken kimi ülkeler ise nerdeyse dini grupların yaşamalarına dahi imkân vermemektedirler. Dini grupların karşılaştıkları sorunların sebepsel çeşitliliği ülkeden ülkeye değişmektedir. Ülkedeki hâkim mezhep ya da din devletlerin siyasi anlayışı üzerinde etkili olduğu görülmektedir (Lugo & Cooperman, 2009, s. 6-16). Böylesi uygulamaların olduğu ülkelerde, toplumsal çatışmaların, hak ihlallerinin olmasına neden olmaktadır.

Bundan dolayı Birleşmiş Milletler ve Avrupa Konseyi, Avrupa İnsan Hakları Sözleşmesi, İnsan Hakları Evrensel Bildirgesi ve diğer birçok raporlara göre din veya inanç özgürlüğünü ortadan kaldıracak şekilde uygulamaların olmasına müsaade etmemektedir. Sadece toplum düzenini tehdit eden durumlar karşısında, devletler, yasalarda belirtilen maddelerin kapsamı dışına çıkmadan, kanunlarda öngörülmüş sınırlar çerçevesinde, sınırlamayı özetleyen, erişilebilir

ve de öngörülebilir yasal hükümlerine uygun olarak sınırlama getirebilir. Temel hakları ilgilendiren konularda, yürütmeye tanınan kanuni takdir yetkisinin sınırsız bir yetki olarak ifade edilmesi hukuk devletine aykırı olacaktır. Kanunlar, yetkili makamlara tanınan takdir yetki kapsamını ve kullanılma şeklini açık bir şekilde belirtmelidir (Buquicchio & Link, 2014, s. 11).

Türkiye din ve vicdan özgürlüğü anayasal güvence altına alınmış olmakla birlikte, dinî grupların doğrudan "dinî tüzel kişilik" statüsüne sahip olmamaları, onları sivil toplum örgütlenmeleri üzerinden varlık göstermeye yöneltmektedir. Dernek ve vakıf modelleri, dinî gruplar için hem hukuki bir koruma alanı hem de devletle ilişki kurmada aracı bir mekanizma işlevi görmektedir. Bu yapı, bir yandan dinî grupların hareket alanını genişletirken, diğer yandan hukuk–din ilişkisini dolaylı ve pragmatik bir zeminde şekillendirmektedir.

Sonuç olarak, yasalarda dinî gruplara ilişkin düzenlemelerin temel ölçütü; din ve vicdan özgürlüğünü korurken kamu düzeni ve hukuk devleti ilkelerini ihlal etmeyen, açık, öngörülebilir ve eşitlikçi bir çerçeve sunmaktır. Dinî gruplara yönelik yasal yaklaşımın, güvenlik merkezli refleksler yerine insan hakları temelli bir perspektifle ele alınması, hem toplumsal barışın sağlanması hem de demokratik çoğulculuğun güçlendirilmesi açısından önemli görünmektedir.

KAYNAKÇA

Ağırbaşlı, Ş. (2012). Avrupa İnsan Hakları Sözleşmesi Çerçevesinde Din ve Vicdan Özgürlüğü. 83-102.

Berger, J. (2016). Religious Organizations in Global Encyclopedia of Public Administration, Public Policy, and Governance . *Springer*, 1-14.

Blitt, T. S. (2005). *The Religion-State Relationship and the Right to Freedom of Religion or Belief - A Comparative Textual Analysis of the Constitutions of Predominantly Muslim Countries.* Washington: U.S. Commission on International Religious Freedom.

Brian J. Grim, A. C. (2009). *Global Restrictions on Religion.* Washington DC: Pew Research Center.

Buquicchio, G., & Link, M. G. (2014). *Guidelines on the Legal Personality of Religious or Belief Communities.* Warsaw: OSCE Office for Democratic Institutions and Human Rights (ODIHR).

Cezayirli, G. (1997). Dini Grup ve Toplumsal Grup. *Ankara Üniversitesi İlahiyat Fakültesi Dergisi, xxxvu*, 335-375.

Günay, Ü. (2010). *Din Sosyolojisi.* İstanbul: İnsan Yayınları.

Gürkan, Ü. (1988). Montesquieu ve Kanunların Ruhu. *Ankara Üniversitesi Hukuk Fakültesi Dergisi*, 9-31.

Harris, D. J., O'Boyle, M., Bates, E., & Buckley, C. M. (2023). *Law of European Convention on Human Rights.* Oxford: Oxford University Press.

Jospeh, S., & Castan, M. (2013, January 27). *International Covenant on Civil and Political Rights, cases, metarilas and Commentary.* Oxford: Oxford University Press. United Nations Treaty Collection: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://treaties.un.org/doc/treaties/1976/03/19760323%2006-17%20am/ch_iv_04.pdf adresinden alındı

Lugo, L., & Cooperman, A. (2009). *Global Restriction on Religion.* Washington: Pew Forum on Religion & Public Life.

Mardin, Ş. (2010). *Din ve İdeoloji.* İstanbul: İletişim Yayınları.

Montesquieu, C. L. (2017). *Kanunların Ruhu Üzerine.* (B. Günen, Çev.) İstanbul: Türkiye İş Bankası Kültür Yayınları.

Özbudun, E. (2025). *Laiklik ve Din Hürriyeti.* Ankara: Yetkin Yayınları.

Rousseau, J. J. (2012). *Toplum Sözleşmesi.* İstanbul: Türkiye İş Bankası Kültür Yayınları.

United Nations. (2026, 01 27). *Universal Declaration of Human Rights.* United Nations: https://www.un.org/en/about-us/universal-declaration-of-human-rights adresinden alındı

Uslu, Ş. (2004). Laiklik- Din İlişkisi. *Ondokuz Mayıs Üniversitesi İlahiyat Fakültesi Dergisi*, 235-250.

Voas, D. (2015). Religion, Sociology of. *Elsevier Ltd.*, 359-365. doi:https://doi.org/10.1016/B978-0-08-097086-8.84041-6

Wallace, R. (1997). *International Human Rights: Text and Materials.* London: Sweet and Maxwell.

Witte, J., & Green, M. C. (2012). *Religion and Human Rights: An Introduction.* Oxford: Oxford Press.

MICROPLASTICS: CLASSIFICATION OF MICROPLASTICS AND THEIR EFFECTS ON HUMAN HEALTH

Fatma Yıldız[1]

INTRODUCTION

Plastics are widely used in all areas of daily life due to their many positive characteristics such as low cost, ease of application, versatile uses, and durability. Annual global plastic production exceeds 380 million tons. High quantities of plastic are used in many different fields, including packaging film, shopping and garbage bags, liquid containers, toys, household products, construction and automotive materials (Sharma and Bansal, 2016). The packaging industry constitutes the most important area of plastic use due to its properties such as packaging, storage, serving of food, temperature and atmosphere control within the package, and easy integration into production steps (Jadhav et al., 2021). Polyethylene terephthalate (PET), polypropylene (PP), high (HDPE) and low (LDPE) density polyethylene, polystyrene (PS), and polyvinyl chloride (PVC) are the most common raw materials used alone or in combination in the production of industrial plastic materials (Geueke et al., 2018). Petroleum-based plastics are not considered biodegradable because it can take centuries for them to decompose into water, carbon dioxide, or methane (Trivedi et al., 2016; Yoshida et al., 2016; Dhanraj et al., 2022). The improper disposal and release of used plastic materials into nature creates a significant environmental problem. The problem essentially begins on land. Items such as bottles and bags, which constitute the majority of plastic waste, are lightweight and are therefore carried by the wind to water sources, floating and spreading across the oceans (Kosior and Crescenzi, 2020). It is estimated that at least 8 million tons of plastic enter the seas and oceans annually (Jambeck et al., 2015). Today, there are more than 150 million tons of plastic waste in the oceans, and if this continues, it is estimated that by 2050 there will be more plastic than fish in the seas (Ocean Conservancy, 2016). A report published by the European Union in 2016 examined the percentages of plastic waste generated by different industries; the packaging industry ranked first

1

with 39.9%, followed by construction with 19.7%, automotive with 8.9%, electrical and electronics with 5.8%, agriculture with 3.3%, and other industries (health, sports, furniture, etc.) with 22.4% (Lusher et al., 2017). Plastic particles smaller than 5 mm are called 'microplastics', while those between 1 nm and 1 µm are called 'nanoplastics' (Hartmann et al., 2019; Lai et al., 2022). In our world, where the amount of plastic waste is constantly increasing, plastics released into the environment are physically broken down into small particles by various external factors such as sunlight, wind, flows, living organisms, and waves, and these are called secondary microplastics. In addition, small plastic particles called microbeads are intentionally added to products such as cosmetics, personal care products, paints, and detergents offered to consumers. These are called primary microplastics (Verschoor, 2015). The current and new size class nomenclatures proposed by Bermúdez and Swarzenski (2021) for microplastics, their proposed size ranges, and a few organisms of equivalent size in the environment are given in Table 1 below.

Table 1. Current and new size class nomenclatures for microplastics, their proposed size ranges, and a few organisms of equivalent size in the environment (Bermúdez, and Swarzenski, 2021).

Available size categories	Size range	Recommended size categories	Size range	Organisms of equivalent size
Nanoplastic	0,001–1 µm	Femto-sized plastics	0,02–0,2 µm	Viruses
Microplastic	1–1000 µm	Pico-sized plastics	0,2–2 µm	Bacteria
		Nano-sized plastics	2–20 µm	Flagellates
		Micro-sized plastics	20–200 µm	Diatoms, dinoflagellates, ciliates, water fleas
		Meso-sized plastics	200–2000 µm	Amphipods, appendiculars, ketognathopods, copepods, taliasian pods
Mesoplastic	1–10 mm	Macro-sized plastics	0,2–20 cm	Euphausiids, heteropods, jellyfish, larval fish, mycids, pteropods, solitary salps
Macroplastic	> 1 cm	Mega-sized plastics	20–200 cm	Jellyfish, colony salps

What are microplastics?

Microplastics are synthetic polymer compounds, smaller than 5 millimeters, that are shaped or amorphous, and insoluble in water. To better visualize microplastics, you can think of a sesame seed. An example of microplastics in a human finger is given in Figure 1 below.

Figure 1. Microplastics in a human finger (URL)

How are microplastics formed?

Microplastics can be formed as a result of the breakdown of large plastics, or they can be artificially produced to be smaller than 1 millimeter in size. Microplastics of this size are called microbeads. Microbeads are used in cleaning products such as detergents, and in personal care and cosmetic products such as toothpaste, facial cleansing gel, and peeling products for purposes such as extending shelf life, increasing volume, and abrasion.

Microbeads are generally produced from polyethylene terephthalate (PET), which is used in the manufacture of single-use water bottles. However, they can also be made from other petrochemical plastics such as polypropylene, plexiglass, and polystyrene. Plastic production has increased rapidly in the last century, and as a result, microplastic pollution has become a serious environmental problem (Andrady, 2017). Microplastics spread into water, soil, and air, and can also reach human health through the food chain. Educational institutions have a critical role in promoting sustainable behaviors and raising environmental awareness.

2. Classification and Sources of Microplastics

2.1. Primary Microplastics

Primary microplastics are small, circular micro-beads intentionally produced by the plastics industry for use in cosmetics, personal care products, dermal exfoliators, cleaning agents, and sandblasting machines. Other types of microplastics are industrial raw materials, or pellets, produced by the plastics industry to be melted and molded into larger plastic materials. Another type is synthetic fibers used to produce clothing. All these microplastics are transported to both freshwater and marine environments via wind or city wastewater. As a result of decades of widespread use of microplastics, they have become prevalent in every layer of the oceans.

These are plastics produced directly in small sizes (Cole et al., 2011):

- Polyethylene microspheres in cosmetic products
- Industrial abrasives
- Micropolymers used in paints and coatings

2.2. Secondary Microplastics

Secondary microplastics are irregular plastic particles formed as a result of the degradation of larger plastic pieces such as plastic bags, crates, bottles, and especially ropes and nets. Over time, large pieces of plastic waste degrade into progressively smaller plastic particles as a result of exposure to ultraviolet light from the sun and mechanical means such as tidal waves.

In the experimental study, it was shown that when a 1 cm^2 polystyrene coffee cup lid was exposed to 320-400 nm ultraviolet light every 24 hours at 30 degrees Celsius for 56 days, it could produce 12,600,000 nanoparticles per milliliter with an average size of 224 nm. This shows that these small plastic particles can easily spread throughout the water column and be ingested by many marine organisms, mistaking them for food. They are formed as a result of the mechanical, chemical, and UV degradation of large plastics (Li et al., 2016). A table prepared by Yurtsever (2015) on "Sources and structure of microplastics" is given in Table 2 below.

Table 2. Sources and structure of microplastics (Yurtsever, 2015).

Categories	microplastics
Sources	1. Originating from consumer products: Microbeads in cosmetics; facial cleansing and exfoliating gels, shampoos and soaps, toothpaste, eyeliner, mascara, lip gloss, deodorant, and sunscreen. 2. Textile products: Polyester, polyamide (nylon), and fleece textile materials used in clothing, etc. 3. Industrial raw materials, residues, and waste: From plastic production, processing, and shaping processes. 4. Originating from transportation: Vehicle tire waste.
Type	Plastic particles, pellets, yarn-fibers, plastic films, foamed plastics, granular plastics, styrofoam
Shapes	Pelled form: cylindrical, discs, flat, oval, spherical. Piece form: round, semi-round, angular, semi-angular. General: shapeless, long, fragmented, rough and broken-edged.
Water Condition	New, intact, rough surface, rough particles, linear fractures, semiparallel protrusions, incipient alteration and scratch level (conchoidal fractures), pitted, smooth surface, degraded and heavily degraded. Transparent, crystalline, white, off-white-cream, red, orange, blue, opaque, black, gray, brown, green, pink, tan, yellow and pigmentation.
Color	New, intact, rough surface, rough particles, linear fractures, semiparallel protrusions, incipient alteration and scratch level (conchoidal fractures), pitted, smooth surface, degraded and heavily degraded. Transparent, crystalline, white, off-white-cream, red, orange, blue, opaque, black, gray, brown, green, pink, tan, yellow and pigmentation.

3. Environmental Impacts

3.1. Aquatic Ecosystems

Microplastics can be ingested by all aquatic organisms, from plankton to fish (Browne et al., 2011). This creates a toxic chain that reaches humans through bioaccumulation. A visual representation of the change in the amount of microplastics in road dust depending on precipitation is given in Figure 2 below.

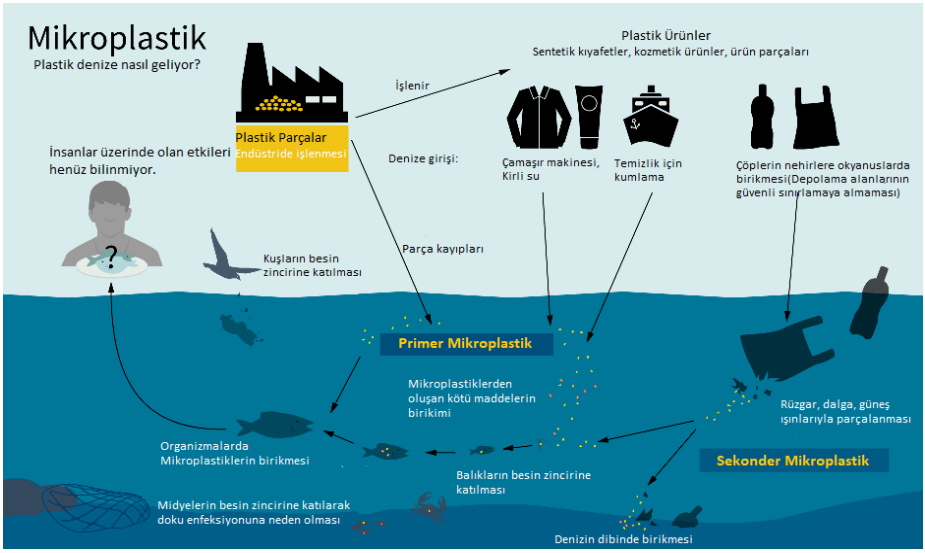


Figure 2. Determination of the Change in Microplastic Amount in Road Dust Depending on Precipitation (Gülsün, 2020).

3.2. Soil and Agriculture

Microplastics mixed into the soil:

- Can disrupt soil structure
- Can hinder the development of plant roots
- Can negatively affect soil microorganisms (Rillig, 2012)

3.3. Atmosphere

Microplastics carried through the air have also been detected in the air breathed in cities (Dris et al., 2016).

4. Effects on Human Health

Microplastics have become one of the most attention-grabbing plastic-derived pollutants in recent years. Morphologically, microplastics can exist in many forms, including amorphous, spherical, and elongated fibers (Yurtsever, 2015). Microplastics also differ in many aspects, including size, composition, weight, and physical and chemical properties. A review of the literature reveals

no consensus regarding the size of microplastics. In field studies, sieves used for sampling surface water and beach sand determine the lower particle size (Law et al., 2010; Hidalgo-Ruz et al., 2012). The inability to retain small-diameter microplastics with meshes typically having a 330 μm pore diameter leads to higher particle sizes in sampled microplastics (Song et al., 2014). In marine environments, microplastics are typically found as clumps, fragments, or fibers (Smith et al., 2018).

Microplastics can enter the human body through food, water, and air. Although still limited, studies show:

• Effects on the immune system

• Endocrine system disorders

• Risks of cellular inflammation (Smith et al., 2018).

In addition, microplastics can carry heavy metals and toxic chemicals, which increases the health risk.

5. CONCLUSION

Microplastics are one of the problems threatening global environmental health and play a role in climate change. Due to the industrial advantages and increasing areas of use of plastics, limiting or banning their use does not seem possible in the short term. However, these plastics transform into microplastics and nanoplastics over time, entering the food chain and negatively affecting the environment and human health. Although the effects of long-term exposure to microplastics entering the human body have not yet been observed, many aquatic organism and in vitro research findings indicate that microplastics can lead to serious health problems. As a result of comprehensive literature reviews conducted within the scope of the current view;

• Expanding efforts to reduce the use of synthetic plastics and develop environmentally friendly alternatives,

• Developing sample preparation, filtration, and analysis methods for detecting microplastics, and creating and disseminating the necessary infrastructure for the use of these methods in our country,

• Detecting nano- and microplastics, especially in food products offered for consumption in our country. Microplastics pose significant threats to ecosystems and human health. Educational institutions play a central role in raising awareness against this invisible pollution and promoting sustainable behaviors. Conscious generations will be a critical factor in reducing environmental risks in the future. Furthermore, microplastics should be used in education. They are of paramount importance in education. Education is a crucial factor for a country (Polat et al., 2025; Baldemir et al., 2022; Tutak et al., 2020; İlhan et al., 2020; İç et al., 2018).

REFERENCES

Akçay, S., Törnük, F., & Yetim, H. (2020). Microplastics: Their presence in food and their effects on health. *European Journal of Science and Technology, 20*, 530–538. https://doi.org/10.31590/ejosat.725259

Andrady, A. L. (2017). The plastic in the environment: An overview. *Environmental Science & Technology, 51*(12), 6616–6624. https://doi.org/10.1021/acs.est.7b00418

Bermúdez, J. R., & Swarzenski, P. W. (2021). A Microplastic Size Classification Scheme Aligned with Universal Plankton Survey Methods. *MethodsX, 8*, 101516. https://doi.org/10.1016/j.mex.2021.101516

Baldemir, B., İç, Ü., Tutak, T. (2022). Primary School Mathematics Teacher Candidates' Views on Dyscalculia. *Bolu Abant İzzet Baysal University Faculty of Education Journal, 22(1), 485-505.*

Browne, M. A., Crump, P., Niven, S. J., Teuten, E., Tonkin, A., Galloway, T., & Thompson, R. (2011). Accumulation of microplastic on shorelines. *Environmental Science & Technology, 45*(21), 9175–9179. https://doi.org/10.1021/es201811s

Cole, M., Lindeque, P., Halsband, C., & Galloway, T. S. (2011). Microplastics as contaminants in the marine environment: A review. *Marine Pollution Bulletin, 62*(12), 2588–2597. https://doi.org/10.1016/j.marpolbul.2011.09.025

Dris, R., Gasperi, J., Saad, M., Mirande, C., & Tassin, B. (2016). Synthetic fibers in atmospheric fallout: A source of microplastics in the environment? *Marine Pollution Bulletin, 104*(1–2), 290–293. https://doi.org/10.1016/j.marpolbul.2016.01.006

Gülsün, S. (2020). A Brief Review of Microplastics. Pollen Ecology. https://www.polenekoloji.org/mikroplastikler-uzerine-kisa-bir-inceleme/

İç, Ü., Tutak, T. (2018). Correlation between Computer and Mathematical Literacy Levels of 6th Grade Students. *European Journal of Educational Research, 7(1), 63-70.*

İlhan, A., Tutak, T., İç, Ü., Ekinci, N. (2020). Examination of Prospective Mathematics Teachers' Views on Special Teaching Methods Course. *Electronic Journal of Social Sciences, 19(73), 156-170.*

Koylan, N. (n.d.). Microplastics. Nevrez Koylan Official Website. https://nevrezkoylan.com/mikroplastikler/

Li, J., Zhang, K., & Zhang, H. (2016). Microplastics in freshwater systems: A review on occurrence, environmental effects, and methods for microplastics detection. *Environmental Pollution, 218*, 1–15. https://doi.org/10.1016/j.envpol.2016.08.058

Mikroplastik.org. (n.d.). What are microplastics?https://mikroplastik.org/mikroplastik-nedir/

Polat, M., Tutak, T. (2025). Interdisciplinary Comparative Analysis of Science and Mathematics Teachers' Level of Technology Use in Teaching Processes, Their Aims and Problems Encountered. *International Journal of Research in Teacher Education (IJRTE), 16(1), 34-48.*

Rillig, M. C. (2012). Microplastic in terrestrial ecosystems and the soil? *Environmental Science & Technology, 46*(12), 6453–6454. https://doi.org/10.1021/es302011r

Republic of Turkey Ministry of Agriculture and Forestry, General Directorate of Food and Control. (n.d.). Scientific opinion on the effects of microplastics on human and environmental health.

Smith, M., Love, D. C., Rochman, C. M., & Neff, R. A. (2018). Human consumption of microplastics. *Environmental Science & Technology, 52*(12), 7069–7075. https://doi.org/10.1021/acs.est.8b01517

Tutak, T., Süzen, A. B., İnan, İ. E. (2020). Determining the Mistakes of Secondary School Mathematics Teachers in Operation Priority. *Participatory Educational Research, 7(1), 16-29.*

UNESCO. (2021). *Education for sustainable development: A roadmap for the future*. Paris, France: UNESCO.

URL Bilimgenç. (n.d.). How do microplastics affect our health? TÜBİTAK Bilim Genç. Retrieved from https://bilimgenc.tubitak.gov.tr/makale/mikroplastikler-sagligimizi-nasil-etkiliyor on 01.12.2025.

Yurtsever, M. (2015). Microplastics: An overview. *Dokuz Eylül University Faculty of Engineering Journal of Science and Engineering*, 17(2), 68–83.

REALISTIC MATHEMATICS EDUCATION

Ünal İç[1], Mehmethan Çakmak[2]

Abstract

In mathematics education, the direct transmission of abstract concepts makes it difficult for students to relate the information to daily life, hindering lasting learning. As a solution to this problem, Realistic Mathematics Education (RME), developed by the Dutch mathematician Hans Freudenthal, defines mathematics as a human activity and is based on the active participation of the student in the process. RME is an approach adopted by many countries that have achieved success in international exams, allowing students to "rediscover" their own mathematical models through real-life situations. The principles of guided rediscovery, didactic phenomenology, and evolving models, which underpin this approach, enable students to transition from informal knowledge to formal mathematical rules. Horizontal mathematization translates everyday problems into mathematical language, while vertical mathematization focuses on mastering symbols and abstractions. In GME, the teacher is not merely a transmitter of ready-made information, but a guide who enables students to develop their own solution strategies. The educational process is built upon the principles of reality, activity, level, and interaction, aiming to present topics in a spiral and interconnected structure. Consequently, GME rejects purely outcome-oriented assessment, focusing instead on the process itself, and aims to foster a positive attitude towards mathematics and enable students to acquire higher-order thinking skills.

Keywords: Realistic Math Education, Mathematization, Freudenthal, Math Teaching.

INTRODUCTION

For many years, mathematics education has been based on an understanding that relies on the direct transmission of abstract concepts. However, this approach can lead to students having difficulty relating mathematics to daily life and the learned information not being retained. At this point, the Realistic

1 Doç. Dr, Fırat University, Mathematics Education, Elazığ, unalic@firat.edu.tr, ORCID: orcid.org/0000-0003-4367-7559

2 Öğretmen, Fırat University, Mathematics Education, Elazığ, mhancak10@gmail.com, ORCID: orcid.org/0009-0008-4964-9587

Mathematics Education approach, which aims to make mathematics meaningful for students, stands out. Realistic Mathematics Education is an approach that advocates for students to discover mathematical concepts through real-life situations and to create their own mathematics. In the teaching of mathematical concepts, the inclusion of real-life situations in mathematics plays an important role. Through mathematics taught with real-life situations, students will be able to make sense of mathematical concepts. This will lead them to develop a positive attitude towards mathematics. According to Taş et al. (2016), Turkey's mathematics achievement ranking is lower than other countries in international exams such as PISA and TIMMS. Countries applying the GME approach have higher mathematics achievement in international exams and rank highly. For these reasons and based on research, it is stated that the GME approach will increase student success. GME is a mathematics teaching approach proposed by the Dutch mathematician and educational scientist Hans Freudenthal. According to this approach, mathematics is learned by doing and experiencing, in connection with daily life (Arseven and Yağcı, 2010: 265). GME is a domain-specific teaching theory based on the view of how students learn mathematics and how mathematics should be taught to students (Van den Heuvel-Panhuizen and Wijers, 2005, 289). Developed at the Freudenthal Institute, this theory has been adopted and used in the education systems of countries such as England, Germany, Spain, Denmark, Portugal, Brazil, South Africa, America, Japan, and Malaysia (Arseven, 2010: 26). The fundamental characteristics of GME theory are real-life problems, material use, knowledge structuring, interaction, and the spiral structure of knowledge (Treffers, 1987). Its basic principles are activity, reality, level, interrelationship, interaction, and guidance (Van den Heuvel Panhuizen, 2000). According to GME theory, the principles for designing a lesson plan consist of objectives, materials, activities, and evaluation (Zulkardi, 1999). Furthermore, the educational design principles of GME theory include guided rediscovery, process rediscovery (didactic phenomenology), and the inclusion of self-developing models (Gravemeijer, 1994). This section will discuss the educational design principles, basic characteristics, learning and teaching principles, and lesson plan elements of GME.

Principles of Educational Design in Realistic Math Education (RME)

The principles that form the basis of Realistic Math Education theory and determine how mathematics learning is or should be are: Guided rediscovery and mathematization, rediscovery of the process (didactic phenomenology), and inclusion of self-developing models. These principles are explained in detail below (Gravemeijer 1994).

Guided rediscovery and mathematization: According to the principle of guided rediscovery (guided rediscovery), one of the educational design

principles of RME theory, an activity designed should enable students to experience real-life situations and produce informal solutions (Freudenthal, 1983). This allows students to experience a method or process similar to the invention of mathematics (Freudenthal, 1991; Kwon, 2002). Furthermore, students have the opportunity to share the mathematics they learned in class with their peers throughout the process. Activities prepared according to GME theory are not only related to real-life problems. They can also be prepared from an imaginary situation or a purely mathematical problem that seems real (Van den Heuvel-Panhuizen, 2020). The main goal here is to enable students to perform mathematization (Freudenthal, 1991). Mathematization consists of two processes: horizontal and vertical (Treffers, 1993). Horizontal mathematization is the process by which students formulate or visualize a problem related to a real-life situation in various ways, discover relationships, and translate it into a mathematical language. Vertical mathematization is the process of working with symbols and arriving at existing mathematical concepts and formulas. In other words, vertical mathematization is the process of performing mathematical operations (modeling, generalization, and abstraction) (Van den Heuvel-Panhuizen, 2020). It can also be considered as the process of re-demonstrating the structure within a formula, proving a mathematical concept, simplifying and correcting models, formulating a mathematical model, and making generalizations (Treffers, 1993).

The rediscovery of the process (didactic phenomenology): This principle examines concepts to show how they arise and the processes they undergo. Freudenthal defines this principle as “the investigation of the relationship between the phenomenon represented by the mathematical concept and the concept itself” (Kwon, 2002). The instructive fact principle aims to make students aware of the knowledge and problem-solving processes they have previously learned by using real-life situations, and to provide them with environments where they can use, adapt, and discuss this knowledge in relation to higher-level problems (Gravemeijer, 1994). Didactic phenomenology is examined in two parts. Of these, mathematical phenomenology aims to explain the properties of mathematical concepts and knowledge, and to help students articulate problems they may encounter in the learning process. In real-life phenomenology, the aim is to explain in which real-life situations mathematical structures and models are needed, and to create a framework that will advance students’ mathematical abilities to a higher level (Oldham et al., 1999).

Developing models: Developing models facilitate the transition between informal and formal knowledge. In GME, models are developed by students. Students will first implement their own knowledge using known materials. Then, through generalization and formulation processes, the models will become independent of the students.

Basic characteristics of realistic mathematics education

Treffers (1987) summarized the basic principles of GME under five headings. Gravemeijer (1994) emphasizes that courses prepared from a realistic mathematics education perspective should be organized according to these headings. These headings are as follows:

Basing on real-life problems: In GME, the starting point of teaching experiences must be 'real' for students; they should be allowed to immediately engage with the situation. This means that instruction should not begin with a formal system. The facts in which concepts actually arise should be the source of concept formation. The process of extracting the appropriate concept from a concrete situation is described by De Lange (1987) as 'conceptual mathematization'. This process will force students to explore the situation, find and define the relevant mathematics, schematize to discover regularities, visualize, and develop a model that results in a mathematical concept. By reflecting and generalizing, students will develop a more complete concept. Students can then apply mathematical concepts to new areas of the real world and, in doing so, reinforce the concept. This process is called applied mathematization.

Use of Models: During mathematization, students create appropriate models and diagrams for informal situations that encompass real-life scenarios. These models developed by students should be suitable for use not only in the horizontal mathematization process but also in the horizontal mathematization process (Van den Heuvel-Panheuizen, 2003). The use of models in GME education both facilitates the learning process and helps establish a more comfortable connection with real life. Models created through symbols, tables, and diagrams should be at a level that all students can understand and should be appropriate to accurately reflect real-life situations. With the help of these models, students should have the opportunity to reach a higher level of understanding of mathematical concepts and sometimes even descend to a lower level (Van den Heuvel-Panheuizen, 2003).

Students' use of their own structures: In GME, it is important to present concrete solutions that can lead to a solution to the problem and to create relevant examples. Students are expected to be able to write a composition, conduct an experiment, design an experiment and share it with their friends, and develop questions related to the experiment (Üzel, 2007). The principle of the GME approach, which is the process of doing mathematics or, in other words, mathematizing, is the situation where the student produces new and different information and interacts. Students who learn to do mathematics produce their own mathematics with the guidance of their teachers (Özdemir, 2008). GME increases students' self-confidence, enabling them to access

concrete information they can produce independently and develop informal solution strategies. The student, who learns new information, thinks deeply about the strategies they produce and forces their mind to predict how the next process will unfold.

Interaction: GME recognizes that while encouraging interaction, it is also important to provide students with opportunities to work independently. It provides a suitable environment to show students different perspectives and encourage them to think while solving a problem. Interaction encourages students to establish cause-and-effect relationships, engage in discussions, analyze, and evaluate their own solutions as well as the solutions of others. Therefore, GME begins with problems that involve real-life situations and interaction (Nelissen, 1999).

The interconnectedness of learning structures: In mathematics, topics or stages are interconnected and cumulative. Therefore, a new topic or stage cannot be taught without first learning the previous topics. Freudenthal (1973) states that related topics are learned much faster and remain in memory for a long time. This means that the links that make up learning are processed together, integrated into problem-solving, rather than separately (Treffers, 1991). Understanding the interconnectedness of topics is fundamental in mathematics teaching. In learning that treats topics independently, students experience difficulties in applying and using mathematics. In situations where mathematical and geometrical knowledge can be used together, it is not sufficient for the student to know only mathematics or only algebra; the use of both fields of knowledge together is necessary. Therefore, the integration of mathematical knowledge represents a situation that goes beyond the reciprocal relationship between different parts of mathematics (Akyüz, 2010).

Principles of Learning and Teaching in Mathematical Mathematics (GME)

The basic principles of GME were first determined by Treffers (1987). However, these principles have since been reviewed by many researchers, including himself. Van den Heuvel-Panhuizen and Wijers (2005) evaluated GME based on six basic principles by analyzing students' methods of learning mathematics and teachers' approaches to teaching mathematics:

Activity principle: The principle where students take an active role in education instead of receiving information ready-made is the activity principle. In the activity principle, students' participation in the learning process is very important. When students take an active role in education, they will be able to develop mathematical knowledge on their own. Students will create their own solution processes by using informal knowledge, and thus will reach knowledge (Arseven, 2010). The student involvement in the process is a non-rote learning

approach, and thanks to this non-rote learning approach, the retention of information increases. The GME approach defines mathematics as an activity learned through the use of mathematics. Therefore, the active participation of students in the mathematics learning process is very important in GME (Sezgin Memnun, 2011).

Reality principle: This principle emphasizes that GME aims for students to have the ability to apply mathematics (Van den Heuvel-Panhuizen, 2010). Context is what makes activities effective in GME. GME uses reality as a resource in teaching mathematics. The reality principle becomes evident at the end of the teaching process. The integration of mathematics with reality gives rise to the science of mathematics. This idea suggests that learning mathematics also requires the mathematization of reality. In this context, mathematics instruction should be carried out with mathematizable content and rich real-world situations, rather than definitions and abstract structures. In this way, students can develop their mathematical knowledge and thinking skills while working on real-world problem situations (Van den Heuvel-Panhuizen & Wijer, 2005).

Level principle: Mathematics learning occurs through various levels of understanding. In the first level, students focus on real-life problems and try to develop new approaches to solving these problems using their existing knowledge. In the second level, the focus is on developing new approaches using modeling methods. In the third level, appropriate methods for solving the problem are planned and evaluated. Finally, the most appropriate method is selected and the problem is solved (Bıldırcın, 2012). The use of modeling methods is of great importance in bridging the gap between these levels.

The principle of interrelationship: This emphasizes that topics in mathematics cannot be separated from each other and that all topics are interrelated. Mathematical tools and different mathematical approaches must be used together to solve real-life situations (Van Den Heuvel, Panhuizen, and Wijers, 2005). Connecting given real-life problem situations to multiple topics in mathematics is a desirable characteristic of GME (Global Mathematical Ethics). GME aims to make students aware of the holistic and flexible nature of mathematics (Alacacı, 2016).

Interaction Principle: At GME, mathematics learning is considered a social activity. Students should be given opportunities to share their strategies and discoveries with each other. By seeing and discussing what other students have found, students gain insights to improve their own strategies. Furthermore, interaction allows for the emergence of ideas that will enable students to understand at higher levels (Akkaya, 2010).

The principle of guidance: Freudenthal, as one of the key words he proposes in the process of mathematization, points to enabling students to produce new products, invent, and discover mathematics in mathematics teaching. This shows that the teacher plays an important role. The teacher should guide students to explore informal solution alternatives in solving problems. They should encourage students to develop their own methods and support them in this process. Ultimately, they should provide guidance to enable students to reach formal mathematical knowledge (Kaylak, 2014).

Elements of a GME-based lesson plan

To create a learning environment suitable for the GME approach, the elements that make up the lesson plan should be identified and linked to the GME approach. These elements are: objectives, materials, activities, and assessment.

Objectives: De Lange (1995) categorized the objectives in mathematics education into lower, intermediate, and upper-level objectives. Most objectives in the traditional curriculum are lower-level, based on formula skills, simple algorithms, and definitions. In the GME (Global Mathematical Education) system, objectives are classified as intermediate and upper-level. According to Üzel (2007), intermediate-level objectives involve the integration of connections between lower-level objectives, while higher-level objectives emphasize the development of thinking and communication skills and critical behaviors.

Materials: The materials used in GME should include real-life, situational information and structures. Problems based on students' real-life experiences should be integrated with the curriculum and their difficulty level should be appropriate to the objectives. These problems should enable students to understand mathematics (Zulkardi, 2002). Material design in a course that includes mathematics education based on the GME approach involves specific stages. Materials related to real life are presented in the classroom. The connection of this material to other topics is explained. During the process, interactive activities are used to create models, diagrams, and other figures. During the activity, interactive and collaborative groups are formed among students. These groups provide students with the opportunity to interact and do mathematics (Cansız, 2015).

Activities: The facilitating, guiding, and evaluative roles undertaken by the teacher in the GME process are quite important (De Lange, 1996; Gravemeijer, 1994). Initially, students are given a problem related to a topic, and guidance is provided to individuals and groups as needed. A discussion environment is created for students to share their solution methods, and the effectiveness of these solutions is discussed. The goal of these discussions is for students to recognize their own solution methods and organize the information according

to their own understanding. This supports students' learning at their own level in the classroom. The most important point here is that instead of expecting students to respond with a single solution, teachers should create an environment where students can freely express and generate their own ideas in the classroom (Gravemeijer, 1994).

Assessment: In the GME approach, students may be asked to collect data, formulate problems related to the situation, write about their experiences in the lesson, prepare similar examples, and perform tasks such as homework in order to evaluate teaching. The basic principles of assessment are stated as follows; not only the result but also the process should be evaluated, the aim should be to show students what they know, assessment should be made for all the goals of mathematics teaching, assessments should be made that measure whether they really understand the problem instead of objective test scores, and assessment tools should be accessible and compatible with the school culture (De Lange, 1995). Furthermore, it should be used in education. They are prominent in terms of education. Education is one of the most important factors for a country (Polat et al., 2025; Baldemir et al., 2022; Tutak et al., 2020; İlhan et al., 2020; İç et al., 2018; Polat et al., 2025).

REFERENCES

Akkaya, R. (2010) "*Examination of the knowledge construction process of concepts in the learning area of Probability and Statistics according to realistic mathematics education and constructivist theory*", Doctoral Thesis, Uludağ University Institute of Social Sciences, Bursa.

Akyüz, M. (2010). *The effect of realistic mathematics education (RME) method on student success in teaching 12th grade mathematics (integral unit) in secondary education*. [Unpublished master's thesis]. Yüzüncü Yıl University, Van.

Alacacı, C. (2016). *Realistic Mathematics Education*. Arslan, S., Bingölbali, E., and Zembat, İ. Ö. (Eds.), Theories in Mathematics Education (341-353). Ankara: Pegem Academy Publications.

Arseven, A. (2010), *The Effect of Realistic Mathematics Teaching on Cognitive and Affective Learning Outcomes*, Doctoral thesis, Hacettepe University Institute of Social Sciences, Ankara.

Arseven, A. & Yağcı, E. (2010), "The Theoretical Structure of Realistics Mathematics Education", *Middle-East Journal of Scientific Research*, 6(6), ss. 664-666.

Bıldırcın, V. (2012). *The effect of realistic mathematics education (RME) approach on teaching length, area and volume concepts in fifth grade primary school*. Unpublished master's thesis, Ahi Evran University, Institute of Social Sciences, Department of Primary Education, Kırşehir.

Baldemir, B., İç, Ü., Tutak, T. (2022). Primary School Mathematics Teacher Candidates' Views on Dyscalculia. *Bolu Abant İzzet Baysal University Faculty of Education Journal, 22(1), 485-505.*

Cansız, Ş. (2015). *The effect of realistic mathematics education approach on students' mathematics achievement and creative thinking skills* (Thesis No. 418229) [Doctoral dissertation, Atatürk University]. YÖK National Thesis Center. https://tez.yok.gov.tr/UlusalTezMerkezi/giris.jsp

De Lange, J. (1987). *Mathematics, Insight and Meaning*, OW&OC, Utrecht University, Utrecht, The Netherlands.

De Lange, J. (1995). *Assessment: no change without problems. T. A. Romberg (Ed.), Reform in school mathematics and authentic assessment*, (s. 87-172). New York: State University of New York Pres.

De Lange, J. (1996). Using and Applying Mathematics in Education. In Bishop, A. et al. (Eds.), *International Handbook of Mathematics Education* V,l, (pp. 49- 97). Dordrecht: Kluwer Acad. Pub.

Freudenthal, H. (1983). *Didactical Phenomenology of Mathematical Structure*. Dordrecht The Netherlands: Kluwer Academis Publishers.

Freudenthal, H. (1973). *Mathematics as an educational task*. Dordrecht: Reidel.

Freudenthal, H. (1991). Thoughts on teachıng mechanıcs didactical phenomenology of the concept of force. *Educational Studies in Mathematics*. 25(2), 71-87.

Gravemeijer, Koeno (1994), *Developing Realistic Mathematics Education*, Freudenthal Institute, Utrecht.

İç, Ü., Tutak, T. (2018). Correlation between Computer and Mathematical Literacy Levels of 6th Grade Students. *European Journal of Educational Research, 7(1), 63-70.*

İlhan, A., Tutak, T., İç, Ü., Ekinci, N. (2020). Examination of Prospective Mathematics Teachers' Views on Special Teaching Methods Course. *Electronic Journal of Social Sciences, 19(73), 156-170.*

Kaylak, S. (2014). "*The effect of lesson activities based on realistic mathematics education on student success*", Master's Thesis, Necmettin Erbakan University Institute of Educational Sciences, Konya.

Kwon, O.N. (2002). Conceptualizing the realistic mathematics education approach in the teaching and learning of ordinary differential equations. *Education Resources Information Center.* 11(2), 143-150.

MEB. (2018). *Mathematics curriculum (primary and secondary school grades 1, 2, 3, 4, 5, 6, 7 and 8).* MEB. http://mufredat.meb.gov.tr/Dosyalar/201813017165445- MATEMAT%C4%B0K%20%C3%96%C4%9ERET%C4%B0M%20PROGRA MI%202018v.pdf

Nelissen, J. M., (1999). Thinkingskills in realistic mathematics, *Teaching And Learning Thinking Skills, 189-213*.

Oldham, E., Van Der Valk, T., Broekman, H., & Berenson, S. (1999). Beginning preservice teachers' approaches to teaching the area concept: identifying tendencies towards realistic, structuralist, mechanist or empiricist mathematics education. *European journal of teacher education, 22(1), 23-43.*

Özdemir, E. (2008), *The effect of teaching the "Surface Measurements and Volumes" unit based on realistic mathematics education (RME) on student success and student opinions regarding the teaching*. Master's thesis, Balıkesir University Institute of Science.

Polat, M., Tutak, T. (2025). Interdisciplinary Comparative Analysis of Science and Mathematics Teachers' Level of Technology Use in Teaching Processes, Their Aims and Problems Encountered. *International Journal of Research in Teacher Education (IJRTE), 16(1), 34-48.*

Polat, M., & Yılayaz, Ö. (2025). Investigation of the effect of SCAMPER technique on eighth grade students' academic achievement, environmental attitudes and science learning motivations. *Participatory Educational Research,* 13(1), 155-175. https://doi.org/10.17275/per.26.09.13.1

Sezgin Memnun, D. (2011). *Investigation of the processes by which sixth-grade primary school students construct the concepts of coordinate system and line equation in analytical geometry according to constructivist learning and realistic mathematics education* (Thesis No. 306364) [Doctoral thesis, Uludağ University]. YÖK National Thesis Center. https://tez.yok.gov.tr/UlusalTezMerkezi/giris.jsp

Taş, U.E., Arıcı, Ö., Ozarkan, H. B. and Özgürlük, B. (2016). *International Student Assessment Program-PISA 2015 National Report. T.C. Ministry of National Education, General Directorate of Measurement, Evaluation and Examination Services*. https://odsgm.meb.gov.tr/test/analizler/docs/PISA/PISA2015_Ulusal_Rapor.pdf

Treffers, A. (1987). *Three Dimensions- A Model of Goal and Theory Description in Mathematics Instruction*. Dordrecht: Kluwer Academic.

Treffers, A. (1991). *Didactical background of a mathematics program for Primary Education. In Leen Streefland* (Ed.), Realistic Mathematics Education in Primary Schools. Utrecht: Freudenthal Institute, Utrecht University.

Treffers, A. (1993). Wiskobas and freudenthal realistic mathematics education. *Educational Studies İn Mathematics. 25(1), 89-108.*

Tutak, T., Süzen, A. B., İnan, İ. E. (2020). Determining the Mistakes of Secondary School Mathematics Teachers in Operation Priority. *Participatory Educational Research, 7(1), 16-29.*

Üzel, D. (2007) "*The effect of realistic mathematics education (RME) supported education on student success in 7th grade primary school mathematics teaching*", Doctoral Thesis, Balıkesir University Institute of Science, Balıkesir.

Van Den Heuvel-Panhuizen, Marja ve Wijers, Monica (2005), "*Mathematics Standards and Curricula in the Netherlands*", ZDM, 37(4), ss. 287-307.

Van den Heuvel-Panhuizen, M. (2000). *Mathematics education in the Netherlands*. Utrecht: Utrecht University. The Netherlands.

Van den Heuvel-Panhuizen, M. (2003). The didactical use of models in Realistic Mathematics Education: An example from a longitudinal on percentage. *Educational Studies in Mathematics, 54(1), 9-35.*

Van den Heuvel-Panhuizen, M. (2010). *Reform under attack: Forty years of working on Better Mathematics Education Thrown on the Scrapheap*? No Way! Freudenthal Institute for Science and Mathematics Education: Utrecht University.

Van den Heuvel-Panhuizen, M. (2020). *International reflections on the netherlands didactics of mathematics. Visions on and Experiences with Realistic Mathematics Education*. Utrecht: Utrecht University. The Netherlands. Nord University, Bodø. Norway.

Zulkardi, Z. (1999). *How to design mathematics lessons based on the realistic approach*. https://repository.unsri.ac.id/6362/1/rme.html.

Zulkardi, Z. (2002). *Developing a learning environment on realistic mathematics education for Indonesian student teachers* (Doctoral dissertation, University of Twente, Enschede).

A LOOK AT THE FOUNDATIONS OF MATHEMATICS

Ünal İç, İbrahim Enam İnan

ABSTRACT

This study examines the historical development of mathematics from antiquity to the present day, and the evolution of its fundamental branches. The study addresses how number systems have evolved to meet various needs, the transition of algebra from 'verbal and geometric' methods to its modern algorithmic structure, and the evolution of analysis from Archimedes to Newton and Leibniz, and then to Weierstrass's modern definitions. It also focuses on the fundamental axioms of Euclidean geometry, the emergence of analytical geometry, and the critical role of logic and proof in mathematical systems. In conclusion, it emphasizes that mathematics is not merely an abstract science, but a universal language that forms the basis of many disciplines such as physics, engineering, medicine, and economics.

Introduction

First, it would be helpful to briefly discuss the origins and history of mathematics. Mathematics is a science that has existed for many years and has developed and progressed over time. Therefore, knowing the history of mathematics will help us understand its foundations. There are two main views regarding the origins of mathematics: Herodotus' view and Aristotle's view. Based on these views, we can say that mathematics emerged in Egypt and Mesopotamia between 3000-2000 BC. The first view on this subject belongs to Herodotus. Herodotus attributes the origin of geometry to the Egyptians' need for land measurement, stating:

"The priests told me that this king had divided all the land among the Egyptians, and everyone received the same amount of land; each landowner paid something like rent once a year at a certain time, and the king thus earned himself an income. If a river eroded one of their lands, that man went and told the king, whereupon Sesostris sent his men to measure the land, determine how much was missing, and the peasant paid his tax accordingly; it seems to me that this is the origin of geometry, which later spread to Greece." (Herodotus, 2018).

As we understand from this, river floods occurred in Egypt, and if the land boundaries of a person changed as a result of these floods, the amount of tax that person had to pay also changed. In order for taxes to be paid in the correct amount, the lands of those whose land boundaries changed were measured by the geometers of the time, and the tax amounts were recalculated based on these measurements. In short, Herodotus adopted the view that mathematics originated in Egypt and that its origin was due to the need for land measurements.

The second view regarding the origin of mathematics belongs to Aristotle. Aristotle puts forward an important thesis about the origin of scientific knowledge, emphasizing the concept of leisure time with the statement, "Therefore, the mathematical sciences first appeared in Egypt; because there the priestly class had leisure time" (Ross, Arslan, 2020). Aristotle also suggested that mathematics originated in Egypt, but his view differs significantly from Herodotus's. While Herodotus held that mathematics arose from practical necessity, Aristotle attributed the origin of theoretical knowledge to intellectual pursuit and a privileged class. It is not yet fully known which of these views is correct. Although there is no definitive information on how and exactly when mathematics emerged, it is generally accepted that it originated in Egyptian civilization.

The Evolution of Numbers

There are many differences between ancient mathematics and modern mathematics. While mathematics and other scientific fields are highly developed today, both science and life were more primitive in ancient times. Mathematics has been used and developed according to the needs of the era. For example, the mathematical knowledge required for people who own animals to count them consisted of numbers and addition with numbers. However, this mathematical knowledge is not sufficient for our modern world.

As time passed and life changed, so did the needs in mathematics. While natural numbers were initially sufficient for people's daily lives, after a while they began to be insufficient. Thus, a different topic opened up in mathematics, and negative numbers entered the historical stage of mathematics. "The first practical use of negative numbers occurred in China around 200 BC for commercial accounting. In these calculations, receivables were represented as positive and payables as negative" (URL8, URL9). As we understand from this, since the issue of debt could not be solved with natural numbers, the need for negative numbers became apparent, and thus negative numbers emerged.

"The first formulation regarding the sum of fractions with different denominators was discovered by Egyptian mathematicians. It is believed that further studies on unit fractions using the concept of multiplication were carried out by Muslim scientists." (MEB, 2017). As we understand, previously,

problems involving fractions involved operations with fractions having the same denominator. When fractions were used in this way, there were no operations involving fractions with different denominators, nor did they yet have a mathematical name. While the formulation of fractions with different denominators was done by the Egyptians, the complete conceptualization of fractions was done by Muslim mathematicians. "The concept of a fraction was introduced by Omar Khayyam in the 11th century. Khayyam interpreted and explained a fraction as the division of two numbers." (MEB, 2017). Omar Khayyam is the Muslim mathematician who conceptualized fractions.

"Hippasus, a student of Pythagoras, claimed that in a right triangle with side lengths of 1 unit, the length of the hypotenuse is $\sqrt{2}$ units, and that this number is not a rational number" (URL8, URL9). After some time, it became clear that rational numbers were also insufficient, leading to the discovery of irrational numbers, although their emergence was more difficult than that of others. While initially rejected, they were later accepted and are frequently used in modern mathematics. π and e are popular irrational numbers used today.

Until the discovery of complex numbers, the existing number systems were used, but something was overlooked. Equations like $x^2 = -1$ cannot be solved without complex numbers. Therefore, they needed to discover complex numbers. To solve quadratic equations like $x^2 + 2x + 3 = 0$ or $x^2 + 1 = 0$, we need complex numbers very much. In 1539, Tartaglia secretly shared these methods and formulas with his friend, the Italian mathematician Girolamo Cardano. However, Cardano broke his promise to Tartaglia and published this method in his book, Ars Magna. Thus, Tartaglia's method was forgotten over time, and the solution came to be generally referred to as the Cardano method." (Zhao, 2023). As we understand from this, the mathematician Tartaglia discovered complex numbers and shared his solutions with his friend Cardano, but Cardano acted as if he had discovered complex numbers himself. We can see that there were difficulties in the emergence of complex numbers, but today this problem has been solved, and complex numbers are used in as many places as possible.

Main Branches of Mathematics

Algebra

"When the definition and origin of algebra are examined, this branch of science can be considered as a generalized form of arithmetic," and it takes its name from the word "Al-Jabr" in al-Khwarizmi's important work (Baki and Bütüner, 2011). This definition shows that algebra arose from the need to solve equations and find unknowns. Although the purpose of using algebra is the same, algebra has been used in different ways in different civilizations.

The article describes the subject of algebra in different civilizations as follows: In the initial phase, the ancient Egyptian and Mesopotamian

civilizations expressed algebraic problems entirely in everyday language, without using any symbols. While the Egyptians focused on practical calculations, the Babylonians demonstrated a more advanced technique by solving quadratic equations using geometric methods such as 'completing the square'. With Greek mathematics, algebra gained a geometric identity; in Euclid's time, identities were explained with field models. This field, which expanded with the inclusion of negative numbers in calculations by Indian mathematicians, reached its peak in the Islamic world with the works of al-Khwarizmi. Al-Khwarizmi laid the foundation for modern algorithmic logic and the term 'algebra' by making algebra a systematic discipline independent of geometry. (Baki and Bütüner, 2011)

This summarizes algebra's millennia-long journey as a transition from the concrete to the abstract, from practice to theory. It shows how the "verbal and geometric" methods used in Egypt and Babylon to solve every day needs were transformed into a modern science through the expansion of the Indian number system and al-Khwarizmi's systematization of this accumulated knowledge. Consequently, algebra is not the legacy of a single civilization, but a universal and cumulative intellectual heritage built upon one another by different cultures.

Analysis

Analysis is one of the branches of mathematics that explains that derivatives and integrals are actually inverses of each other. The derivative is the problem of finding the tangent to a curve at a point and explains how velocity changes instantaneously. The integral is the problem of calculating the area under irregular shapes and describes reaching the whole by adding the parts.

Let's examine analysis in three stages: Ancient times, Newton vs. Leibniz, the modernization of analysis. In ancient times, we encounter Archimedes.

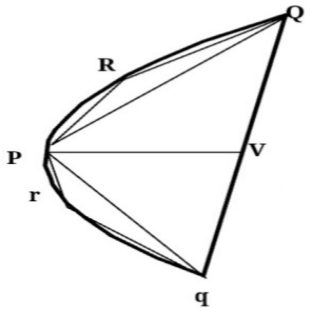


Figure 1: Parabolic arc and triangle (Baki, 2020)

"Archimedes is considered the founder of analysis because of the 'exhaustion' method he followed in proving this proposition" (Baki, 2020). This "exhaustion" method used by Archimedes is actually the equivalent of

the concept of limits, which forms the basis of modern integral calculus, in that era. This inference made thousands of years ago proves how deep the historical roots of the modern discipline of analysis go. The fact that Archimedes, who lived centuries before Newton and Leibniz, is described as the "founder of analysis" shows that he was not only a geometer but also a mathematician who transformed abstract thought into concrete calculations.

Over time, disagreements arose between Newton and Leibniz. These events are described as follows: "Calculus of infinitesimals was independently developed by Isaac Newton and Gottfried Wilhelm Leibniz in the late 17th century. The dispute over priority led to the Leibniz-Newton calculus debate, which continued until Leibniz's death in 1716." (URL6). Newton and Leibniz worked on the same topic at the same time without knowing each other, but Leibniz was the first to publish his work in a formal paper. Although Newton began his work earlier than Leibniz, Leibniz was the first to publish, leading to a debate between them about who discovered the topic first. This debate, which lasted for years between British and German mathematicians, divided the mathematical world. Today, we generally use Newton's ideas and Leibniz's notation. In the modern analytic period, Weierstrass stands out. "Weierstrass rewrote previous definitions. He used precise language and clear mathematical formulas instead of vague expressions" (URL2). Weierstrass's intervention ensured that calculus ceased to be merely an intuitive tool and took on a logical precision. This clarity, replacing vague expressions, laid the foundation for structures such as the epsilon-delta definition that we still use in modern analytic analysis today. Geometry

•Euclidean Geometry

One of the figures who shook mathematics and left his mark on the field of geometry is Euclid. Euclid's five postulates brought a great innovation to the world of geometry. Let's look at Euclid's postulates, especially the fifth postulate, which is a subject of debate:

1. A straight line can be drawn from one point to another.

2. It is possible to extend a line segment continuously in both directions.

3. It is possible to define a circle with a center and a radius.

4. All right angles are equal.

5. If a line is drawn that intersects two lines, and the sum of the two angles on the opposite side of the intersecting line is less than two right angles, then if these two lines are extended along the side where the sum of the angles is less than two right angles, they will intersect at a point later (URL5). With these five fundamental assumptions, for the first time in history, the source of knowledge became proven propositions (theorems) derived through logical

deduction from a few accepted basic assumptions (postulates and axioms). The first four postulates are quite clear, but the fifth postulate led to debates among mathematicians. The fifth postulate was a subject of debate for a long time, and attempts to refute it resulted in non-Euclidean geometry.

Fundamental Theorems: Pythagorean Theorem, Thales' Theorem

Figure 2: Pythagorean Theorem (URL4).

The Pythagorean theorem states that in a right-angled triangle, the sum of the squares of the two sides of the right angle is equal to the square of the hypotenuse. Applying this equation to the right-angled triangle shown, we get $a^2 + b^2 = c^2$. The Pythagorean theorem is a cornerstone of Euclidean geometry. Without the Pythagorean theorem, we could not give a consistent answer to the question "What is the distance between two points?" on a flat surface. The "Distance Formula" that we use to calculate the shortest distance between two points in Euclidean geometry is actually an adaptation of the Pythagorean theorem to the coordinate plane.

Figure 3: Thales' Theorem (URL7).

It establishes the proportion between line segments intersected by parallel lines. "Hieronymus noted that Thales measured the height of the pyramids using the moment when the length of the shadow was equal to the height of a man." (O'Connor & Robertson, 1999). Geometric Logic: Staff Length / Staff Shadow = Pyramid Height / Pyramid Shadow. This simple ratio is the first great example of how human intelligence overcame enormous physical obstacles (such as climbing a pyramid) through abstract thought.

•Analytical Geometry

"Although Apollonius came very close to analytical geometry, he was unable to develop it further because he did not take negative magnitudes into account" (URL1). Apollonius conducted studies in the field of analytical geometry in the 1st millennium BC, but because mathematics was not highly developed at that time, his work was not entirely sufficient in the field of analytical geometry. For example, let's consider a two-dimensional coordinate plane. This coordinate plane consists of x and y. Here, x takes positive and negative values, and y also takes positive and negative values. Thus, a four-quadrant coordinate plane is formed. Apollonius did not take negative numbers into account in the plane and did not conduct studies with negative numbers. That is, he only worked with the quadrants where x and y took positive values.

"The methods Apollonius used in conic sections are so close to modern approaches that it is as if he predicted the analytical geometry that Descartes would develop 1800 years later and acted accordingly..." (Takıcak, 2019). Although he did not work with negative numbers, Apollonius's contributions

to analytical geometry are undeniable. He managed to shed light on the field of analytical geometry and inspire mathematicians even years after him.

Although the foundations of analytical geometry were laid by Apollonius and Descartes, Leonhard Euler was the first to systematically apply the coordinate method (URL1). Euler left revolutionary contributions not only in this field but also in the development of the concept of function and in many disciplines ranging from mechanics to astronomy.

Logic and Proof

Logic and proof did not enter our lives only through mathematics; they have been used in other fields as well. Logic and mathematical proof constitute the purest and most solid building blocks of human thought. This subject has a very deep history because it combines both philosophy and mathematics.

Let's divide the system of logic into three periods: the ancient period, the transition period to modern logic, and the 20th-century period. Aristotle is a prominent figure in the ancient period. "The philosopher set out to investigate whether apodeictic (certain, true, and necessary) knowledge is possible and argued that it can only be reached through deduction" (Sarılı & Somuncuoğlu, 2024). He established the deductive method of proof and argued that knowledge can only be attained through deduction. Deduction is a method of reasoning that goes from the general to the specific. For example, all humans are mortal, Socrates is a human, therefore Socrates is mortal. Here, by saying "all humans," the general is mentioned, and by saying "Socrates," the individual (the specific) is mentioned.

Bacon and Leibniz stand out in the transition period to modern logic. While Bacon argued that induction should be the only source for acquiring knowledge, Leibniz abstracted logical truths from their content by considering them as rational truths (Eroğlu, 2012). Both thinkers adopted a critical stance against classical logic (Aristotelian logic) and paved the way for the birth of modern logic.

The 20th century witnessed a major crisis and initiated significant changes. During this period, Hilbert and Kurt Gödel rose to prominence. Regarding Hilbert's fundamental aim, the article states: "The purpose of this program is to demonstrate the consistency of mathematics by the finite method, while remaining based on axioms" (Güven, 2020). As we understand from this, David Hilbert wanted to prove that mathematics is entirely consistent and complete, but Gödel surprised the world by proving that in every mathematical system there are propositions that are true but cannot be proven by the rules of that system. This highlighted the difference between provability and truth. This situation is expressed in the article as follows: "The first consequence of all these proofs is that a formal system powerful enough to encompass all the

truths of mathematics, as sought in the Hilbert Program, is impossible. This shows that the Hilbert Program cannot be concluded in accordance with its original aims" (Öztürk, 2011).

CONCLUSION

Mathematics has developed considerably today, and fundamental mathematical concepts have spread to many fields. Mathematics has become a widespread branch of science, used both in the daily lives of the public and by scientists to contribute to humanity. To see how widespread mathematics has become, it is useful to examine its relationship with other sciences (Baldemir, 2025; Polat, 2025; Nayıroğlu, 2023; Aydoğdu, 2020; Tutak, 2023).

All modern physics is based on analysis (Derivatives and Integrals), which examines the concepts of motion and change. Since Isaac Newton, concepts such as acceleration, force, and gravity have been expressed with precise formulas using analysis. Furthermore, complex numbers are frequently used in physics because they simplify calculations.

Geometry is fundamental in space science and engineering structures. The aerodynamic designs of bridges, buildings, and airplanes are based on geometric principles. We also encounter geometry very frequently in our daily lives. For example, blackboards in classrooms are rectangular, and beehives are hexagonal; these are good examples. In finance and economics, stock market predictions, interest rate calculations, and investment risk assessments are done entirely using probability theory and statistical modeling. Another field where probability theory and statistical analysis are used is medicine. The analysis of genetic variations, DNA sequencing, and population dynamics of species require extensive probability theory and statistical analysis.

The foundations of mathematics are far more than just an abstract field of study. They form the basis of our ability to understand, predict, and transform the world around us. The logical consistency and predictive power that mathematics provides are indispensable for the advancement of science and technology; this makes mathematics the most enduring and universal language in humanity's body of knowledge.

REFERENCE

Aydoğdu, M., Tutak, T., Göçük, Ş. (2020). Determining the Misconceptions of Eighth Grade Students on Exponents and Roots. *International Journal of Educational Science and Technology.*

Baki, A. (2020). *History and philosophy of mathematics*. Pegem Academy.

Baki, A., & Bütüner, S. Ö. (2011). Historical development of algebra. *Turkish Journal of Computer and Mathematics Education, 2(3), 198-231.*

Baldemir, B., Tutak, T., İç, Ü. (2025). Student and Teacher Views on Artificial Intelligence-Supported History of Mathematics and Mathematics Knowledge Competition. *Journal of Education and Human Sciences: Theory and Practice, 16(32), 459-482.*

Eroğlu, G. (2012). Transition from classical logic to modern logic: Some issues that can be considered fundamental to the birth of modern logic. *Hikmet Yurdu, 5(9), 115-135.*

Güven, Ö. (2020). Hilbert, the foundations and views of mathematics. *Philosophy Archive, (52), 113-149.*

Herodotus. (2018). *History* (M. Ökmen, Trans.). İş Bankası Cultural Publications. Ministry of National Education

(MEB). (2017). Mathematics textbook (Preparation). *Ministry of National Education Publications.*

Nayıroğlu, B., Tutak, T. (2023). The Effect of Using Web 2.0 Tools in Algebra Teaching on Student Success and Attitude. *International e-Journal of Educational Studies, 7(14), 416-425.*

O'Connor, J. J., & Robertson, E. F. (1999). *Thales of Miletus.* MacTutor History of Mathematics Archive. https://mathshistory.st-andrews.ac.uk/Biographies/Thales/

Öztürk, A. B. (2011). *A philosophical examination of Kurt Gödel's incompleteness theorems and Platonism* [Master's thesis]. Pamukkale University.

Polat, M., Tutak, T. (2025). Interdisciplinary Comparative Analysis of Science and Mathematics Teachers' Level of Technology Use in Teaching Processes, Their Aims and Problems Encountered. *International Journal of Research in Teacher Education (IJRTE), 16(1), 34-48.*

Ross, D. (2020). *Aristotle*. Kabalcı Publishing House. (2020). Metaphysics (A. Arslan, Trans.). Social Publications.

Sarılı, G., & Somuncuoğlu, S. Ö. (2024). A general evaluation of Aristotle's understanding of deduction and induction. *Fikriyat Journal of Social Sciences Research, 4(2), 153-162*.

Takıcak, S. B. (2019). Analytical geometry in the Ottomans*. Kebikeç, (47), 165-188.*

Tutak, T., Nayıroğlu, B., Süzen, A. B. (2023). Examining the Effects of Using Educational Games in 6th Grade Algebra Teaching on Students' Academic Achievement and Attitudes. *International Online Journal of Educational Sciences, 15(2), 238-250*

URL1 Bilgiustam, *what is Analytical Geometry? Its History*. Retrieved from https://www.bilgiustam.com/analitik-geometri-nedir-tarihcesi/ on 01.12.2025.

URL2 *Karl Weierstrass and his famous function*. Mathematical. Retrieved from https://www.matematiksel.org/karl-weierstrass-ve-fonksiyonu/ on 01.12.2025.

URL3 *Derspresso Coordinate Plane [Graphic]. Derspresso Mathematics*. Retrieved from https://www.derspresso.com.tr/matematik/analitik-geometri/koordinat-duzlemi on 01.12.2025.

URL4 *Evrim Ağacı, what is the Pythagorean theorem? Who is Pythagoras*? Retrieved from https://evrimagaci.org/pisagor-teoremi-nedir-pisagor-kimdir-12873 on 01.12.2025.

URL5 *Geomania Forum, The beginning of Euclid's Elements and the list of axioms/postulates [Forum Topic]*. Retrieved from https://geomania.org/forum/index.php?topic=6164.0 on 01.12.2025.

URL6 *History of calculus.* (2024). In Wikipedia. Retrieved from https://en.wikipedia.org/wiki/History_of_calculus on 01.12.2025.

URL7 *Passion for Mathematics*, Thales' theorem relation formula [Image]. https://www.matematiktutkusu.com/forum/geometri-formulleri/2405-thales-tales-teoremi-bagintisi-formulu.html Retrieved on 01.12.2025.

URL8 "*How was the first known irrational number, the square root of two, discovered?".* Retrieved from https://bilimgenc.tubitak.gov.tr/makale/bilinen-ilk-irrasyonel-sayi-olan-karekok-iki-sayisi-nasil-kesfedildi on 03.12.2025

URL9 *"Why do negative numbers exist?".* Retrieved from https://bilimgenc.tubitak.gov.tr/makale/negatif-sayilar-neden-var on 05.12.2025.

Zhao, Y. Y. (2023). Discovery of complex numbers. Highlights in Science, *Engineering and Technology, 38, 138-143.*

AN INNOVATIVE LEARNING APPROACH: FLIPPED LEARNING

Hatice Uzala, Ünal İç, İbrahim Enam İnan

Abstract

The flipped learning model holds a significant position, particularly in education, across various disciplines. This study examines the flipped learning model, a blended learning model used in education, and discusses its advantages, disadvantages, and some limitations, while also reviewing some studies conducted in Turkey. To this end, the research was conducted using a literature review method. Data was collected through a systematic search of the literature, YÖK TEZ, and ULAKBİM databases. The results indicate that the use of the flipped learning model in education is particularly beneficial for students.

Keywords: Flipped Learning Model, Blended Learning, Education, Flipped Classroom

INTRODUCTION

Technological advancements worldwide are highly diverse and progressing at an accelerating pace. This progress has significant effects on education, as it does on all other fields (Ünsal, 2018). Research examining the impact of technology on education reveals that various technological tools are utilized in classroom activities, and diverse learning approaches are employed. Blended learning is one such learning approach, combining the strengths of face-to-face and distance education, and leveraging the advantages of two distinct learning environments. In other words, it is the combination of learning activities that the student carries out using various online tools outside of the classic learning environment, where they can organize their time, place, and pace according to their individual needs, with face-to-face education in classrooms, which are classic learning environments (Hayırsever & Orhan, 2018). One of the blended learning models, which has been frequently mentioned in recent years, is the "flipped classroom" model (Ök, 2019).

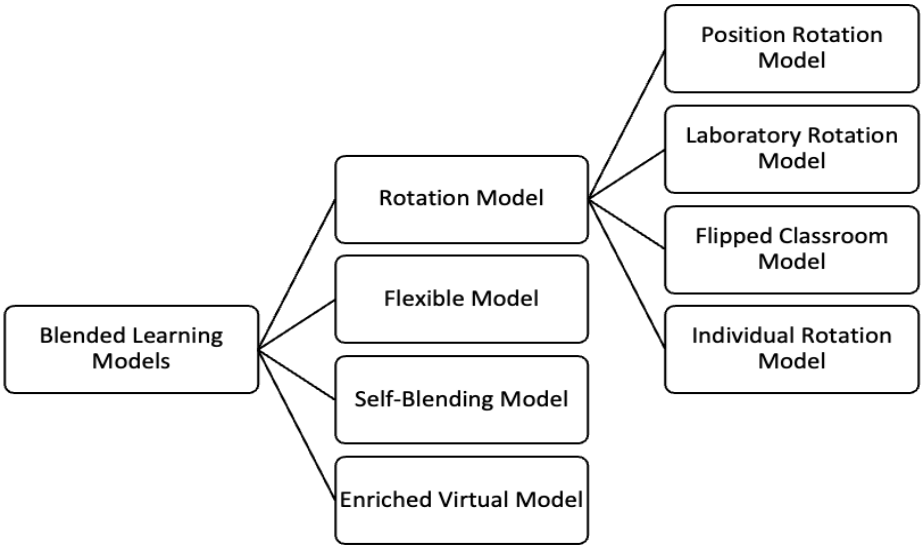


Figure 1: Blended learning models (Çevikbaş, 2018).

Figure 1 above attempts to show the types of blended learning models and one of them, the flipped classroom model. Flipped learning started in 2007 when chemistry teachers Jonathan Bergmann and Aaron Sams at Woodland Park High School in Colorado recorded the lesson and published it online for students who missed it. Afterwards, they observed that not only students who missed the lesson but also students who attended the lesson in person benefited from the videos to review the lesson, and as a result, it emerged as an active learning model that could be used in lessons (Karadeniz, 2015).

The flipped learning model is a learning model where topics to be taught in class are given as homework, and students complete this homework in class before coming to school. The aim is to ensure that the shared information is understood before the lesson, allowing students to reach higher-level learning stages, including Bloom's application, analysis, and synthesis skills, during their time at school (Tarhan, 2019).

In the application of the flipped classroom model, unlike traditional teaching methods, students learn the theoretical part of the lesson outside of school using tools such as internet-based videos, files, and learning management systems. In addition to the basic course materials shared by the teacher on the subject, students gain individual learning responsibility by doing the necessary work related to the content. In the classroom, students have the opportunity to share and support the information they have obtained through activities in which the teacher actively participates to help, such as applications prepared on the subject and discussion environments created for them to share what they have learned (Gençer & Gürbulak & Adıgüzel, 2014).

2. Purpose of the Research

The purpose of this study is to examine the general structure of the flipped learning model by reviewing the existing literature in a wide range and to determine what benefits its use in education will provide.

3. Research Methodology

The research employs a literature review method to deeply analyze the existing academic literature. During this study, both digital and printed sources were reviewed, and important findings, theories, and discussions related to the flipped learning model were identified.

4. Study Group

The study group consisted of articles and theses written on the flipped learning model and approach, obtained from the Higher Education Council Thesis Center (YÖK TEZ) and the National Academic Network and Information Center (ULAKBİM). These studies were selected according to predetermined criteria.

5. Data Collection Tool

In this research, information about the flipped learning model was collected from the literature, YÖK TEZ database, and ULAKBİM database using a systematic search method.

6. Data Analysis

The collected data were examined using descriptive analysis methods. This approach allowed for the reorganization of the data and its evaluation from different perspectives in accordance with the research questions.

7. Flipped Learning

"Flipped Learning" literally means "inverted", and "Learning" means "learning." In its simplest form, it can be translated into Turkish as "Ters Dönmüş Öğrenme" (Inverted Learning). In many studies and existing literature in Turkey, it is referred to as "Ters Yüz Öğrenme" (Reversed Learning). As the name suggests, "Ters Yüz Öğrenme" describes a system where the learning process, which traditionally takes place in school, is reversed; the work done in school is done outside of school, and the work done outside of school is done in school (Gökdemir & Gazel, 2019).

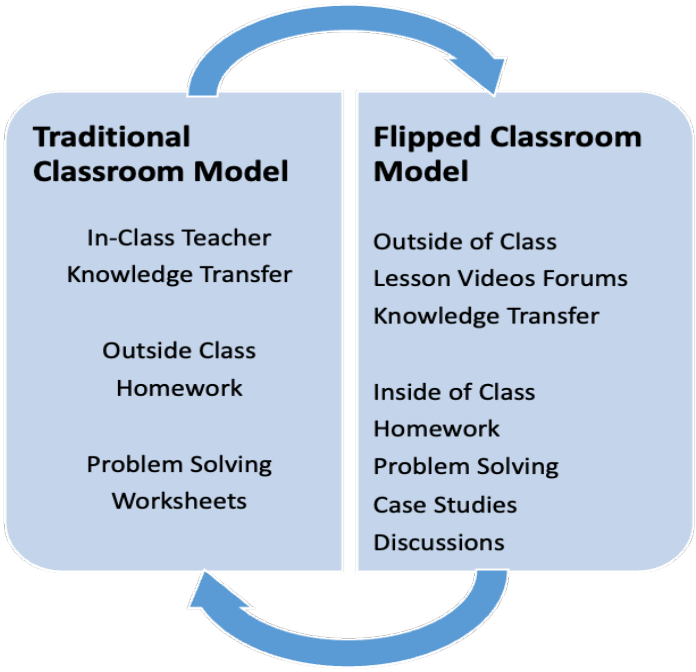


Figure 2: Comparison of traditional and flipped classroom (Ök, 2019).

Figure 2 attempts to highlight the differences between the traditional and flipped classroom models by comparing them.

The flipped learning model is theoretically a learning model based on the principle of applying learning activities such as understanding and remembering outside the classroom with the support of videos and different digital-based materials; while performing higher-level learning activities such as application, analysis, evaluation, and production inside the classroom (Ünlü, 2022).

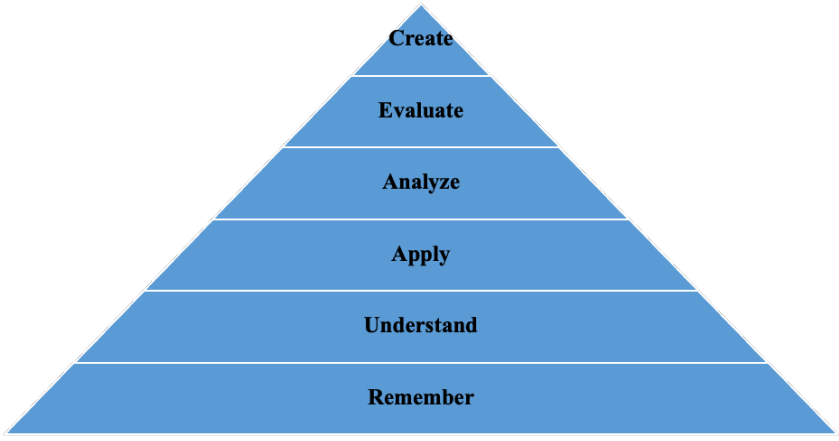


Figure 3: Comparison of Traditional Learning Model and Flipped Learning Model According to Bloom's Taxonomy (Kozikoğlu & Erbenzer & Ateş, 2021).

Unlike Figure 2, Figure 3 attempts to compare the traditional learning model and the flipped learning model according to Bloom's taxonomy.

According to Bishop and Verleger (2013), the flipped learning model consists of two main components. The first is providing individual learning through online resources such as videos, animations, or slides before the lesson; the second main component is carrying out student-centered, collaborative, and interaction-oriented learning activities. One of the main goals of this model is to increase the level of classroom interaction and to provide feedback appropriate to the individual needs of students (Ök, 2019).

Utilizing digital resources is crucial to enhance the applicability of the model. For example, the Khan Academy platform, founded by Salman Khan, supports individual learning outside of school by providing students with internet-based learning materials. Such resources encourage pre-lesson preparation and increase the functionality of classroom activities. In addition, learning management systems (LMS) and interactive applications allow for monitoring students' cognitive learning processes and creating a more effective learning environment (Solak & Coştu, 2025).

The flipped learning model offers various pedagogical opportunities to improve the quality of learning with its student-centered approach, but it also has limitations and disadvantages.

7.1. Advantages of the Flipped Learning Model

• Students have access to course materials whenever and wherever they want.

• It instills individual learning responsibility in students.

• It allows for immediate feedback from the teacher through classroom activities.

• It facilitates knowledge structuring by prioritizing peer interaction.

• It supports 21st-century learning by utilizing the conveniences brought by technology in the education process.

• It helps to increase the variety of activities tailored to students' individual differences (Hayırsever & Orhan, 2018).

7.2. Disadvantages and Limitations of Flipped Learning

• Controlling extracurricular activities can be difficult.

• Concerns may arise if teachers and students cannot use technology effectively.

• Students and teachers may not have adequate technological infrastructure.

• Students may not want to take responsibility for their individual learning.

• Because students' activities are open to everyone, students may not give sincere and objective answers in practice (Açıkgül & Yalınkılıç, 2023).

8. Some Studies on Flipped Learning in Turkey

Interest in the flipped learning model has increased significantly in our country recently, and it has begun to find application in various schools and projects. The use of the flipped learning model in projects supported by the GRUNDTVIG Program and TÜBİTAK can be given as an example of its use in our country. In addition, within the scope of the iTEC project, supported by the European Commission and involving 18 countries in Europe, the Ministry of National Education has integrated the flipped learning model into the education process. At the higher education level in our country, MEF University, which is the first institution to apply the flipped learning model, and Erzurum Technical University, which applies this model in the field of engineering, are among the examples contributing to its application. However, despite these examples, it can be said that this model is applied at a limited level in our country and is in the initial stages of its development process (Hayırsever & Orhan, 2018).

In Turkey, in 2013, within the scope of the Ministry of National Education's FATİH project, Sebit Vitamin and Lisego content were transferred to EBA. Thus, significant opportunities were created for the flipped learning model (Özdemir, Ağırman Aydın & Küçük Demir, 2020).

In a study conducted by Aydın (2016) to measure the academic achievement, homework/task stress levels, learning transfers, and perceptions of university-level students, it was found that the flipped learning model applied in the course on material design and use in education significantly increased academic achievement levels, and that the stress levels arising from homework/task processes were lower in the group where the model was applied. However, no significant difference was found in terms of learning transfer. As a result of the interviews, it was reported that there was a generally positive opinion towards the model (Sakar & Uluçınar Sağır, 2017).

9. CONCLUSION

This study focuses on the flipped learning model, which is used in various disciplines, primarily education. Studies conducted using this model in the literature were examined to define the model and highlight its advantages and disadvantages. The findings of the study show that the flipped learning approach allows for learning processes tailored to individual differences, provides a collaborative learning atmosphere, and makes the learning process more efficient by providing time and space flexibility. However, differences in access to technological resources and variations in students' motivation levels can make it difficult to apply the model widely and effectively in every learning

environment. These findings are consistent with the findings of similar research conducted in the field (Kaya, 2018; Ök, 2019).

Ultimately, flipped learning can be considered an innovative model in the field of education. Qualitative, quantitative, experimental, and survey studies conducted on flipped learning have revealed that it improves individual learning, reasoning, and thinking skills, facilitates peer interaction, elicits positive feedback from students and teachers, and has the potential for application in many different fields (basic sciences, medicine, etc.) (Ünsal, 2018). Bu uygulama öğrencilerin başarı ve tutumunu olumlu yönde etkilemiştir (Bilal ve diğ, 2025; İlhan ve diğ, 2020; Tutak ve diğ, 2018; İç ve Tutak, 2018; Tutak ve diğ, 2020).

10. RECOMMENDATIONS

In line with the results of this study, the following recommendations can be listed to increase the applicability of the flipped learning model in education and training processes and to contribute to future studies:

• Efforts can be made to identify and address deficiencies in the technological infrastructure in order to obtain the expected effect from this model.

• Necessary support can be obtained from relevant sources to enable students to take responsibility for their individual learning.

• Emphasis can be placed on studies conducted at different educational levels.

• In order to increase the use of this model in our country, educators can be informed about how to use the model.

REFERENCES

Açıkgül, K., & Yalınkılıç, O. (2023). Examination of the readiness of middle school students for flipped mathematics classrooms and their self-regulated learning skill levels. *International Journal of Educational Studies in Mathematics, 10(3), 190-207.*

Baldemir, B., Tutak, T., İç, Ü. (2025). Yapay Zekâ Destekli Matematik Tarihi ve Matematik Bilgi Yarışmasına Yönelik Öğrenci ve Öğretmen Görüşleri. *Eğitim ve İnsani Bilimler Dergisi: Teori ve Uygulama, 16(32), 459-482.*

Çevikbaş, M. (2018). *Examination of the student participation process in a mathematics classroom based on flipped classroom model applications* [Unpublished Doctoral Thesis]. Gazi University Institute of Educational Sciences, Ankara.

Gençer, B. Gürbulak, N., & Adıgüzel, T. (2014, February 5-6). *A New Process in Education: Flipped Classroom System* [Conference Presentation]. International Teacher Education Conference, Dubai, United Arab Emirates.

Gökdemir, A., & Gazel, A. (2019). The Effect of Flipped Learning on Social Studies Teacher Candidates' Attitudes Towards Constructivism. *Journal of Educational Theory and Practice Research, 5(2), 239-249.*

Hayırsever, F., & Orhan, A. (2018). Theoretical analysis of the flipped learning model. *Mersin University Journal of Education, 14(2), 572-596.*

İç, Ü., Tutak, T. (2018). Correlation between Computer and Mathematical Literacy Levels of 6th Grade Students. *European Journal of Educational Research, 7(1), 63-70.*

İlhan, A., Tutak, T., İç, Ü., Ekinci, N. (2020). Matematik Öğretmen Adaylarının Özel Öğretim Yöntemleri Dersine Yönelik Görüşlerinin İncelenmesi. *Elektronik Sosyal Bilimler Dergisi, 19(73),*

Karadeniz, A. (2015, April 24-26). *Flipped classrooms* [Oral presentation]. 6th International Congress on New Trends in Education- ICONTE, Antalya. http://www.jret.org/FileUpload/ks281142/File/35._abdulkadir_karadeniz.pdf

Kaya, D. (2018). The effect of the flipped learning model on the participation of middle school students in mathematics teaching. *Sakarya University Journal of Education, 8(4), 232-249.*

Kozikoğlu, İ. Erbenzer, E., & Ateş, G. (2021). The relationship between teachers' flipped learning self-efficacy perceptions and their behaviors supporting learner autonomy. *Atatürk University Kazım Karabekir Faculty of Education Journal, 42, 344-366.*

Ök, S. (2019). *Investigation of students' academic achievement and self-regulated learning skills in flipped learning environments* [Unpublished Master's Thesis]. Balıkesir University Institute of Science, Balıkesir.

Sakar, D., Uluçınar Sağır, Ş. (2017). Flipped classroom model in education. *International Journal of Social Sciences and Education Research*, 3(5), 1904-1916.

Solak, B., & Coştu, B. (2025). The Effect of Virtual Laboratory Supported Flipped Learning Model on Changes in Students' Cognitive Structures. *International Journal of Social Field Research, 14(1), 1-36.*

Tarhan, G. F. (2019). *Teaching the Ethics and Security Unit of the Fifth Grade Information Technologies and Software Course with Flipped Learning and Gamification Approaches*. [Unpublished Master's Thesis]. Balıkesir University Institute of Science, Balıkesir.

Torun, F., Dargut, T. (2015). A Proposal on the Feasibility of the Flipped Classroom Model in Mobile Learning Environments. *Adnan Menderes University Faculty of Education Journal of Educational Sciences, 6(2), 20-29.*

Tutak, T., İlhan, A., İç, Ü., Kılıçarslan, S. (2018). Bilgisayar Destekli Matematik Öğretiminin Matematik Öğretmen Adaylarının Öğrenme Süreçlerine Yönelik Görüşlerine Etkileri. *Journal of Turkish Studies,* 13(27), 1509-1524.

Tutak, T., Süzen, A. B., İnan, İ. E. (2020). Determining the Mistakes of Secondary School Mathematics Teachers in Operation Priority. *Participatory Educational Research, 7(1), 16-29.*

Unlu, S. (2022). *The Effect of Coding Education with Flipped Learning Model on the Achievement and Attitudes of Science Teacher Candidates.* [Unpublished Master's Thesis]. Necmettin Erbakan University Institute of Educational Sciences, Konya.

Unsal, H. (2018). Flipped learning and some application models. *Gazi Journal of Educational Sciences, 4(2), 39-50.*

AN OVERVIEW OF MONTESSORI EDUCATION

Mehmet Polat, Tayfun Tutak

INTRODUCTION

Education is a learning process that enables individuals to develop themselves by acquiring knowledge, skills, values, and attitudes. This process can take place in structured environments such as schools, universities, or other educational institutions, or it can be achieved through learning from daily life experiences (Tutak et al, 2020). Education is present at every stage of life. Education is life itself. It is particularly important to prioritize education for individuals from an early age. This is crucial both for the development of individuals and for the progress of nations. Therefore, today, countries are constantly renewing and improving their education policies to increase their level of development.

The concept of education, which is so important, is often confused with the concept of instruction. The most important characteristic of education is that it continues throughout life and can take place in any environment the individual is in. However, the most fundamental characteristic of instruction is that it is a planned, programmed process that takes place in a specific location and is completed with a document (Güven, 2014). Therefore, the concepts of education and instruction are always directly affected by the political, economic, and cultural changes that societies experience and are constantly undergoing change accordingly (Güven, 2014). On the other hand, research on education is evaluated as accurate and objective only if it is based on a historical foundation (Kamer and Şimşek, 2016).

The use of education in conjunction with knowledge is the most important key to achieving a high standard of living for individuals through learning and teaching, and to the development and progress of society as a whole. Furthermore, establishing and developing a democratic and human rights-compliant political and social system also depends on education (Özyılmaz, 2013). Education possesses significant power in terms of its individual, social, economic, and political functions. Education systems are shaped according to the cultures of societies and the desired behaviors. On the other hand, it is necessary to keep pace with innovations in science, technology, and art, and to

cultivate individuals who are open to innovation, inquisitive, questioning, and tolerant. States have political systems and wish to protect and maintain their existing political systems. States can maintain their existence by instilling the principles of their political regimes in their citizens and by internalizing these values. In this regard, states, aware of the functions of education, influence its aims and content (Eraslan and Babadağ, 2015). However, in order to achieve this and for education to fulfill its fundamental functions, the problems and deficiencies in the education systems must be addressed. Primary education is one of the important stages of education. Through this education, children acquire the basic knowledge and skills necessary for adapting to society and leading better lives. In the first stage, children learn to read and write, use their native language correctly and effectively, understand what they read, perform basic mathematical operations, and gain basic knowledge about important social and natural events. This information constitutes a prerequisite for further learning. In underdeveloped or developing countries where educational opportunities are limited and the rate of dropping out of formal education after primary school is high, basic education is crucial for equipping individuals with at least fundamental knowledge and skills. Since the main function of primary education, or basic education, is to prepare children for life, the priority should be to provide students with fundamental knowledge and skills. The fact that education in Turkey is not of the desired quality has been debated for many years (Okutan, 2003). Problems, solutions, and changes at each stage of education affect both previous and subsequent stages. Capacity limitations and inadequacies in pre-school education affect primary education, just as structural inequalities and quality problems in secondary education negatively impact primary education (TED, 2007).

Educational systems developed to cultivate individuals emerge as a reflection of various ways of thinking, focused on specific goals that find application in every society. From this perspective, two fundamental trends and criteria can be mentioned in guiding these ways of thinking. The first is worldviews formed by common and similar qualities that serve to define a universal model of humanity, society, and culture; the second is social and national trends carrying local characteristics, created by people who are shaped within a specific geography, history, and culture and united in common symbols. In other words, education, while trying to create a model that conforms to its own definition of its people and society, also seeks to find answers to the typologies of humanity and society that have become distinct in universal criteria and frameworks, by allocating both the aims and the teaching content that is appropriate to these aims (Akyüz, 2019).

Due to rapidly changing living conditions worldwide, the skills people need are constantly evolving. Innovations in science and technology, in particular, are rapidly transforming living conditions, making the importance of possessing up-to-date skills increasingly crucial (Ablak, 2020; Atik and Yetkiner, 2021; Cansoy, 2018). In today's world, where skills such as creativity, innovation, leadership, and entrepreneurship are becoming increasingly important, individuals need to possess skills that meet the demands of the 21st century (Kayhan et al., 2019). The 21st century is considered a period in which humanity feels change and innovation profoundly, as science and technology are rapidly changing, and daily life is constantly being renewed as a result (Posos Devrani, 2021). In the 21st-century world, simply possessing knowledge is no longer sufficient; people are expected to use that knowledge in a way that is appropriate to the changing conditions of the world (Eryılmaz and Ulusoy, 2015). Individuals are expected to adapt to the rapid change and transformation, to use the knowledge they possess in their lives, and to actively participate in social life as part of the society in which they live with a productive and participatory structure (Belet Boyacı and Güner Özer, 2019). At this point, the ability to solve various problems arising from the change and to adapt to developing new situations stand out as fundamental requirements (Tuğluk and Özkan, 2019; Üzümcü and Bay, 2018). As a result of this change, 21st-century skills represent the skills that people should possess in today's world. These skills generally refer to the advanced thinking skills, enhanced affective characteristics, and learning abilities required in the technological and scientific age in which we live (Demir and Özyurt, 2021; Ecevit and Kaptan, 2021; Gömleksiz et al., 2019). At the core of 21st-century skills are competencies such as strong communication and collaboration skills, efficient use of technology, innovation, creative thinking, and problem-solving. It is expected that these skills will enable people to be active participants and productive members of society (Bozkurt, 2021; Hamarat, 2019).

All of the above is possible with a strong education system. Therefore, every country constantly strives to strengthen its education system. Especially considering the early ages at which education begins, Montessori education is one of the first things that comes to mind.

Montessori Education

Montessori education completely centers the child and prioritizes their development. The balance between freedom and responsibility is always paramount. Montessori education was developed in the early 20th century by the Italian doctor and educator Maria Montessori. The basic principles and practical information regarding Montessori education are presented below.

Montessori Education: Basic Principles and Application

Montessori education is an alternative educational approach developed at the beginning of the 20th century by Italian doctor and educator Maria Montessori, which centers the child and prioritizes individual development. The Montessori method is a system based on a balance of freedom and responsibility, allowing children to learn at their own pace, according to their interests and needs. The basic characteristics of Montessori education are given below.

Basic Characteristics

The basic characteristics of Montessori education are listed below.

1. Child-Centered and Individualized Education: Montessori education respects each child's individual developmental process and interests. Children learn at their own pace and with materials of their own choosing (Keerthirathne, & Sampath, 2025; Chloë, 2017; Ifeoma et al, 2017; Kızılabdullah, 2021).

2. Prepared Environment: Classrooms are arranged in a way that allows children to explore independently. Materials are designed to support children's sensory, cognitive, and motor development (Nadiva, & Oleksandra, 2019; Türk & Sarı, 2020; Kızılabdullah, 2021).

3. Age-Different Groups: Children from different age groups are together in the classrooms. This encourages peer learning and social development (Angeline, & Else-Quest, 2006; Nadiva, & Oleksandra, 2019; Kızılabdullah, 2021).

4. The Role of the Teacher: The teacher acts as a guide and observer; providing support when needed without interfering with the child's learning process (Keerthirathne, & Sampath, 2025; Faisal Reza Saputra, 2025; Kızılabdullah, 2021).

5. Grading and Exams: Montessori schools do not have a traditional grading system or exams. Instead of the grading system and exams in traditional schools, children's development is monitored through continuous observation and individual assessment (Angeline, & Else-Quest, 2006; Keerthirathne, & Sampath, 2025; Chloë, 2017).

Benefits of Montessori Education

The benefits of Montessori education are listed below:

1. It supports children's development in areas such as independence, self-confidence, problem-solving, and social skills (Susana, 2021; Ritu, 2024; Bednarczuk, 2023).

2. More positive results can be obtained in academic and social/emotional areas compared to traditional education (Justus et al., 2023; Chloë, 2017; Angeline, & Else-Quest, 2006).

Basic Principles and Differences of Montessori Education

Montessori education is a method that prioritizes the child and supports their individual development. However, this method will inevitably have differences from other methods. The basic principles and differences of Montessori education are given in Table 1 below.

Table 1. Basic Principles and Differences of Montessori Education

Characteristic	Montessori Education	Tradiotinal Education
Student role	Active, manages their own learning.	Passive, teacher-centered
Classroom order	Prepared environment, freedom.	Sequential, teacher-controlled.
Evulation	Continuous monitoring, individual follow-up.	Grades and exams
Age groups	Mixed groups of different ages	Single age group

Figure 1 above shows the differences between Montessori education and traditional education. In Montessori education, the student is active and manages their own learning, while in traditional education, the student is passive and the teacher is centered. Looking at the classroom environment, Montessori education uses prepared learning environments, while traditional education has a teacher-controlled environment. Regarding the assessment stage, Montessori education involves continuous observation and personal development. There is no grading or examination system. However, traditional education involves a system of exams and grading. In Montessori education, students are evaluated through continuous monitoring and personal development, whereas in traditional education, students are constantly given exams, and grades are assigned based on the results. Comparing age groups, Montessori education involves mixed groups of children of different ages. In contrast, traditional education clearly involves student groups where all students are the same age.

Conclusion

Montessori education is an educational model that supports the child's natural development, balances freedom and responsibility, and is based on individualized and active learning. This approach has positive effects on both the academic and socio-emotional development of children.

References

Ablak, S. (2020). An examination of the 21st-century skills of social studies teacher candidates in terms of various variables. *Journal History School*, 13(48), 3316–3334. https://doi.org/10.29228/Joh.45167

Akyüz, H. (2019). *Educational Sociology*. Pegem Akademi.

Angeline, L., & Else-Quest, N. (2006). The early years. *Evaluating Montessori education*. DOI: 10.1126/science.1132362

Angeline, S. L. (2021). Montessori as an alternative early childhood education. *Early Chıld Development and Care,* 2021, Vol. 191, Nos. 7–8, 1196–1206https://doi.org/10.1080/03004430.2020.1832998

Atik, A. D., & Yetkiner, A. (2021). Examination of secondary school biology curriculum outcomes in terms of 21st century skills. *Trakya Education Journal*, 11(2), 745-765. https://doi.org/10.24315/tred.707904.

Bednarczuk, B. (2023). Potential and Actual Significance of Montessori Learning Environment. *Lubelski Rocznik Pedagogiczny*, *42*(4), 113–130. http://dx.doi.org/10.17951/ lrp.2023.42.4.7.113-130

Belet-Boyacı, Ş. D., & Güner-Özer, M. (2019). The future of the teacher: Turkish language curriculum from the perspective of 21st century skills. *Anadolu Journal of Educational Sciences International,* 9(2), 708–738. https://doi.org/10.18039/ajesi.578170

Bozkurt, F. (2021). Evaluation of the social studies teacher training undergraduate program in terms of 21st century skills. *Pamukkale University Faculty of Education Journal, 51, 34–64. https://doi.org/10.9779/pauefd.688622*

Cansoy, R. (2018). 21st century skills according to international frameworks and their acquisition in the education system. *Journal of Human and Society Research*, 7(4), 3112-3134.

Chloë, M. (2017). Montessori education: a review of the evidence base. npj Science of Learning. *npj Science of Learning* (2017) 2:11; doi:10.1038/s41539-017-0012-7

Demir, A. Y., & Özyurt, M. (2021). Examination of social studies curriculum and textbooks in the context of 21st century skills. *İnönü University Faculty of Education Journal,* 22(2), 1254–1290. Doi: 10.17679/inuefd.867905

Ecevit, T., & Kaptan, F. (2021). Description of the argumentation-supported inquiry-based teaching model designed to acquire 21st century skills. *Hacettepe University Faculty of Education Journal*, 36(2), 470–488. doi: 10.16986/HUJE.2019056328

Eraslan, L. and Babadağ, G. (2015). *Legal Foundations of Education*. In Introduction to Educational Science.

Eryılmaz, S., & Ulusoy, Ç. (2015). Evaluation of the Fatih Project in light of 21st century skills. *Gazi University Gazi Faculty of Education Journal*, 35(2), 209-229

Faisal Reza Saputra (2025). Transforming Teacher-Student Relationships through Montessori Philosophy: Addressing Educational Challenges and Enhancing Learning Environments. *At Turots: Jurnal Pendidikan Islam*. Vol. 7, No. 1, Juni 2025, pp. 376-383

Gömleksiz, M. N., Sinan, A. T., & Doğan, F. D. (2019). Perceptions of 21st-century skills competencies of prospective teachers of Turkish, Turkish language and literature and contemporary Turkish dialects. *Eurasian International Research Journal*, 7(19), 163–185. https://doi.org/10.33692/avrasyad.628236

Güven, İ. (2014). *Turkish Education History*, Ankara: Pegem Akademi.

Hamarat, E. (2019). *Turkey's education policies focusing on 21st-century skills*. Seta Analysis, 272.

Ife*oma M. Ogbemudia, Victor Mafone Alasa, Joseph C. Ikenyiri. (2024).* The Montessori Pedagogy: A Multi-Sensory Approach to Childhood Education. *Jurnal Pendidikan Abad Ke-21, Vol 2(2).*

Justus J. R., Anaya, B., Lakshmi, M., David, K. H., Austin, K. M., Stephen, M., debra, l., w., r., Warren, M., Rebecca, O., Angeline, S. L. (2023). Montessori education's impacton academic and nonacademic outcomes: Asystematic review. *Campbell Systematic Reviews*. https://doi.org/10.1002/cl2.1330

Kamer, S. T. and Şimşek A. S. (2016). "Measurement of Teacher Candidates' Attitudes Towards the Turkish Educational History Course". *Ahi Evran University Kırşehir Faculty of Education Journal (KEFAD)* Vol. 17, No. 2, pp. 663-678.

Kayhan, E., Altun, S., & Gürol, M. (2019). Evaluation of the eighth-grade Turkish language curriculum (2018) in terms of 21st-century skills. *Adnan Menderes University Faculty of Education Journal of Educational Sciences, 10*(2), 20–35.

Keerthirathne, WKD, & Sampath, HGC. (2025). Preschool Education and Maria Montessori A Review. *Internatıonal Journal of Research and Scıentıfic Innovatıon (Ijrsı). https://doi.org/10.51244/IJRSI.2024.11120046*

Kızılabdullah, Y. (2021). Montessori Method in Preschool Religious, Value and Moral Education -Indiana Example-. *Religious Studies* 24/60 (June 2021), 9-34, https://doi.org/10.15745/da.931903

Maruša Mavrič, University of Maribor, Slovenia (2020). The Montessori Approach as a Model of Personalized Instruction. *Journal of Montessori Research*, Fall 2020, Volume 6, Issue 2

Nadiya, D. & Oleksandra, S. (2019). The Use of Pedagogical System of Maria Montessori in Ukrainian Education. *Human Studies Series of Pedagogy*, DOI: 10.24919/2413-2039.9/41.175703

Okutan, M. (2003). Administrative Behaviors of School Principals, *National Education Journal*, 157. Eleventh National Education Council. (1982). http://ttkb.meb.gov.tr/meb_iys_dosyalar/2014_10/02113508_11_sura.pdf Accessed: 13.03.2015

Özyılmaz, Ö. (2013). *Problems and Solution Seeking of the Turkish National Education System (4th Edition)*. Ankara: Pegem Academy.

Posos Devrani, A. E. (2021). 21st Century Skills for Young People and the Requirements of the Digitalizing World: New Literacies. *Journal of Youth Studies*, 9(24), 5–20.

Ritu, C. (2024). Montessorı Method of Educatıon is a Boon for Nursery School Chıldren: A Case Study. *Internatıonal Educatıon and Research Journal*. Vol. 10 No. 7 (2024): July Issue,

Susana, S. (2021). *Montessori Education: Building Life with Soft Skills for a Better Life*. Routledge.

Tuğluk, M. N., & Özkan, B. (2019). Analysis of the 2013 Ministry of National Education pre-school education program in terms of 21st century skills. *Journal of Basic Education*, 1(4), 29–38. https://doi.org/10.31464/jlere.578224

Turkish Education Association (2007). *Basic Problems and Solution Proposals of the Pre-School and Primary Education System in Turkey*, Summary Report (First Edition). Ankara: Adım Agency.

Tutak, T., Süzen, A. B., İnan, İ. E. (2020). Determining the Mistakes of Secondary School Mathematics Teachers in Operation Priority. *Participatory Educational Research*, 7(1), 16-29. Doi: http://dx.doi.org/10.17275/per.20.2.7.1

Türk, S. A., Sarı, R. M. (2020). Reading Space with Concepts in Montessori Schools. *Journal of Art and Design, Volume: 10 Issue: 1, 82 - 105, 30.06.2020.*

Üzümcü, Ö., & Bay, E. (2018). The new 21st century skill in education: computational thinking. *International Journal of Social Sciences in the Turkish Cultural Geography*. Volume: 3 Issue: 2, 1 - 16, 30.09.2018

BEDEN EĞİTİMİNDE GELENEKSEL MODELLER İLE DİJİTAL ARAÇLARIN KULLANILDIĞI HİBRİT EĞİTİM MODELLERİ

Necla Yaşar[1]

GİRİŞ

Yirmi birinci yüzyılın eğitim paradigması, teknolojinin hızlı evrimi ve pedagojik yaklaşımlardaki dönüşümlerle birlikte yeniden şekillenmektedir. Fiziksel okuryazarlık, sağlık bilinci ve yaşam boyu spor alışkanlığı kazandırmayı hedefleyen beden eğitimi ve spor disiplini de bu değişim rüzgârından nasibini almaktadır. Geleneksel öğretim modelleri, yıllarca beden eğitimi müfredatlarının temelini oluşturmuş olsa da, günümüz dijital çağının getirdiği yeni öğrenme ihtiyaçları ve teknolojik imkânlar, daha kapsayıcı, esnek ve öğrenci merkezli yaklaşımların benimsenmesini zorunlu kılmaktadır. Bu bağlamda, "hibrit eğitim modelleri" kavramı, hem yüz yüze eğitimin sosyal dinamiklerini hem de dijital araçların sunduğu bireyselleştirilmiş öğrenme fırsatlarını bir araya getiren güçlü bir pedagojik strateji olarak karşımıza çıkmaktadır. Bu kitap bölümü, beden eğitiminde geleneksel modeller ile dijital araçların entegre edildiği hibrit eğitim modellerinin teorik temellerini, uygulama süreçlerini ve öğrenci çıktıları üzerindeki etkilerini derinlemesine incelemeyi amaçlamaktadır.

Geleneksel beden eğitimi yaklaşımları, sıklıkla öğretmen merkezli doğrudan öğretim modeline dayanmaktadır. Bu modelde öğretmen, sürecin lideri olarak içerik, sınıf yönetimi ve öğrenci sorumlulukları üzerindeki tüm kararları verirken, öğrenciler genellikle pasif alıcılar konumundadır (Gil-Arias vd., 2017). Doğrudan öğretim, teknik becerilerin tekrarına ve motor gelişime odaklanmasıyla bilinse de, öğrencilerin bilişsel ve sosyal gelişimlerini sınırlayabildiği, oyunun bağlamından kopuk olduğu ve motivasyonu düşürebildiği yönünde eleştirilere maruz kalmaktadır (Metzler, 2011; Gil-Arias vd., 2020). Bu eleştirilere bir yanıt olarak geliştirilen Spor Eğitimi Modeli, Oyunla Öğretim, Bireysel ve Sosyal Sorumluluk Modeli ve İşbirlikli Öğrenme gibi pedagojik modeller, öğrenciyi merkeze alan yapılandırmacı bir yaklaşım sunmaktadır (Dyson vd., 2004; Siedentop vd., 2011). Ancak, literatürdeki

1 Dr., İnönü Üniversitesi, Spor Bilimleri Fakültesi, Malatya, necla.1323@gmail.com, ORCID: orcid.org/ 0000-0003-2283-8608

çalışmalar, hiçbir tekil modelin beden eğitiminin tüm hedeflerini aynı anda ve eksiksiz bir şekilde karşılayamayacağını ortaya koymaktadır (Casey & Kirk, 2021; Mehranmanesh vd., 2025).

İşte bu noktada hibritleşme kavramı devreye girmektedir. Hibrit pedagoji, iki veya daha fazla pedagojik modelin güçlü yönlerinin birleştirilerek, tek bir modelin sınırlılıklarının aşılmasını ve daha nitelikli öğrenme çıktılarının elde edilmesini ifade eder (González-Víllora vd., 2019). Örneğin, Spor Eğitimi Modeli'nin sunduğu sezon yapısı, takıma aidiyet ve şenlik havası ile Oyunla Öğretim (TGfU) modelinin taktiksel farkındalık ve problem çözme odaklı yapısının birleştirilmesi, öğrencilerin hem oyun performanslarını hem de motivasyonlarını artırmada etkili bir strateji olarak öne çıkmaktadır (Hastie & Curtner-Smith, 2006; Gil-Arias vd., 2017). Benzer şekilde, SEM ile TPSR'nin entegrasyonu, öğrencilerin sadece sportif becerilerini değil, aynı zamanda kişisel ve sosyal sorumluluklarını da geliştirmeyi hedefleyen güçlü bir triad oluşturmaktadır (Hastie & Buchanan, 2000; Menendez-Santurio & Fernandez-Rio, 2017).

Ancak hibritleşme sadece pedagojik modellerin bir araya getirilmesiyle sınırlı kalmamalıdır. Günümüzün "dijital yerlileri" olan öğrencilerin ihtiyaçlarına cevap verebilmek için, bu hibrit yapıların dijital araçlar ve yapay zeka teknolojileriyle desteklenmesi gerekmektedir. İnternet ve mobil teknolojilerin yaygınlaşması, çevrimiçi ve çevrimdışı öğrenmenin entegre edildiği yeni bir hibrit öğrenme anlayışını beraberinde getirmiştir (Gao, 2023). Beden eğitiminde yapay zeka ve oyunlaştırma unsurlarının kullanımı, geleneksel öğretimin mekanik ve sıkıcı yapısını kırma potansiyeline sahiptir. Jiang (2024), Beden Eğitimi + Yapay Zeka + Oyunlar şeklindeki hibrit öğretim modunun, öğrencilerin spora olan ilgisini artırırken, yapay zeka algoritmaları sayesinde kişiselleştirilmiş öğrenme deneyimleri ve veri odaklı geri bildirimler sunduğunu belirtmektedir. Ayrıca, kitlesel açık çevrimiçi dersler (MOOC) ve mobil uygulamalar, öğrencilerin teorik bilgileri (örneğin spor güvenliği veya oyun kuralları) ders dışında kendi hızlarında öğrenmelerine olanak tanırken, yüz yüze derslerin daha çok pratik uygulamalara ve sosyal etkileşime ayrılmasını sağlamaktadır (Gao, 2023).

Dijital araçların hibrit modellere entegrasyonu, özellikle COVID-19 pandemisi sürecinde bir zorunluluk haline gelmiş ve bu süreç, beden eğitimi öğretmenlerinin dijital hazırbulunuşluk düzeylerinin önemini gözler önüne sermiştir (Kriswanto vd., 2023). Sanal sınıflar, video analizleri ve giyilebilir teknolojiler, öğrencilerin hareket kalıplarını izlemek, teknik hataları düzeltmek ve fiziksel aktivite düzeylerini artırmak için kullanılabilmektedir (Zhang & Huang, 2025). Örneğin, bir öğrencinin basketbol şut tekniğinin video kaydı üzerinden yapay zeka destekli bir analizle değerlendirilmesi ve ardından hibrit

bir SEM-TGfU ünitesinde bu becerinin oyun içinde uygulanması, teknolojinin ve pedagojinin mükemmel bir uyumunu temsil etmektedir.

Bu araştırmada, öncelikle geleneksel pedagojik modellerin temel özellikleri ve sınırlılıkları ele alınacak, ardından bu modellerin birbirleriyle nasıl hibritleştiği literatürden örneklerle açıklanacaktır. Daha sonra, bu pedagojik hibritleşmenin, dijital araçlar ile nasıl zenginleştirilebileceği ve dijital hibrit eğitim kavramının beden eğitimindeki karşılığı tartışılacaktır. Son olarak, bu çok katmanlı hibrit modellerin öğrenci motivasyonu, beceri gelişimi, taktiksel anlayış ve sosyal sorumluluk üzerindeki etkileri, güncel araştırmalar ışığında değerlendirilecek ve gelecekteki uygulamalar için öneriler sunulacaktır.

Tekil Modellerden Çoklu Yaklaşımlara Pedagojik Hibritleşme

Beden eğitimi pedagojisinde son yıllarda yaşanan en belirgin dönüşümlerden biri, öğretmen merkezli geleneksel yaklaşımlardan öğrenciyi merkeze alan yapılandırmacı modellere doğru evrilmedir. Spor Eğitimi Modeli, Oyunla Öğretim ve Bireysel ve Sosyal Sorumluluk Modeli gibi tekil pedagojik modeller, öğrencilerin fiziksel okuryazarlık yolculuğunda önemli kilometre taşları olmuştur. Ancak, güncel literatür ve saha deneyimleri, tek bir pedagojik modelin beden eğitiminin fiziksel, bilişsel, duygusal ve sosyal hedeflerini aynı anda ve eksiksiz bir şekilde karşılamada zaman zaman yetersiz kalabileceğini ortaya koymaktadır (Mehranmanesh vd., 2025). Her modelin kendine has güçlü yanları olduğu gibi, uygulama bağlamına göre sınırlılıkları da bulunmaktadır. İşte bu noktada, tekil modellerin sınırlarını aşmak ve öğrenme çıktılarını zenginleştirmek amacıyla geliştirilen pedagojik hibritleşme kavramı devreye girmektedir.

Hibritleşme, basitçe iki öğretim yönteminin rastgele karıştırılması değil; aksine, iki veya daha fazla modelin en etkili özelliklerinin, öğrencilerin ihtiyaçlarına göre stratejik bir biçimde bütünleştirilmesi sürecidir. Bu yaklaşım, modelleri birbirine rakip alternatifler olarak görmek yerine, onları birbirini tamamlayan ve destekleyen bir "pedagojik yapbozun" parçaları olarak ele alır (González-Víllora vd., 2019). Araştırmalar, hibrit modellerin, öğrencilerin hem oyun performanslarını hem de taktiksel farkındalıklarını geliştirmede tekil modellere veya doğrudan öğretime kıyasla daha üstün sonuçlar verebildiğini göstermektedir (Araujo vd., 2016).

Özellikle Spor Eğitimi Modeli'nin sağladığı sezon yapısı, takıma aidiyet ve şenlik gibi yapısal özellikler, diğer modellerin içeriksel zenginliği ile birleştiğinde güçlü bir sinerji yaratmaktadır. Örneğin, SEM'in yapısal çatısı altında TGfU'nun taktiksel problem çözme süreçlerinin işlendiği bir hibrit ünitede, öğrenciler hem teknik becerilerini oyunun gerçekliği içinde öğrenmekte hem de takım olmanın getirdiği sosyal sorumluluğu deneyimlemektedirler (Gil-Arias vd., 2017). Benzer şekilde, SEM ile TPSR'nin entegrasyonu, öğrencilerin özerklik,

yetkinlik ve ilişkili olma gibi temel psikolojik ihtiyaçlarını destekleyerek içsel motivasyonlarını ve dersten aldıkları keyfi artırmaktadır (Gil-Arias vd., 2020).

Bu bağlamda pedagojik hibritleşme, beden eğitimi öğretmenlerine esnek ve çok yönlü bir öğretim "alet çantası" sunmaktadır. Bu çoklu yaklaşım sayesinde, sadece motor becerilerin geliştirilmesi değil, aynı zamanda öğrencilerin karar verme yetilerinin, liderlik vasıflarının ve sosyal sorumluluk bilinçlerinin de eş zamanlı olarak desteklenmesi mümkün hale gelmektedir. Sonuç olarak, tekil modellerden hibrit yaklaşımlara geçiş, beden eğitiminde daha kapsayıcı, motive edici ve bütüncül bir öğrenme iklimi yaratmanın en etkili yollarından biri olarak kabul edilmektedir (Zhang vd., 2024).

Yapay Zeka ve Dijital Araçların Beden Eğitimi ve Spor Derslerine Entegrasyonu

Akıllı beden eğitimi, geleneksel öğretim yöntemlerinin dijital çağın imkânlarıyla yeniden yorumlanarak, yapay zeka ve ileri teknoloji araçlarının pedagojik sürece derinlemesine entegre edildiği yeni bir eğitim paradigmasını ifade etmektedir. Bu yaklaşım, beden eğitimini sadece fiziksel bir uygulama alanı olmaktan çıkarıp, veriye dayalı hassas analizlerin ve kişiselleştirilmiş geri bildirimlerin merkeze alındığı dinamik bir ekosisteme dönüştürür. Geleneksel modellerde öğretmenlerin deneyimlerine ve öznel gözlemlerine dayanan değerlendirme süreçleri, günümüzde yerini bilgisayarlı görü, giyilebilir sensörler ve derin öğrenme algoritmalarına bırakmaktadır (Zhang & Huang, 2025). Bu teknolojiler, öğrencilerin hareket yörüngelerini, biyomekanik duruşlarını ve fizyolojik tepkilerini gerçek zamanlı izleyerek, insan gözünün kaçırabileceği mikro düzeydeki teknik hataları anında belirleme ve düzeltme imkânı sunar.

Bu dijital dönüşümün en kritik katkısı, eğitimin bireyselleştirilmesi noktasında ortaya çıkmaktadır. Geçmişte sınıflarda uygulanan standartlaştırılmış tek tip müfredatlar, öğrencilerin farklılaşan fiziksel yeteneklerini ve öğrenme hızlarını karşılamada çoğu zaman yetersiz kalmıştır. Ancak günümüzde yapay zeka destekli sistemler, öğrencilerin tarihsel performans verilerini ve fiziksel gelişimlerini analiz ederek onlara özel, uyarlanabilir antrenman reçeteleri ve gelişim rotaları oluşturabilmektedir (Jiang, 2024). Örneğin, Random Forest gibi gelişmiş algoritmalar kullanılarak oluşturulan değerlendirme modelleri, öğrencilerin spor güvenliği konusundaki teorik bilgilerini ve pratik gelişimlerini geleneksel yöntemlere kıyasla çok daha yüksek bir doğrulukla ve objektif bir şekilde analiz edebilir (Gao, 2023).

Ayrıca, MOOC (Kitlesel Açık Çevrimiçi Dersler) platformları ve sanal gerçeklik uygulamaları ile desteklenen hibrit yapılar, öğrenme sürecini okul duvarlarının ve ders saatlerinin ötesine taşımaktadır. Bu sayede öğrenciler, teorik bilgileri veya oyun kurallarını dijital ortamda kendi hızlarında edinirken,

yüz yüze derslerde daha nitelikli pratik yapma ve sosyal etkileşim kurma şansı bulurlar (Gao, 2023). Özetle, akıllı beden eğitimi kavramı, teknolojiyi öğretmenin yerine geçecek bir unsur olarak değil; öğretim verimliliğini, öğrenci güvenliğini ve derse katılımı artıran güçlü bir "katalizör" olarak konumlandırmaktadır.

Motivasyon, Beceri ve Sosyal Gelişim Üzerine Etkiler

Beden eğitiminde pedagojik ve teknolojik hibritleşme, öğrencilerin çok yönlü gelişimini destekleyen sinerjik bir etki yaratmaktadır. Bu sentezin çıktıları, Öz-Belirleme Kuramı (Self-Determination Theory) perspektifinden incelendiğinde, hibrit modellerin (özellikle SEM ve TGfU entegrasyonunun), öğrencilerin özerklik, yetkinlik ve ilişkili olma gibi temel psikolojik ihtiyaçlarını doğrudan öğretim yöntemlerine kıyasla daha güçlü bir şekilde karşıladığı görülmektedir (Gil-Arias vd., 2017). Öğrencilerin kendi takımlarını yönetmeleri, stratejik kararlar almaları ve dijital araçlarla süreçlerini takip etmeleri, içsel motivasyonu artırmakta ve dersten alınan zevki (enjoyment) üst seviyeye taşımaktadır. Özellikle başlangıç motivasyonu düşük veya orta düzeyde olan öğrencilerde, hibrit modellerin yarattığı "yenilik" (novelty) ve "çeşitlilik" (variety) algısı, derse katılımı artıran kritik bir faktör olarak öne çıkmaktadır (García-González vd., 2020).

Bilişsel ve psikomotor beceri gelişimi açısından bakıldığında, hibrit modeller tekil yaklaşımların eksikliklerini tamamlayıcı bir rol üstlenir. González-Víllora ve diğerleri (2019), Spor Eğitimi Modeli'nin (SEM) sağladığı yapısal çerçevenin (sezon, şenlik vb.), Oyunla Öğretim (TGfU) gibi modellerin taktiksel derinliği ile birleştiğinde, öğrencilerin hem oyun performansını hem de teknik becerilerini eş zamanlı olarak geliştirdiğini belirtmektedir. Bu sentez, öğrencilerin sadece hareketi "nasıl" yapacaklarını değil, oyun içinde "ne zaman ve neden" yapacaklarını da kavramalarını sağlar. Ayrıca, "Spor + Yapay Zeka + Oyun" formundaki teknoloji destekli hibrit modeller, öğrencilerin fiziksel yeteneklerini geliştirirken aynı zamanda sportmenlik ve derse bağlılık düzeylerini de artırmaktadır (Jiang, 2024).

Sosyal ve duyuşsal gelişim bağlamında ise hibritleşme, kapsayıcı ve adil bir öğrenme iklimi yaratır. SEM ile Bireysel ve Sosyal Sorumluluk Modeli'nin (TPSR) entegrasyonu, öğrencilerin liderlik, empati ve yardımseverlik gibi sosyal becerilerini pekiştirirken, şiddet içeren tutumların azalmasına katkı sağlar (Menendez-Santurio & Fernandez-Rio, 2017). Bu modeller, cinsiyet kalıpyargılarının ötesine geçerek, kız ve erkek öğrencilerin eşit fırsatlara sahip olduğu, özerkliği destekleyen bir ortam sunar (Gil-Arias vd., 2021). Sonuç olarak, yapılan sistematik derlemeler, hibrit pedagojilerin fiziksel, bilişsel, duygusal ve sosyal alanlarda tekil veya geleneksel modellere kıyasla daha üstün ve bütüncül öğrenme çıktıları sağladığını doğrulamaktadır (Mehranmanesh

vd., 2025). Bu bulgular, hibrit modellerin sadece akademik bir yenilik değil, aynı zamanda öğrenci refahını ve yaşam boyu fiziksel aktivite alışkanlığını destekleyen güçlü bir pedagojik araç olduğunu göstermektedir.

SONUÇ VE ÖNERİLER

Beden eğitimi ve spor öğretiminde geleneksel yöntemlerin, 21. yüzyıl becerilerine sahip bireyler yetiştirmede tek başına yeterli olamadığı gerçeği, pedagojik ve teknolojik hibritleşmeyi bir tercih olmaktan çıkarıp bir gerekliliğe dönüştürmüştür. Bu kitap bölümü kapsamında incelenen literatür ve analizler, spor eğitimi modeli, oyunla öğretim ve bireysel ve sosyal sorumluluk modeli gibi kanıt temelli modellerin hibritlenmesinin, öğrenci çıktılarında sinerjik bir etki yarattığını ortaya koymaktadır. Araştırmalar, hiçbir tekil modelin beden eğitiminin fiziksel, bilişsel, sosyal ve duyuşsal hedeflerini aynı anda tam kapasiteyle karşılayamadığını; ancak modellerin güçlü yönlerinin birleştirilmesiyle bu çok boyutlu hedeflere daha etkili bir şekilde ulaşılabildiğini göstermektedir. Özellikle SEM'in sağladığı yapısal çerçeve ile TGfU'nun taktiksel derinliğinin veya TPSR'nin sosyal sorumluluk vurgusunun entegrasyonu, öğrencilerin motivasyonunu, oyun performansını ve derse bağlılığını önemli ölçüde artırmaktadır.

Bununla birlikte, sadece pedagojik modellerin birleşimi değil, bu yapıların dijital araçlarla desteklenmesi de "Akıllı Beden Eğitimi" döneminin kapılarını aralamaktadır. Yapay zeka destekli analizler ve çevrimiçi öğrenme platformları, öğrencilere kişiselleştirilmiş geri bildirimler sunarak motor beceri gelişimini hızlandırmakta ve teorik bilgilerin edinilmesinde zaman tasarrufu sağlamaktadır. Ayrıca, bu hibrit yaklaşımların cinsiyet kalıpyargılarını kırarak hem kız hem de erkek öğrenciler için kapsayıcı ve eşitlikçi bir öğrenme ortamı sunduğu, özellikle kız öğrencilerin motivasyonunda belirgin artışlar sağladığı görülmüştür.

Elde edilen bu sonuçlar ışığında, uygulayıcılar, politika yapıcılar ve araştırmacılar için şu öneriler geliştirilmiştir:

- Hibrit modellerin başarısı, öğretmenin bu modellere olan hakimiyetine ve "model sadakatine" doğrudan bağlıdır. Öğretmenlerin sadece tekil modelleri değil, bu modelleri nasıl sentezleyeceklerini ve dijital araçları pedagojik sürece nasıl entegre edeceklerini öğrenmeleri gerekmektedir. Hizmet içi eğitimler, öğretmenlerin dijital yeterliliklerini ve hibrit pedagoji tasarlama becerilerini geliştirecek şekilde yeniden yapılandırılmalıdır.
- Beden eğitimi müfredatları, katı ve tek tip öğretim yöntemleri yerine, öğrenci ihtiyaçlarına ve okulun imkânlarına göre şekillenebilen modüler ve hibrit yapılara izin vermelidir. Öğretmenler, sınıfın dinamiklerine göre SEM'i temel alıp üzerine TGfU veya TPSR gibi modelleri eklemleyerek kendi "pedagojik yapbozlarını" oluşturmaya teşvik edilmelidir.

- Dijital hibritleşmenin (çevrimiçi/çevrimdışı) sağlıklı yürütülebilmesi için okulların teknolojik altyapıları güçlendirilmelidir. Ancak teknoloji kullanımı amaç haline getirilmemeli; öğrencilerin hareket süresini kısıtlamadan, verimliliği ve öğrenmeyi derinleştiren bir araç olarak konumlandırılmalıdır.
- Hibrit modeller tasarlanırken, dezavantajlı gruplar, düşük beceri düzeyine sahip öğrenciler ve farklı motivasyon profillerindeki bireyler göz önünde bulundurulmalıdır. Özellikle motivasyonu düşük öğrenciler için hibrit modellerin sunduğu "yenilik" ve "çeşitlilik" unsurları stratejik olarak kullanılmalıdır.

Sonuç olarak, beden eğitiminde hibritleşme, sadece bir yöntem değişikliği değil, öğrenciyi merkeze alan, teknolojiyi pedagojiyle harmanlayan ve bütüncül gelişimi hedefleyen bir zihniyet dönüşümüdür. Geleceğin beden eğitimi, bu esnek ve çok katmanlı yapıların üzerinde yükselecektir.

KAYNAKÇA

Araújo, R., Mesquita, I., Hastie, P. A. ve Pereira, C. (2016). Students' game performance improvements during a hybrid sport education–step-game-approach volleyball unit. *European Physical Education Review*, 22(2), 185–200. DOI: 10.1177/1356336X15597927.

Casey, A. ve Kirk, D. (2021). Reorganising physical education through pedagogical models: The possibility of MbP. A. Casey ve D. Kirk (Ed.), *Models-based practice in physical education* içinde (s. 97-110). London: Routledge.

Dyson, B., Griffin, L. L. ve Hastie, P. A. (2004). Sport education, tactical games, and cooperative learning: Theoretical and pedagogical considerations. *Quest*, 56(2), 226-240. DOI: 10.1080/00336297.2004.10491823.

Gao, Y. (2023). The effect of online and offline sports safety education combined with MOOC platforms in physical education teaching in colleges and universities. *Scalable Computing: Practice and Experience*, 24(3), 585–596. DOI: 10.12694/scpe.v24i3.2285.

García-González, L., Abós, Á., Diloy-Peña, S., Gil-Arias, A. ve Sevil-Serrano, J. (2020). Can a hybrid sport education/teaching games for understanding volleyball unit be more effective in less motivated students? An examination into a set of motivation-related variables. *Sustainability*, 12(15), 6170. DOI: 10.3390/su12156170.

Gil-Arias, A., Claver, F., Práxedes, A., Del Villar, F. ve Harvey, S. (2020). Autonomy support, motivational climate, enjoyment and perceived competence in physical education: impact of a hybrid teaching games for understanding/sport education unit. *European Physical Education Review*, 26(1), 36-53. DOI: 10.1177/1356336X18816997.

Gil-Arias, A., Diloy-Peña, S., Sevil-Serrano, J., García-González, L. ve Abós, Á. (2021). A hybrid TGfU/SE volleyball teaching unit for enhancing motivation in physical education: A mixed-method approach. *International Journal of Environmental Research and Public Health*, 18(1), 110. DOI: 10.3390/ijerph18010110.

Gil-Arias, A., Harvey, S., Cárceles, A., Práxedes, A. ve Del Villar, F. (2017). Impact of a hybrid TGfU-Sport Education unit on student motivation in physical education. *PLoS ONE*, 12(6), e0179876. DOI: 10.1371/journal.pone.0179876.

González-Víllora, S., Evangelio, C., Sierra-Díaz, J. ve Fernández-Río, J. (2019). Hybridizing pedagogical models: a systematic review. *European Physical Education Review*, 25(4), 1056-1074. DOI: 10.1177/1356336x18797363.

Hastie, P. A. ve Buchanan, A. M. (2000). Teaching responsibility through sport education: prospects of coalition. *Research Quarterly for Exercise and Sport*, 71(1), 25-35. DOI: 10.1080/02701367.2000.10608877.

Hastie, P. A. ve Curtner-Smith, M. D. (2006). Influence of a hybrid sport education - teaching games for understanding unit on one teacher and his students. *Physical Education and Sport Pedagogy*, 11(1), 1-27. DOI: 10.1080/17408980500466813.

Jiang, C. (2024). Hybrid teaching mode of physical education with sports games based on artificial intelligence. *KSII Transactions on Internet and Information Systems*, 18(11), 3165-3176. DOI: 10.3837/tiis.2024.11.004.

Kriswanto, E. S., Firmansyah, Meikahani, R. ve Mulyawan, R. (2023). Digital readiness in physical education and sports health learning study at elementary school, Yogyakarta. *Jurnal Prima Edukasia*, 11(1), 60-71. DOI: 10.21831/jpe.v11i1.56700.

Mehranmanesh, M., Vaez Mousavi, S. M. K. ve Aslankhani, M. A. (2025). Learning outcomes of hybrid pedagogies in the context of physical education: A systematic review. *Motor Behavior*, 17(59), 37-82. DOI: 10.22089/mbj.2023.14275.2077.

Menéndez-Santurio, J. I. ve Fernandez-Rio, J. (2017). Hybridising sport education and teaching for personal and social responsibility to include students with disabilities. *European Journal of Special Needs Education*, 32(4), 508-524. DOI: 10.1080/08856257.2016.1267943.

Metzler, M. W. (2011). *Instructional models for physical education* (3. baskı). Scottsdale, AZ: Holcomb Hathaway. Siedentop, D., Hastie, P. A. ve van der Mars, H. (2011). *Complete guide to sport education* (2. baskı). Champaign, IL: Human Kinetics.

Oliveros, M. ve Fernandez-Rio, J. (2022). Pedagogical models: Can they make a difference to girls' in-class physical activity? *Health Education Journal*, 81(8), 913-925. DOI: 10.1177/00178969221128641.

Zhang, J., Soh, K. G., Bai, X., Mohd Anuar, M. A. ve Xiao, W. (2024). Optimizing learning outcomes in physical education: A comprehensive systematic review of hybrid pedagogical models integrated with the sport education model. *PLoS ONE*, 19(12), e0311957. DOI: 10.1371/journal.pone.0311957.

Zhang, Z. ve Huang, X. (2025). Analysis of physical education teaching and prediction of students' sports performance based on artificial intelligence algorithms. *Proceedings of SEML 2025 Symposium: Machine Learning Theory and Applications* içinde (s. 124-130). DOI: 10.54254/2755-2721/2025.TJ22250.