Application of Language Planning in Jordan

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Abstract

This study explores the current linguistic situation in Jordan, focusing on the Arabic language and identifying significant linguistic challenges such as the youth's declining proficiency, the dominance of English in higher education, and the lack of standardized Arabic in official documents. By analyzing historical and contemporary language planning efforts, including ancient Arabic models and current initiatives in Jordan, the study aims to comprehensively understand the linguistic reality and propose a future vision to enhance and develop the Arabic language. The study employs a descriptive-analytical method, historical analysis, case studies, and foresight to achieve its objectives. The recommendations emphasize integrating artificial intelligence (AI) into language planning to address these challenges effectively, using AI technologies for educational tools, research and development, international collaboration, and supportive legislation.

Keywords: AI, Language, Jordan, Language Planning, Policy Making.

Introduction

The field of language planning emerged in the early 1950s to highlight the role of language in nation-building after the successive stages of colonialism experienced by Third World countries. Haugen noted that the first to use the term language planning was the scholar, Weinreich, as a title for a symposium held at Columbia University in 1957. However, Haugen was the first to use this term scientifically in his 1959 article, The Planning of the Standard Norwegian Language, referring to the efforts of Norwegians to make the Norwegian language express the national identity. Language planning primarily focused on systematically addressing the linguistic problems resulting from the erasure of linguistic and national identities of some colonized countries, where English and French languages replaced national languages, distancing them from performing their linguistic functions. In the 1970s, efforts shifted towards institutionalizing planning, where international and national institutions began supervising the process of developing plans for language growth, development, and the selection of widely spoken languages for trade and international relations (1). The relationship between humans and language has led to an interest in language planning to solve linguistic problems in various countries. This, in turn, led to the development of language planning

as a field with its policies, principles, and different beneficial domains. This study aims to explore the current linguistic situation in Jordan, specifically focusing on the Arabic language. It identifies major linguistic problems at various levels, such as the youth's decline in Arabic language proficiency, the dominance of English in higher education, and the lack of standardized Arabic in official documents. The study provides a comprehensive analysis of the linguistic reality, highlighting areas that need improvement. It also analyzes historical and contemporary language planning efforts, including models of language planning among ancient Arabs and current efforts in Jordan. The study presents a future vision to improve the linguistic situation in Jordan and proposes solutions to develop and activate language planning on the ground. The study seeks to comprehensively understand the linguistic reality in Jordan and provide solutions and future visions to improve and expand the reality, serving the Arabic language and enhancing its status in society. Therefore, the study tries to answer how language planning initiatives in Jordan can enhance Arabic proficiency among the youth particularly in higher education, what impact Arabic language planning has on preserving local dialects and minority language in Jordan, how these efforts can be strengthened, how socio

-political factors, such as legislative efforts and government policies, influence the promotion and preservation of Modern Standard Arabic in Jordan, and how integrating Artificial Intelligence (AI) into language planning improves Arabic language education and standardization in Jordan. The study explores several dimensions of language planning in Jordan. It focuses on the impact of language education programs in schools and universities and the development of educational resources in Arabic. The study also examines the socio-political influences on language use, emphasizing government-led efforts such as the Arabic Language Protection Law of 2015 and the role of media institutions in promoting Modern Standard Arabic. Finally, the study incorporates a forward-looking dimension by investigating the integration of Artificial Intelligence in language planning and how AI tools can enhance Arabic language documentation, education, and standardization.

Methodology

The study employed research methods and procedures to analyze the linguistic reality in Jordan and propose a future vision for its improvement. It utilized the descriptive-analytical method to describe and analyze the current linguistic situation in Jordan. Data and information regarding linguistic issues and current language planning were collected by reviewing previous studies and analyzing official documents and statistics related to linguistic reality. This included the Arabic Protection Law of 2015. Additionally, the historical method was used to review models of language planning among ancient Arabs. This involved examining Arabic heritage and analyzing historical language planning models by referring to historical books, literary texts, and heritage documents. A content analysis method was also employed to examine Jordan's language planning policies, specifically those related to Arabicization in schools and higher education and institutional efforts promoting Arabic in public and private sectors. The research also adopted a case study approach, focusing on critical institutions like the Jordan Academy of Arabic. This case study evaluated the Academy's role in standardizing terminologies and developing language policies to enhance the status of Arabic, including initiatives like the Dictionary of Public Life Terms in Jordan. Moreover, the study employed the foresight method to develop a future vision for improving

the linguistic situation. It predicted the potential development of language planning while integrating artificial intelligence.

Results and Discussion
The Nature of Language Planning

Language planning is a branch of sociolinguistics, a developing field that views language as a social resource. This discipline studies the relationship between language and society and how they influence each other. Haugen defined language planning in 1959 as "the activity of preparing writing, codifying it, and establishing rules and model dictionaries to guide individual writers in a linguistically heterogeneous society." Similarly, Rubin sees language planning as addressing issues involving specific political, educational, social, or a combination of activities aimed at systematically changing the written or spoken system (2). Cooper (1989) explained language planning as "the exchange of scholars' efforts to develop people's behaviors while considering the acquisition of correct linguistic structures, the functional roles of their language laws, and that planning should take place within the context of social speech" (3). However, his definition was not comprehensive and was further expanded by Blommaert, stating it encompasses all situations where those in authority attempt to shape the sociolinguistic landscape of their communities. He described it as implementing a language policy resulting from deliberately creating linguistic forms (4). Fishman, the founder of sociolinguistics, grew up in a family committed to preserving the Yiddish language, spoken in Europe and Russia with Hebrew letters. He was deeply concerned with reviving this language and believed that minority languages could play a complete role alongside more widely spoken languages. He expanded the vision of language planning, describing it as the systematic pursuit of linguistic problems and finding solutions at the national level through purposeful activities, including the formulation or use of languages or both (2). Scholars continued to clarify the nature of language planning. Weinstein defined it as governmental, authoritative, long-term, and conscious efforts to solve communication problems using auxiliary resources and making complex decisions. An example is the Berber language in Algeria, which President Bouteflika recognized for its various functions and variables

in planning. Ronald Wardhaugh stated that language planning is part of nation-building, with a clear trend in the modern world to make language and nation synonymous (5). Thus, it is evident that language planning is an integrated system involving the efforts of sociologists, educators, politicians, linguists, and economists. It is a branch of sociolinguistics that addresses linguistic problems, whether purely linguistic, such as generating vocabulary to meet contemporary demands, updating the linguistic system, and developing lexical material, or non-linguistic issues related to language use, finding solutions to these problems. It is a means of unifying the nation intellectually and politically, with its importance extending from expression to change. Language planning involves actions by international organizations to develop and disseminate human communication languages. A key topic in this field is creating scripts for unwritten languages, such as some unwritten African languages still used orally without a written system. An example is the Berber language in North Africa, which has no specific writing system but has been orally transmitted. When a state formalizes a written system for such a language, it falls within the scope of language planning. Updating the linguistic system includes efforts by countries and Arabic language academies to develop terms in fields like computing or any modern scientific field, expanding the regional spread of a language.

Objectives of Language Planning

The main objectives of language planning include determining the appropriate linguistic usage for a linguistic community, such as the case in China, where writing has a lexical nature, and the written linguistic unit represented by a single character is the word. The structure of Chinese writing is symbolic, with complex forms, and using a symbol for each word adds significant difficulty to communication. Language planners developed a symbol for each syllable instead of a word. Another example is India, where the government found multiple languages and made English the official language of the Indian government, requiring all Indians to learn it. Studying the available linguistic options for the linguistic community means that a language planner might find it difficult to use certain terms in a specific language, providing solutions to simplify them. For instance, Arabic terms that entered the Romanian language

through Turkish, such as kayf, were adapted for chef. Additionally, providing recommendations for language policies that a linguistic community might adopt is another objective, such as in the 1920s when Atatürk abolished using the Arabic alphabet for writing Turkish and replaced it with the Latin alphabet. This decision was part of a comprehensive program to distance the Arabic language and alphabet and Islam from Turkey, focusing on secularism and reshaping Turkish identity to prioritize Turkey. Similarly, the Stalinist decision in the Soviet Union abolished the use of the Arabic alphabet, which was used until the 1920s, for writing the languages of the Muslim republics of Central Asia, replacing it with the Latin alphabet (6). Another essential objective is encouraging a sense of national unity among collaborating groups, where language has become the primary expression of national sentiment, and language planning has become part of the nation's structure. Clear trends in the new world make language and nation synonymous, meaning that the nation takes its name from the unified language. For example, the unity of the Arab nation and its single national sentiment is due to the unity of its language. Enhancing communication between peoples to develop and spread human contact languages is also crucial, as learning a second language helps spread that nation's language. For instance, learning English in Jordan or using English in Singapore and the Philippines for educational and commercial purposes (5). Another key objective is addressing linguistic problems by obliterating some colonized countries' linguistic and national identities. Major languages like English and French replaced national and local languages. A prime example is France's obliteration of the Arabic language in Algeria, replacing it with French, thereby excluding Arabic from its expected functions. Highlighting the role of language in nation-building post-colonial stages in Third World countries is essential. For instance, after Syria gained independence from French rule, Arabic was imposed in all state apparatuses, Arabizing terminology was used in university textbooks, and Arabic became the language of instruction in schoolbooks and all official and everyday domains. Developing the writing system and creating scripts for unwritten languages is necessary. There is an urgent need to review writing systems after use.

Modern English, for example, developed from Anglo-Saxon, the Old English language. Likewise, creating scripts for unwritten languages like the Berber Tamazight language in Algeria, officially recognized by the Algerian president, requires language planners to develop a script for that language. Conducting scientific and cultural studies on selecting the language of instruction and translating literary works is also essential. This includes adopting an appropriate language for scientific and cultural exchange to make the language a tool for intellectual and scientific creativity. For instance, Catalan in Spain has an ancient history that was nearly extinct by the late 19th century. Still, some thinkers and poets succeeded in reviving it through literature in the context of the Catalan Renaissance movement. Moreover, modernizing the linguistic system by publishing and developing lexical material and words to suit contemporary requirements, known as linguistic generation, is crucial. For example, the word ḥāsūb was coined from the root ḥasaba to fit the technological era, and the term al-ḥawsaba was introduced in the field of computing (7). Finally, evaluating and correcting existing language plans is necessary to modify them for a specific linguistic community. The language planner evaluates and corrects them for improvement. If a writing system is deemed difficult after evaluation, planners make it easier. For instance, teaching Arabic used to start with letters, then words, and then syllables. Nowadays, children begin with pictures, then sentences, words, and syllables, ending with letters.

Principles of Language Planning

The critical components of language planning involve the politically endorsed language choice among the available options, selecting the languages that can be considered national and those that can be widely spoken global languages. The choice of a language for a community depends on political and national factors related to the community and the functions the language serves for the community. Decision-makers must select the language or languages to be planned before forming the language policy. Language choice is influenced by two factors: the unity of the nation, meaning a single-nation state, and the diversity of nationalities, meaning a multi-national state. These two types of nations differ in making the language choice easy, straightforward, lasting, and

acceptable to all constituent groups of the country. Fishman outlined six attributes of language choice, each with three categories. The first category includes nations that choose a unifying language in a linguistically complex area, such as the use of English in Western Cameroon. The second category encompasses nations with one original language and a literary heritage but using a language inherited from political colonization. An example is Tanzania, where Swahili has a literary heritage, but the Tanzanian people use the colonial language, English. The third category includes nations with many languages, each with a literary heritage. In this case, the principle of compromise is applied to choose one of these languages as the national language. An example is India, where there are many local languages, but the national language is Hindi. The six attributes of language choice, as outlined by Fishman, are the existence of traditions, recognizing the historical and cultural traditions associated with a language; reasons for choosing a national language, the factors motivating the selection of a language as the national language; reasons for using a global language, the factors motivating the use of a widely spoken international language; scope of language planning to be implemented, whether it involves language standardization, the presence of multiple language forms in the community (the glossier), or language modernization; bilingualism as an acceptable goal for the nation, considering bilingualism as an acceptable objective for the country; and biculturalism as a goal for the nation, considering biculturalism as an objective for the nation (8).

Nation's Language Policy

Language planning encompasses a range of activities in two complementary directions: language status planning and language corpus planning. Language planning is defined as governmental political decisions that involve a conscious intervention in a language or one of its variants and its use, aiming to achieve specific language objectives within the state or region. This intervention may focus on its position or status, known as language status planning. This definition alters the customary status of the language or its variants (dialects) and the rights of its users. Examples include the Circassian language, the Jordanian dialect in Jordan, Syriac in northeastern Syria, and Kurdish in Turkey. During the Persian

era, Aramaic became the lingua franca (9). The attempt may also focus on the internal conditions of the language, referred to as corpus planning, which seeks to develop a language or its variants by making it a standardized language in the state. Consequently, corpus planning may address issues such as creating the writing system. Corpus planning is essential in countries like Pakistan, India, and Israel. For example, in India, the diversity of languages prevented their use as official languages, leading to the adoption of English. Corpus planning also deals with technical educational needs concerning governmental activities and technical processes (10).

Linguistic Integration and Other Sciences: Sociology, Economics, and Politics

It is important to note that the language planning field results from the concerted efforts of sociologists, economists, educators, anthropologists, linguists, and political scientists. Language planning is an integrative discipline that involves all the human sciences because it deals with language, a heritage shared by everyone and not owned by anyone. Therefore, the collaboration of various sciences is essential for the success of language planning initiatives.

The emergence of language planning coincided with advances in social and economic sciences, influencing language planners, particularly in developing and modernizing economically, socially, educationally, culturally, scientifically, and linguistically underdeveloped countries. It is unsurprising to observe this integration among sciences, as their focus is the human being, who cannot do without a language to express thoughts, needs, culture, and civilization (1).

Alignment between Language Policy and Language Choice and their Evaluation

We observe that language policy and language choice are the main components of language planning. When we formulate the language policy and choose the language, language planning begins based on these two components. The primary aspect of language planning is evaluating the directed planning policy after the plan is put into practice to implement the necessary changes. Unfortunately, evaluation is often ambiguous and occurs late in the process, affecting the scope of

planning progress in the future. For example, reviewing the writing system is necessary after a specific writing method has been practiced for a long time. Additionally, linguistic vocabulary needs periodic development, and classical languages require improvement and expansion for broader use than they had previously. Similarly, in other fields, such as higher education stages, it may become necessary to make certain changes in a language after specific planning processes to facilitate printing (11).

Language Planning Policy

Language policies are formulated, organized, developed, and implemented. Fishman and Ferguson (9) notes these are the four stages of any language planning policy.

Formulation: This process involves scrutinizing and making decisions about it. The literature in the field mentions several social, economic, and political factors that play a role in the formulation and outcomes of language policy. However, there has not been sufficient research on the actual process of language policy formulation. The primary political factor in formulating language policy is the objective with which an entity, such as a nation, formulates its language policy. Most of the research on the political factors of language policy formulation has been conducted in Africa. For instance, in East Africa, studies have addressed language policy formulation in Tanzania concerning the development of Swahili political culture. In Kenya, the government sought assistance from educational and religious organizations to formulate a policy to develop a national Kenyan culture free from tribal, colonial, or religious affiliations.

Codification: This process occurs after the formulation of the language policy and refers to the technical preparation and organization of the decided policy. Codification involves more than just mechanisms for implementing the policy; it means paying attention to the feelings, attitudes, loyalties, practices, and preferences of the decision-makers and policy recipients. When organizing a language policy, the language planner must remember that people in modern linguistic communities want their language to be more than just elegant, polite, pliable, and easy to use—they want it to reflect who they are and who they will be.

Elaboration: Developing a language policy involves expanding the agreed-upon languages or writing systems to cover all activities envisaged for use. Spelling must be detailed and accurate enough to accommodate new words and metaphors. The writing system must match available printing technologies, whether manual or graphical. The specific language agreed upon and organized must remain flexible to maintain its integrity and unity and continue to achieve policy goals. The language policy must also allow the language to be technologically adaptable and internally updatable, allowing the incorporation of new expressions and words for new ideas. Language academies or planning agencies typically manage the policy development process. Unlike formulation and codification, development continues as long as the policy is in effect. However, this process has not been extensively researched, leaving many questions unanswered. It is unclear who accepts or rejects newly proposed technical vocabulary, what words people perceive as new, how they distinguish foreign words from native ones, and the sources of modern vocabulary. Additionally, it is uncertain how a coordinated language policy meant to be unified varies when implemented in different contexts.

Implementation: Implementing a language policy is the process used to effect change in the language, allowing the achievement of policy goals. It involves implementing a plan to achieve a clear objective and requires legislation to implement the language policy successfully. The structure of the implementing bodies must be detailed. Language academies or language planning agencies implement language policies that make decisions about the direction of the language and policies and the form of development in a specific context. For example, three Arabic language academies—in Syria, Egypt, and Iraq—addressed policies necessary to develop Modern Standard Arabic. Each had the primary goals of preserving Modern Standard Arabic and reviving it as a unified, effective language for all Arabic-speaking peoples. Each attempted to curb the internal development of colloquial Arabic dialects and prevent foreign words from entering Standard Arabic. However, no one has effectively developed these policies while maintaining a language that meets contemporary needs. Society had to approve spelling, grammar, and vocabulary changes in each

case. Additionally, several language academies in Latin America, like the Royal Spanish Academy founded in 1713, aim to give status and stature to the national form of communication and education. These academies often endorse their official dictionaries, spelling, and grammar. Latin American academies followed the Spanish academy's model, involving literary and linguistic figures. Academies developed globally in countries like Colombia, Mexico, Chile, Guatemala, Peru, Ecuador, El Salvador, Panama, and Venezuela, and in the 1920s, in Bolivia, Costa Rica, Cuba, the Dominican Republic, Paraguay, Honduras, and Puerto Rico. Today, the Royal Spanish Academy is linked under the Association of Academies of the Spanish Language, with a permanent committee executing the association's decisions, coordinating activities, overseeing agreements, and monitoring language development. Implementing language policy depends on several factors, such as government support and interest from all government sectors, application and further research of scientific studies, facilitating the process of language teaching and learning using the latest methods and educational tools, and use of the language in both public and private sectors. Thus, language policy formation does not occur without explicit or at least implicit guidance from planning agencies or a language academy.

The Impact of Artificial Intelligence on Language Planning

Artificial Intelligence also affected language planning as it did in other fields. It has revolutionized language planning by providing generated, detailed, coherent scripts and enhancing language documentation and preservation. By leveraging AI-powered tools, linguists, researchers, and indigenous communities have found ways to document languages that exist primarily in oral forms, such as Automatic Speech Recognition (ASR) systems, which decode spoken language into written text, enabling the transcription of languages lacking a script (12). Additionally, the Indian government has utilized AI in its project of revitalizing minority and Indigenous languages through initiatives that include digitizing scripts of minority languages and creating digital resources for learning and teaching these languages, such as e-learning platforms and human-machine interfaces developed by the Department of Electronics and Information

Technology (DeitY) (13). Although DL approaches have revolutionized NLP for high-resource languages such as English, Arabic is still in its infancy (14). In Arabic, AI technologies have begun to address some of these challenges by facilitating Arabic language processing, including tasks like reading, spelling, summarizing, translating, and analyzing. However, the inherent complexity of Arabic, including its rich morphology, syntax, and various dialects, poses significant challenges (15). However, it is far beyond English since it is considered a lingua franca, leading to a greater focus on developing Arabic NLP and enhancing AI's ability to process and understand the language more, as AI tools can process a considerable amount of Arabic vocabulary (15). One of the applications related to the Arabic language is Nabiha, an AI chatbot designed to converse in the Saudi Arabic dialect. It serves IT students at the university, answering their academic inquiries and providing support on various platforms, including Android, Twitter, and the web. Nabiha was evaluated for its usability and received positive feedback for its conversational abilities and helpfulness (16). Investing in developing educational and technological applications in Arabic is also essential to facilitate the learning and use of the language in various fields. A key aspect is using artificial intelligence technologies to analyze and develop Arabic, including improving machine translation and developing machine learning programs to enhance language skills. The integration of artificial intelligence in language planning can be viewed through Fishman (17). In the formulation stage, AI provides data analysis that helps policymakers decide on linguistic data and trends, ensuring language policies are responsive to current language trends and changes. In the codification stage, AI technologies aid in preparing language sources and facilitating accurate language documentation. In the elaboration stage, AI technologies continue developing language derived from different sources and social contexts. Finally, in the implementation stage, AI-driven applications help promote these language policies, making them more effective.

Language Planning Application in Jordan

Language planning in Jordan plays a crucial role in enhancing national and cultural identity,

improving education, and fostering social communication. Abd al-Haqq highlights the importance of language planning, which encompasses various strategies and policies to organize and develop language use in society. For instance, one of the critical focuses of language planning in Jordan is Arabicizing curricula at all educational levels. This aims to promote using Arabic as the language of instruction and teaching, contributing to preserving cultural and national identity. However, the process of Arabicization requires legislative support to make political decisions and develop the process (18). Efforts are also made to develop educational resources in Arabic, such as textbooks and digital educational materials, to encourage authorship in Arabic curricula for specialized purposes. This ensures the quality of education and enhances the use of Arabic among students and teachers. Arabic is a language of existence, a symbol of identity, a unifying factor, and a global communication tool. An individual's strength is derived from their language, enabling good expression and understanding by the recipient (19). Language legislation is essential to preserve the integrity of the language when put into practice (20). Thus, the Jordanian government has organized awareness campaigns to promote the use of Modern Standard Arabic in various aspects of life and issued the Arabic Language Protection Law of 2015. This law includes legislative provisions to protect Arabic and regulate and promote its use in government, private institutions, and the media (21). Efforts include promoting the use of Modern Standard Arabic in official, educational, and media institutions (22) and encouraging the translation of official documents and laws into Arabic to ensure information is accessible to everyone in their native language. Additionally, there is a focus on monitoring the implementation of language legislation, removing obstacles to their application, developing flexible language policies that adapt to changes and needs, and adjusting them according to emerging requirements (21). Media institutions play a vital role in language planning and should operate within a clear language plan. This includes encouraging and supporting media production in Arabic, such as television and radio programs and digital content, which helps to promote Arabic as a daily communication language and strengthens cultural ties. Organizing festivals and cultural

events that focus on literature and the arts in Arabic, such as the Reading for All Festival and the Arab Theater Festival organized by the Ministry of Culture, helps to enhance cultural and linguistic awareness. Furthermore, it is crucial to establish and support research institutes and centers that focus on studying and developing Arabic, such as the Jordan Academy of Arabic. This institution monitors language development and formulates appropriate language policies. It also encourages scientific research and academic studies in Arabic, publishes them in Arabic scientific journals, and provides financial and educational support to researchers in this field (23).

The Jordan Academy of Arabic: The Jordan Academy of Arabic plays a pivotal role in language planning in Jordan, striving to enhance and protect the Arabic language through various activities and initiatives. First, the academy develops strategies for creating dictionaries and documenting linguistic phenomena. For instance, it established the Dictionary of Public Life Terms in Jordan in 2006 (24), which includes terms used in everyday life in Jordan, collected and categorized by specialized committees according to their uses and meanings. Additionally, the academy updates terminology by creating specialized dictionaries in various scientific and literary fields to document the language and provide a reliable reference for researchers, students, and academics. One of its initiatives in this domain is the Language Resource Project in Jordan, which, in its second phase (the spoken phase), involved collecting and documenting the vocabulary used in Jordan, studying the words and their meanings, and assessing the linguistic skills of elementary school students to promote the use of Arabic (25). The academy also formulates policies and laws to protect Arabic from foreign influences and neglect. This includes regulating the use of the language in government institutions, media, and business. The academy puts significant effort into Arabicizing curricula in schools and universities by preparing and developing new scientific and technical terms that align with modern scientific and technological advancements. It works on standardizing and using these terms in educational curricula, media, and scientific research (26), reducing the linguistic gap between Arabic and scientific progress. Moreover, the academy encourages linguistic research and studies on the Arabic language,

including its development, history, and various uses. It provides financial and academic support to researchers and academics in this field (27). The academy also organizes training programs and workshops for teachers and scholars to enhance their Arabic language skills and teaching methods. It develops curricula that meet modern educational needs and has overseen the translation and publication of essential health science books for university levels in the Arab world (28). Additionally, the academy holds scientific and cultural conferences and seminars that bring together researchers and specialists in Arabic worldwide. These events aim to exchange knowledge and experiences and strengthen research cooperation (27). The academy seeks to enhance cooperation with linguistic and cultural institutions regionally and internationally, participating in projects and initiatives to promote and disseminate the Arabic language globally. It collaborates with media institutions to ensure the correct and proficient use of Arabic in various media platforms, offering advice and guidance to journalists and editors on proper language use. One notable initiative is the Dhād initiative, launched in collaboration with the Crown Prince Foundation to enhance the status of Arabic and develop its content on digital platforms. This initiative aims to preserve the Arabic language and work on its development in modern contexts, including creating digital content and educational resources. This initiative holds and organizes several projects, including establishing a center for Arabic language studies and a center for Arabic calligraphy and orthography. This collaboration also focuses on developing digital applications and tools to aid in teaching and learning Arabic and organizing workshops and training programs for educators and linguists to enhance their skills in Arabic language instruction. It includes various activities and events such as creative writing, linguistic editing, drawing, and workshops focused on using artificial intelligence in language processing. These workshops aim to foster a deeper understanding and appreciation of the Arabic language among students and educators, ensuring its continued relevance and application in contemporary settings (29).

The Jordanian National Committee for Advancing Towards a Knowledge Society, part of the Academy of Arabic Language, is dedicated to protecting and

promoting the Arabic language, recognizing it as the foundation of the nation's civilization and culture. Since its establishment, the committee has launched several significant projects addressing various aspects of language advancement. These projects include the Media Awareness Project, which develops linguistic awareness through television programs, seminars, workshops, and written media, and the project for Compiling Selections from the Best of Arabic Heritage in Poetry and Prose, which aims to create a series of graded books showcasing the richness of Arabic heritage. Additionally, the committee focuses on advancing Arabic in general education with a specific project for elementary and secondary education, forming expert committees to study and enhance the language's role in education. Another notable initiative is the Arabic Language Proficiency Exam, designed to select the best candidates for language-centric professions and identify recurring weaknesses to improve teaching methods. This exam, similar to the TOEFL exam, is a mandatory requirement for individuals aspiring to secure governmental jobs or continue their studies in higher education institutions to ensure proficiency in Arabic as a national language and a medium of communication in Jordan. The committee's efforts also extend to modernizing educational curricula, contributing to the Arabization of sciences in universities, and enacting legislation to protect and develop the use of Arabic in media, advertising, and online platforms. Through these diverse and comprehensive projects, the committee works tirelessly to ensure the Arabic language's prominence and relevance in various facets of life (29). Due to the rapid development of artificial intelligence (AI) and its impact on language, the Jordan Academy of Arabic initiated several projects as a response to integrating AI into language preservation and enhancement efforts. Starting with the forming of a permanent committee in the academy Arabic Language and Information Technology Committee in 2009 to go along with the continuous technological developments, the publication of a guide for Arabic language computing research, the guide for Arabic in media and communication, and Arabic Language as a medium on the internet and mobile phones (29), and the recent first Jordanian international conference of Arabic Language in the age of

Artificial Intelligence in 2023, which mainly recommended the integration of artificial intelligence applications in Arabic language education, similar to their usage in other languages, the establishment of a comprehensive generative model for Arabic language, and conducting more research in this field. Through these roles and initiatives, the Jordan Academy of Arabic significantly contributes to enhancing the status of the Arabic language, preserving its heritage, and developing it to meet modern-day requirements such as artificial intelligence.

The Ministry of Education: Plays a crucial role in promoting the Arabic language and its use through various initiatives and educational levels. One of its critical efforts is raising awareness about the importance of Arabic. This includes issuing official books to educational administrations to emphasize the significance of the Arabic language, using school radio and theater to enhance its status, and preparing unique materials to foster care for the language (30). The Ministry also develops curricula to align with the standards of Modern Standard Arabic and revises textbooks to correct linguistic errors. In addition, it works on developing digital curricula and television programs by incorporating modern teaching strategies using educational technologies, thereby creating computer-based lessons for teaching Arabic. The Ministry has activated digital curricula through the e-learning platform (31). Regarding educational activities, it organizes competitions such as the Top Students Competition and the Literary Creativity Competition to promote Arabic. Moreover, it collaborates with public and private sectors to disseminate promotional messages in Arabic. It organizes conferences and workshops on the importance of the Arabic language and skills for its use. For instance, in line with Jordan's membership in UNESCO since June 14, 1950, and according to Article 7 of the UNESCO Constitution, the Jordanian National Committee for Education, Culture, and Science was established. This committee, which falls under the Ministry of Education and is chaired by the Minister of Education, plays a vital role in implementing UNESCO's goals and expanding its influence. Established under Regulation No. 66 of 1993, issued under Article 120 of the Jordanian Constitution, the committee represents a collaborative effort involving the government and

various national bodies dedicated to education, science, and culture. This ensures effective participation in UNESCO's activities and encourages the engagement of Jordanian intellectual and scientific communities in these initiatives (32). Moreover, the Ministry of Education, in collaboration with the Ministry of Digital Economy and Entrepreneurship, the National Curriculum Development Center, and the World Bank's Youth, Technology, and Jobs project, aims to develop a new digital skills curriculum for public school students and train teachers in STEM subjects to ensure the effective integration of digital skills into the teaching process (33). Additionally, the Ministry focuses on examinations and assessments by analyzing national test results to identify and correct linguistic errors. It has established specialized teams to monitor the implementation of remedial plans and improve students' language performance. For evaluation and monitoring, the Ministry conducts periodic studies on the use of Arabic in schools and organizes field visits to ensure the use of Modern Standard Arabic. Regarding editing and proofreading, the Ministry has created a department to ensure that official texts and documents are accessible from linguistic errors (30). Through these efforts, the Ministry of Education significantly advances the Arabic language, ensuring its proper use and fostering a deeper appreciation for its cultural and educational value. Looking at the application of language planning from the lens of Fishman's model, the case of language planning in Jordan shows a structured and adaptive approach. In the formulation stage, Jordan's language policies are made within the nation's socio-political context, emphasizing promoting and preserving Arabic within linguistic diversity. An example of this is the establishment of linguistic corpus projects and the development of different daily-life dictionaries. In the codification stage, the Jordan Academy of Arabic standardizes language resources to reflect Jordanian society's linguistic identity. The elaboration stage involves expanding and promoting these policies in all life sectors, including education, media, and technology. In this stage, AI plays a role by enabling the creation of different language resources and incorporating new technological terms that align with society and the future. Finally, in the implementation stage, different AI-driven tools, e-learning tools, and other language processing tools enable the promotion and application of these policies.

Language Planning and National Identity

In Jordan, language planning is crucial in preserving and reinforcing national identity. Modern Standard Arabic (MSA) is integral to Jordan's cultural and linguistic identity, as it is the official language in education, government, and media. However, with the spread of globalization and the use of colloquial Arabic and English, especially in media and education, MSA started facing a severe challenge in its retreat and the dominance of colloquial Arabic and English (34). In response, different trials were held to safeguard MSA; the most prominent is the 2015 Arabic Language Protection Law, which strictly requires using MSA in education, media, legislation, government, and the private sector. Moreover, if any foreign language is to be used, it must be accompanied by an Arabic translation. This ensures the prominence of the Arabic language in Jordan and that it will not be replaced with another language or the colloquial language that causes the MSA to retreat. This also strengthens the role of Arabic in the globalized world as any other dominant language. Additionally, the Jordanian government maintains a delicate balance between MSA and Jordanian Arabic, with MSA used in formal settings and Jordanian Arabic used in non-formal ones since Jordanian Arabic is considered a significant part of Jordan's culture and national identity, which differentiates Jordanians from other Arab-speaking countries, different projects, such as the dictionary of everyday life terms created in 2006 (35), conferences such as the Jordanian Arabic Academy's 33rd cultural conference which discussed Arabic dialects and their role in everyday life were established to preserve the Jordanian dialect identity. Jordan also hosts a diverse range of minorities, including Circassia's, Chechens, and others who have a long history of maintaining their language and culture. However, Arabic, as an official language in Jordan, is also perceived by these communities as a symbol of identity that unites people in Jordan (36). This shows that even minorities, despite preserving their native language, aim to protect the national language that they use in education. Thus, while

Jordan's language planning efforts focus on preserving Modern Standard Arabic as a critical element of national identity, they also recognize the importance of Arabic varieties and how minorities are also preserving both their native and national language, which reflects their heritage identity and Jordanian national identity. This leads to a cohesive national identity that promotes cultural diversity under the umbrella of one language.

Recommendations for Policymakers, Educators, and Language Planners, Including AI Integration Language Planning in Jordan

Policymakers, educators, and language planners can make several concrete and actionable recommendations to address the current linguistic reality and the challenges facing MSA and language planning in Jordan. These recommendations include traditional approaches, the integration of AI into language planning, and promoting the use of Arabic in the globalized world. First, revising educational curricula is crucial to prioritizing MSA. Schools and universities should allocate more instructional time and resources to ensure students develop a strong command of MSA for use later in different life aspects. Additionally, educators should be provided professional development to train them in modern pedagogical strategies to engage students with Arabic. This necessitates the development of advanced educational tools and applications. Linguists, educators, and researchers should collaborate to create intelligent educational AI-based learning programs that enhance Arabic language acquisition, including interactive applications designed to improve language skills at all levels. These tools would benefit schools and universities by offering innovative approaches to teaching Arabic in an interactive, engaging way. These applications should also reflect the identity of Jordanian Arabic culture. Second, increasing investment in research and development in AI and language is essential. Institutions should provide scholarships and financial support for research projects focused on Natural Language Processing, machine translation, and other technologies to improve Arabic text processing and global content. This includes creating extensive linguistic databases that contain the complexities of Arabic, such as making a dictionary of Arabic proverbs and

their origins and standardized Arabicized terms in different scientific fields to be disseminated to all Arabic Language Academies, governmental and non-governmental institutions, and educational institutions to abide by. In addition to that, these databases should be integrated into AI models and updated to better understand Arabic as in English. More partnerships should be formed with international universities and research institutions experienced in AI to exchange expertise and knowledge in AI and Arabic language applications. Moreover, conferences and workshops should be organized to bring together researchers and experts to discuss the latest developments and challenges in applying AI to the Arabic language. Language policy making should also be strengthened. Language legislation should be applied to the public and private sectors to ensure their compliance; this can be done through regular assessments to help maintain MSA's presence in media, advertising, and other public platforms. Moreover, specialized institutions should formulate governmental policies that encourage the integration of AI in language planning and protect the Arabic language. They should also conduct regular assessments to evaluate the effectiveness of these policies and adjust them based on findings to ensure they meet their intended goals. To complement these efforts, public awareness campaigns should be launched to highlight the cultural importance of MSA; specialized institutions should also launch awareness campaigns to educate the public about the benefits of using AI to improve the Arabic language. Supporting minority languages is also essential for ensuring linguistic diversity. Policymakers should implement bilingual education programs for minority communities, which help to promote both the native and national languages, reflecting a more unified linguistic heritage of these communities. By implementing these recommendations, Jordan can significantly enhance the integration of AI in language planning, thereby improving the linguistic landscape and strengthening the status of the Arabic language across various sectors.

Conclusion

In conclusion, integrating AI into language planning in Jordan presents a promising opportunity to address the significant linguistic challenges. Jordan can significantly improve its

linguistic landscape by developing advanced educational tools, supporting research and development, fostering international collaboration, enhancing academic and media institutions, implementing supportive legislation, and raising public awareness. These measures will strengthen the Arabic language's status and ensure its continued relevance and vitality in the modern world. The successful implementation of these recommendations will enhance the role of the Arabic language in education, media, and daily life, ultimately contributing to the preservation and promotion of Jordanian national and cultural identity.

Abbreviation

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