Arabs without Arabic: A Spatio-Temporal Model of Language Attrition and its Implications for National Security

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ABSTRACT

This paper challenges the classification of the Arabic language as 'secure' by mainstream language vitality indices. We argue that such assessments, focused on static metrics like speaker numbers, overlook the dynamic and corrosive processes of language attrition driven by globalisation and linguistic hegemony. We introduce a novel Socio-Political-Historical (SPH) framework that integrates Pierre Bourdieu's theory of linguistic capital and Antonio Gramsci's concept of hegemony to analyse the decline of Arabic's socio-economic prestige. Based on this framework, we develop a predictive mathematical model that quantifies the rate of Arabic language attrition across 22 Arab states over a 100-year period (2024-2124). The model forecasts an accelerating decline, particularly in the peripheries of the Arab world, pushing the average status of the language below a critical viability threshold. We argue that this linguistic erosion constitutes a first-order threat to Arab national security, potentially leading to societal fragmentation and conflict, mirroring the Balkanisation of the former Yugoslavia. The paper concludes by proposing a comprehensive policy framework for language revitalisation, structured around governmental regulation, educational reform, and the strategic projection of linguistic soft power, arguing that such measures are a strategic imperative for the future of the Arab world.

Keywords: Arabic language, language Attrition, National Security, Balkanisation, language Revitalisation, linguistic erosion, Arabs, Socio-Political-Historical (SPH) framework.

INTRODUCTION

The contemporary status of the Arabic language presents a profound paradox. On one hand, global language databases such as the UNESCO World Atlas of Languages and Ethnologue classify Arabic as a "living and powerful language," secure from the threats of obsolescence or extinction. This assessment is predicated on robust, quantifiable metrics: an estimated 400 million speakers, official status in 22 nations, and its role as the liturgical language for over a billion Muslims. On the other hand, this research posits a countervailing and more alarming thesis: that the Arabic language is, in fact, "engulfed in a tumultuous sea of threats," the repercussions

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of which extend beyond mere linguistic concerns to endanger the very fabric of Arab societies.

This paper argues that the primary threat to Arabic is not one of imminent extinction, a fate reserved for languages with dwindling numbers of elderly speakers, but rather a process of gradual yet accelerating attrition. This attrition manifests as a progressive decline in the language's functional domains, social prestige, and perceived utility, particularly among younger generations and within the spheres of economic and scientific advancement. The erosion is subtle but pervasive, constituting a challenge that is not captured by the static, synchronic assessments of conventional language vitality indices. The central argument of this paper is that this linguistic attrition is not a peripheral cultural issue but a first-order challenge to Arab national security and the future cohesion of the Arab identity. For millennia, the Arabic language has served as a "historical chronicle and a repository of identity, simultaneously shaping and preserving it". Its decline, therefore, threatens to dissolve the fundamental bonds that unite disparate Arab communities, creating a vacuum that may be filled by resurgent sub-nationalisms and centrifugal forces, with potentially catastrophic consequences analogous to the violent disintegration of the Socialist Federal Republic of Yugoslavia.

To substantiate this claim, this paper undertakes a novel, multi-stage methodological approach. First, it provides a systematic critique of existing language vitality models, demonstrating their inadequacy in capturing the dynamic nature of the threat to Arabic. Second, it proposes a new theoretical lens—the Socio-Political-Historical (SPH) framework—that integrates sociological and political theory to provide a more holistic assessment of language vitality. Third, based on this framework, it develops and explains a predictive mathematical model designed to quantify the rate of Arabic language attrition both spatially and temporally. Fourth, it analyses the model's projections over a 100-year horizon, identifying key trends and vulnerabilities across the Arab world. Finally, it moves from diagnosis and prognosis to prescription, outlining a comprehensive policy framework aimed at reversing the trajectory of decline. This paper, therefore, serves as an early warning, seeking to reframe the conversation around the Arabic language from one of cultural preservation to one of strategic necessity for the stability and future of the Arab world.

Theoretical Framework: Beyond Static Metrics

The discrepancy between the official classification of Arabic as 'secure' and the observable evidence of its declining prestige necessitates a fundamental re-evaluation of the tools used to measure language vitality. Conventional models, while valuable, are ill-equipped to diagnose the specific nature of the threat facing Arabic. Their focus on synchronic data and intergenerational transmission provides a static snapshot that fails to capture the underlying dynamics of socio-economic and political pressure that drive language shift over time. This section deconstructs the limitations of these models and proposes a new Socio-Political-Historical (SPH) framework designed to analyse the trajectory, rather than just the current state, of a language's health.

A Critique of Conventional Language Vitality Models

The two most prominent frameworks for assessing language status are the UNESCO World Atlas of Languages (WAL) and Ethnologue's Expanded Graded Intergenerational Disruption Scale (EGIDS). Both classify Arabic in their highest tiers of vitality. The UNESCO WAL deems Arabic a "living and powerful language" based on descriptive factors like its official status and vital factors like its large speaker base. Similarly, Ethnologue, using the EGIDS framework, classifies Arabic as a Level 1 "National" or Level 0 "International" language, categories designated as "Safe".

The EGIDS, an expansion of Fishman's seminal Graded the Intergenerational Disruption Scale (GIDS) is the industry standard for assessing endangerment.[1] It is a 13-level scale focused primarily on the extent to which a language is passed down between generations. A language is considered "Vigorous" (Level 6a) as long as it is "used for face-to-face communication by all generations and the situation is sustainable."[2] The critical tipping point occurs when it becomes "Threatened" (Level 6b), where intergenerational transmission begins to falter.[3] By this measure, Arabic appears robust, as it is still the mother tongue acquired by children across the Arab world.

The fundamental flaw in these models, however, is their neglect of the crucial historical, social, and political

dimensions that shape a language's long-term vitality. They function as lagging, rather than leading, indicators of language health. The faltering of intergenerational transmission (Level 6b) is a late-stage symptom of language shift; it is the result of a process that begins much earlier with the erosion of a language's prestige and utility in key societal domains.[4] The social, economic, and political forces that convince parents that another language offers their children a better future are the root cause of attrition. By focusing on the final stage of transmission, the EGIDS framework effectively measures the collapse of the building's structure while overlooking the preceding decay in its foundations. A truly predictive assessment must analyse these foundational drivers of decline.

A Socio-Political-Historical (SPH) Framework for Language Vitality

To address this gap, this paper proposes a Socio-Political-Historical (SPH) framework. This approach argues that a language's vitality cannot be understood as a static point but as a dynamic trajectory shaped by forces acting upon it over time. It integrates three dimensions of analysis: the historical context, the socio-economic environment, and the political power structures in which the language is embedded.

The Historical Dimension: Trajectories of Contraction

A language's present status is rendered meaningful only when contextualised within its historical trajectory. While international databases highlight the 22 countries where Arabic is currently an official language, they ignore the historical reality of its contraction. At its zenith under the Umayyad Caliphate around 750 AD, Arabic was the official language of administration and culture across a vast territory stretching from the Iberian Peninsula to Central Asia. Since then, three major waves of spatial contraction—triggered by the rise of the Abbasids and their more inclusive identity politics, the fall of Andalusia, and finally European colonisation—have dramatically reduced its domain.[5]

This historical decline has had catastrophic consequences for the language's reach. As shown in Table 1, the number of countries, or regions thereof, that used Arabic as an official language has decreased from 46 to 22, a reduction of more than half. The population of these 24 territories that have abandoned Arabic today exceeds one billion people—more than double the current population of the Arab world. This represents a historical loss of over two-thirds of the language's potential speaker base by 2018.[6] This empirical evidence of a long-term, large-scale decline provides a critical counter-narrative to the static "safe" classification and establishes a historical precedent for the current phase of attrition. It demonstrates that Arabic is not immune to the forces of language shift and that its current domain is a fraction of its former expanse.

Table 1: Historical Contraction of the Arabic Language

Current country	Population (2023)	Historical spoken language(s)	Time period
Afghanistan	40,172,400	Pashto, Uzbek, Central Asian Arabic	661–750
Armenia	2,994,400	Arabic, Armenian	661–750
Azerbaijan	10,367,000	Arabic, Azeri	661–750
Cyprus	875,900	Siculo-Arabic	661–750
France	65,273,510	Frankish, Latin, Vulgar Latin, Gaulish, Arabic	719–759
Georgia	3,723,549	Arabic, Georgian	661–750
Greece	10,423,056	Arabic, Greek, various others	824–961
Iran	85,328,143	Arabic, Persian	661–1062

Israel	9,513,048	Arabic, Hebrew	636–2018
Sicily	4,800,000 (approx.)	Siculo-Arabic, Byzantine Greek, Vulgar Latin	831–1091
Kenya	56,250,000	Omani Arabic, Yemeni Arabic, Swahili	1696–1856
Kyrgyzstan	6,593,000	Central Asian Arabic, Kyrgyz	651–750
Malta	516,449	Siculo-Arabic, Byzantine Greek, Vulgar Latin	831–1091
Niger	26,077,000	Classical Arabic, Hausa, Zarma	1804–1908
Nigeria	218,919,000	Classical Arabic, Hausa, Fula	1804–1908
Pakistan	225,189,187	Urdu, Central Asian Arabic	661–750
Portugal	10,355,506	Andalusian Arabic, Mozarabic, Medieval Hebrew	711–1139
Spain	47,354,268	Andalusian Arabic, Mozarabic, Medieval Hebrew	711–1492
South Sudan	11,193,729	Juba Arabic	1863–2011
Tajikistan	9,537,600	Central Asian Arabic, Tajik	661–750
Tanzania	63,573,000	Swahili, Omani Arabic, Yemeni Arabic	1696–1856
Turkey	85,678,326	North Mesopotamian Arabic	661–1517
Turkmenistan	6,209,300	Central Asian Arabic, Turkmen	661–750
Uzbekistan	34,913,983	Central Asian Arabic, Uzbek	661–750
Total Population	**1,031,031,354**		

Source: Compiled by study researchers, from multiple sources.

The Socio-Economic Dimension: Linguistic Capital and the Arab Marketplace

To understand the contemporary drivers of attrition, the SPH framework incorporates the sociological theory of linguistic capital, developed by Pierre Bourdieu. Bourdieu posits that language is not merely a tool for communication but a form of cultural capital—an asset that can be accumulated and exchanged for social and economic advantages within a given "marketplace".[7] Different languages and dialects possess different values, and individuals make rational choices to acquire and deploy the language varieties that offer the greatest return on investment.

The analysis of the business environment in the Arab world provides stark empirical evidence of the declining market value of Arabic and the corresponding rise in the linguistic capital of English. As detailed in Table 2, a comparison between the top 100 established Arab companies (the "parent generation") and the top 50 emerging Fintech companies (the "children generation") reveals a dramatic shift. While 70% of older firms use Arabic in their names, this figure plummets to just 6% for the younger, future-orientated firms. The trend is even more pronounced in logos and the language of internal operations: 98% of emerging companies require English for

senior management positions, compared to 79% of established firms.

This data is not merely a symptom of decline; it reveals the very engine of language attrition. When companies, particularly in high-growth sectors, signal through their branding and hiring practices that English is the language of opportunity and success, they are actively shaping the linguistic marketplace.[8] This creates a powerful feedback loop. The perceived superior linguistic capital of English incentivises individuals, especially young people aspiring to social and economic mobility, to prioritise English-medium education.[9] This, in turn, further devalues Arabic in the professional sphere, reinforcing the initial perception and accelerating the cycle of attrition. The choice to use English is not an emotional rejection of Arabic but a rational economic decision within a market that disproportionately rewards English-language skills.[10]

Table 2: Socio-Economic Indicators of Declining Linguistic Capital in the Arab Corporate Sector

Indicator	Parent Generation (Top 100)	Children Generation (Top 50 Fintech)
Use of Arabic in Company Name	70%	6%
Use of Arabic in Company Logo	80%	16%
Use of Arabic Letters in Name Spelling	64%	0%
English Proficiency Required for Senior Roles	79%	98%

Source: Compiled by study researchers, from multiple sources.

The Political Dimension: Linguistic Hegemony

The final dimension of the SPH framework addresses the question of why the linguistic capital of Arabic is declining relative to English. This requires an analysis of power, for which the framework employs Antonio Gramsci's concept of cultural hegemony.[11] Hegemony refers to the process by which the worldview, values, and norms of a dominant class become so deeply embedded in society's institutions and "common sense" that they are accepted as natural and inevitable, even by those who are subordinated by them.[12]

Linguistic hegemony is the application of this concept to language, where one language becomes dominant not through overt force, but by being associated with power, prestige, modernity, and progress.[13] The dominance of English and, to a lesser extent, French in the Arab world is a clear manifestation of this process.[14] Through colonial legacies and the contemporary forces of globalisation, these languages have become hegemonic. Their proficiency is framed as an essential prerequisite for access to global knowledge, higher education, and economic advancement. This is not a neutral, apolitical development; it is the result of historical power dynamics that have established a global linguistic hierarchy with English at its apex.[15]

This hegemonic pressure explains the devaluation of Arabic's linguistic capital. The "choice" to adopt English is made within a structural context where the rewards for doing so are immense and the penalties for relying solely on Arabic are increasingly severe. The educational systems in many Arab countries, which create a divide between elite, foreign-language private schools and Arabic-medium public schools, are a key institution for reproducing this linguistic hegemony, tying language to social class and perpetuating the cycle of attrition.[16] The SPH framework, by integrating these historical, socio-economic, and political dimensions, provides a comprehensive and dynamic model for understanding the true nature of the threat to the Arabic language.

The Mathematical Model of Arabic Language Attrition

To move from theoretical diagnosis to quantitative prognosis, this study developed a mathematical model to forecast the trajectory of Arabic language attrition. The model is designed to quantify the cumulative impact of the key drivers of attrition identified in the SPH framework and project their effects over a 100-year period. Its architecture is built upon established sociolinguistic factors, weighted according to their scholarly prominence, and incorporates both temporal and spatial dimensions to reflect the complex nature of language shift.

Model Architecture and Variables

The model's foundation rests on seven core independent variables identified through a comprehensive literature review as the most significant factors contributing to language attrition. The selection of these factors is grounded in established sociolinguistic theories of language shift and loss. For instance, 'Age' corresponds to the critical period hypothesis; 'Migration' and 'Second Language' relate to L2 interference and contact-induced change; and 'Social Class', 'Education', and 'Globalisation' are proxies for motivation, attitude, and the hegemonic pressures that influence language choice.

To ensure objectivity, the relative importance of each factor within the model was determined by its prevalence in the academic literature, as measured by the number of relevant studies published on the DOI database. This process yielded the weights shown in Part A of Table 3. Subsequently, each of the 22 Arab countries was evaluated against these seven factors using a composite of international indices (e.g., KOF Globalisation Index, EF English Proficiency Index, PISA scores) to produce a status score (Si) from 1 to 10 for each factor, where 10 represents the most favourable condition for Arabic's vitality. These country-specific scores, which form a key input for the model, are detailed in Part B of Table 3.

Table 3: Attrition Factor Weights and Country Status Evaluation

Part A: Attrition Factor Weights

Factor	Weight in Model
Globalization (G)	20%
Age (A)	20%
Education (E)	15%
Second Language (L2)	15%
Marriage (M)	10%
Migration (H)	10%
Social Class (S)	10%
Total	**100%**

Source: Compiled by study researchers, from multiple sources.

Part B: Country Status Evaluation (Selected Countries)

State	G	E	M	H	A	S	L2	Total (of 70)	Initial SLA (of 100)
Saudi Arabia	5	9	9	3	3	5	8	42	60.00

Egypt	5	5	9	3	3	6	4	35	50.00
UAE	1	2	4	2	3	8	1	21	30.00
Morocco	5	4	8	2	3	6	2	30	42.86
Mauritania	7	8	9	5	3	6	7	45	64.29
Yemen	7	8	9	2	3	7	7	43	61.43

Source: Compiled by study researchers, from multiple sources.

The Language Deterioration Index (LDI)

The first output of the model is the Language Deterioration Index (LDI), a composite score that quantifies the baseline level of attrition pressure on each country. It is calculated using the following formula:

$$LDI = \sum_{i=1}^{7} \left(W_i \times (10 - S_i) \right)$$

Where W_i is the weight of factor i and S_i is the country's score for that factor. The term $(10-S_i)$ ensures that a high score on a factor (a positive condition for Arabic) results in a low contribution to the overall deterioration index, and vice versa. A higher LDI value thus signifies greater pressure and a faster rate of potential decline.

The Spatio-Temporal Attrition Equation

To project the decline over time and space, the model employs a final, comprehensive equation that builds upon the initial country status scores and incorporates both an accelerating temporal decay and a geographically adjusted rate of attrition:

$$SLA(t) = SLA_0 \times e^{kt-}$$

Each component of this equation is designed to model a specific aspect of the attrition process:

1. $SLA(t)$ is the projected Status of the Arabic Language for country i at time t (in years from 2024).

2. SLA_0 is the initial language status for country i in 2024, derived from the seven-factor analysis (as shown in Table 3).

3. e is the base of the natural logarithm, indicating that the decay is exponential.

4. t2 is the squared time variable. This is a critical feature of the model, designed to represent the accelerating nature of language attrition. As a language's status weakens and its linguistic capital diminishes, the social and economic pressures to abandon it intensify, causing the rate of decline to increase over time.

5. Ki is the geographically adjusted deterioration constant for each country. This variable is a direct attempt to quantify and operationalize the historical pattern of peripheral decline observed in the SPH framework. It posits that the same forces that caused past contractions—namely, weaker cultural, political, and economic links to the linguistic core—are still active and will shape future decline. Ki is calculated as:

$$K_i = k_0 + \alpha \times \left(\frac{d_i}{d_{max}} \right)$$

Where k₀ is the base deterioration rate, α is a coefficient determining the impact of distance, d_i is the distance

of country i's capital from Riyadh (selected as the Arab world's geographical centre), and d_max is the maximum distance (to Rabat). This ensures that countries on the periphery of the Arab world are modelled with a higher intrinsic rate of attrition, reflecting their greater exposure to external linguistic pressures and weaker connection to the centre. The model, therefore, does not merely predict the future; it tests a theory of historical recurrence.

Projections and Analysis: A Century of Decline (2024-2124)

The application of the spatio-temporal model across the 22 Arab states yields a series of projections that are both detailed and deeply concerning. The results forecast a widespread and accelerating decline in the status of the Arabic language over the next century, with no country remaining immune. The analysis reveals a clear tipping point beyond which deterioration becomes precipitous and highlights a dangerous divergence between the Arab world's core and its peripheries.

Aggregate Trends and Tipping Points

At the macro level, the model projects a steady erosion of Arabic's vitality across the entire region, the average Status of the Arabic Language (SLA) score for all 22 countries is projected to fall from its current, already precarious level of 50 points to below 40 points by the year 2064. This 40-point mark represents a critical tipping point in the model. Below this threshold, the exponential nature of the decay function (e^{-kt2}) causes the rate of attrition to accelerate dramatically, suggesting that once a certain level of vitality is lost, the process of decline becomes self-reinforcing and increasingly difficult to reverse. This aligns with theories of language endangerment, which posit that language shift often follows a non-linear pattern, with periods of slow decline followed by rapid collapse once community-wide confidence in the language is lost.[17] By the end of the century, in 2124, the average SLA score is projected to fall to a catastrophic low of approximately 20 points, a level indicative of a language that has become severely marginalised in most functional domains of society.

The Centre-Periphery Dynamic

The model's spatial dimension reveals that this decline will not be uniform. Instead, it is projected to occur in "concentric circles", with the rate of attrition intensifying as one move from the geographic centre of the Arab world to its peripheries. which compares the average decline in central versus peripheral countries, the divergence is stark. As shown in table 4 While both groups start at a similar average SLA score of around 51, the peripheral nations are projected to decline at a much faster rate, ending the century with an average SLA of just 14.39, compared to 20.80 for the central nations.

This finding reinforces the model's core assumption, derived from historical analysis, that geographic and cultural distance from the linguistic heartland is a key vulnerability. Peripheral nations, such as those in the Maghreb and the Horn of Africa, face a dual pressure: a weaker connection to the centres of Arabic cultural production and a more intense, direct interface with other powerful linguistic spheres (e.g., French and English in Africa). This dynamic suggests a future of increasing linguistic fragmentation, where the shared bond of Arabic weakens most rapidly at the edges of the Arab world, potentially leading to a cultural and political decoupling of the periphery from the core.

Case Study Illustrations

To translate these aggregate trends into concrete realities, an analysis of the model's predictions for specific countries is illustrative. Table 4 presents the projected decline for all 22 Arab states at key intervals over the next century.

Table 4: Projected Arabic Language Status (SLA) in 2024, 2064, 2094, and 2124

Country	SLA (2024)	SLA (2064)	SLA (2094)	SLA (2124)
UAE	30.00	20.35	13.91	11.96
Lebanon	31.43	20.12	13.11	11.59

Qatar	40.00	27.56	18.66	15.56
Bahrain	41.43	28.71	19.51	16.13
Tunisia	42.86	25.84	16.32	12.89
Algeria	42.86	24.11	14.54	10.80
Morocco	42.86	22.84	12.85	7.89
Djibouti	42.86	28.10	18.61	15.81
Kuwait	45.71	31.62	21.41	17.78
Jordan	47.14	30.77	20.07	17.05
Comoros	48.57	28.67	17.65	13.74
Egypt	50.00	32.12	20.91	18.44
Palestine	57.14	37.13	24.31	20.89
Oman	58.57	39.52	26.33	22.73
Saudi Arabia	60.00	43.76	31.91	30.00
Iraq	60.00	40.24	26.70	23.56
Syria	60.00	39.11	25.46	21.67
Yemen	61.43	42.14	28.27	24.49
Sudan	61.43	41.42	27.27	22.49
Libya	61.43	39.26	24.78	16.88
Somalia	61.43	38.30	23.49	19.15
Mauritania	64.29	36.63	20.94	11.94

Source: Compiled by study researchers, from multiple sources.

A few cases exemplify the different trajectories of decline:

1. The Hyper-Globalised Trajectory (UAE, Lebanon): Starting with the lowest SLA scores (30.00 and 31.43 respectively), these nations are projected to see Arabic's status fall to vestigial levels (11.96 and 11.59). This is a direct consequence of their extreme openness to globalisation, the dominance of English and French in education and commerce (reflected in low scores on factors G, E, and L2), and high rates of migration, which combine to create an environment of intense and overwhelming pressure on Arabic.
2. The Core Under Pressure (Saudi Arabia, Egypt): As the demographic and cultural centres of the Arab world, the projected declines for Saudi Arabia (from 60 to 30) and Egypt (from 50 to 18.44) are particularly significant. While their starting positions are stronger, the model demonstrates that even they are not immune to the pervasive forces of attrition. The erosion of Arabic in these core states would have immense regional consequences, undermining the language's primary anchor points.

3. The Periphery Dynamic (Morocco, Mauritania): These cases perfectly illustrate the spatial logic of the model. Mauritania begins with the highest SLA score of all 22 nations (64.29) but is projected to plummet to one of the lowest (11.94). Similarly, Morocco is forecast to fall from 42.86 to a catastrophic 7.89, the lowest of any country. This precipitous decline is explained by their high geographically adjusted deterioration constants (K_i), which reflect their distance from the centre, coupled with the intense hegemonic pressure from French and the simultaneous resurgence of local languages like Amazigh, creating a multi-front challenge to Arabic's dominance.

Repercussions: From Language Loss to State Fragmentation

The projected decline of the Arabic language, as quantified by the model, is not merely a linguistic or cultural phenomenon. It represents a foundational threat to the stability of Arab states and the coherence of Arab national identity. The erosion of a common language acts as a solvent on the bonds of society, creating a vacuum that can lead to political polarisation and, in the most extreme cases, state fragmentation. This section explores the potential chain of repercussions, arguing that linguistic vitality must be considered a core component of national security.

The Specter of Balkanization

The study posits a stark historical analogy for the potential consequences of linguistic fragmentation: the violent disintegration of the Socialist Federal Republic of Yugoslavia in the 1990s. While Serbo-Croatian was the official language, the federation was a tapestry of distinct ethnic and religious groups—Serbs, Croats, Bosnians, Albanians, and others. As the central political authority weakened, these underlying identity fault lines, amplified by political manipulation, erupted into a series of brutal conflicts that tore the state apart.

The core argument is that the Arabic language has historically served as the primary unifying force across a similarly diverse Arab world. It is the principal shared element that transcends national, sectarian, and tribal divisions. The accelerating attrition of this common linguistic bond, therefore, removes a crucial layer of social cohesion, leaving Arab societies more vulnerable to fragmentation along other pre-existing fault lines. The decline of Arabic creates a linguistic vacuum, and as historical precedents show, such vacuums are rarely filled peacefully.

A Three-Stage Model of Internal Disintegration

The process by which language attrition can lead to state instability can be conceptualised as a three-stage sequence of internal disintegration as:

1. Loss of the Common Bond: The process begins with the gradual decline in Arabic proficiency and prestige, particularly among the youth and in vital sectors like business and higher education. As the language recedes from public life, its role as a unifying symbol and a medium for shared cultural and political discourse diminishes. Individuals and groups lose a primary point of commonality, making them more susceptible to retreating into narrower, sub-national affiliations.
2. The Resurgence of Alternative Identities: The linguistic vacuum created by Arabic's decline is inevitably filled by alternative forms of identity. In the Arab context, this takes two primary forms. First is the revival of ancient, pre-Arab/pre-Islamic cultural identities, a trend already visible in the promotion of Pharaonic or Coptic identity in Egypt and, most significantly, the official recognition and resurgence of the Amazigh (Berber) language and identity in Morocco and Algeria. Second is the adoption of a deterritorialised, globalised identity, mediated primarily through the English language. This creates competing linguistic and cultural poles within a single state, fracturing the national identity into disparate and often mutually unintelligible segments.
3. Political Exploitation and Conflict: These emergent, identity-based divisions become fertile ground for political exploitation. Internal political actors seeking to mobilise support can leverage these linguistic and cultural differences to advance narrow sectarian or regional agendas. This can trigger a cycle of action and reaction, deepen societal polarisation and potentially escalating into civil strife. A state thus divided becomes internally weak, unable to command the loyalty of all its citizens, and vulnerable to

external interference or, alternatively, may seek to export its internal crises, leading to regional instability.

Redefining Arab National Security

The vitality of the Arabic language must be elevated from a matter of cultural policy to a pillar of national and regional security strategy. The most significant threat to the future of many Arab states is not a conventional military invasion but a process of internal societal erosion, for which language attrition is both a primary symptom and a key catalyst. Protecting the shared linguistic space is therefore not an act of nostalgia but a strategic imperative for ensuring the long-term viability and stability of the Arab nation-state in the 21st century.

A Framework for Revitalization: Policy and Soft Power

The forecast of accelerating decline is a prognosis, not a destiny. Reversing this trajectory requires a deliberate, strategic, and multi-faceted response. The policies proposed here are not merely a list of desirable initiatives; they constitute a coherent framework for a counter-hegemonic "war of position", in the Gramscian sense, designed to reclaim linguistic space and systematically increase the social, economic, and symbolic capital of the Arabic language. This framework is structured around three pillars: top-down governmental intervention, a fundamental re-engineering of the educational ecosystem, and the proactive projection of linguistic soft power.

Pillar I: Governmental and Regulatory Intervention

The state must be the prime mover in reversing attrition by using its regulatory power to reshape the linguistic marketplace and reinforce the symbolic status of Arabic. This involves direct interventions to artificially inflate the language's value where it is being outcompeted.

1. **Creating Market Value:** Drawing inspiration from France's Toubon Law, Arab governments should enact comprehensive Arabisation laws that mandate the use of Arabic in all commercial signage, advertising, and corporate communication. Critically, national private companies should be required to use Arabic as the primary language of internal and external communication, with foreign language requirements restricted only to roles that necessitate direct interaction with non-Arab markets. This directly counters the current trend of English dominance in the corporate sphere and creates a tangible economic incentive for Arabic proficiency.

2. **Enforcing Symbolic Power:** To combat the hegemonic notion that foreign languages are the languages of power and governance, Arabic must be unequivocally established as the language of the state. All official government business, from parliamentary debate to ministerial press conferences, must be conducted exclusively in fluent, standard Arabic. Specialised agencies should be established to certify the high-level Arabic proficiency of all candidates for senior government and diplomatic positions. This not only reinforces the language's prestige but also helps to break the link between elite status and foreign language fluency, opening pathways to leadership for those educated in the national system.

Pillar II: Re-engineering the Educational Ecosystem

Education is the primary site of hegemonic reproduction and thus must be the primary front for any revitalisation effort. The current educational landscape in many Arab countries, with its stark divide between Arabic-medium public schools for the masses and foreign-language private schools for the elite, perpetuates the devaluation of Arabic by tying it to lower socio-economic status.

1. **Breaking the Educational Divide:** A unified policy must be implemented across all schools, public and private. International and private schools must be mandated to teach a significant portion of their curriculum (e.g., 25% of non-language subjects) in Arabic and to have their Arabic language grades count towards university admission requirements, as recently legislated in Egypt. In higher education, Arabic should be reinstated as the primary language of instruction across all disciplines, including the sciences, with a concerted, state-sponsored effort to translate and create the necessary academic resources.

2. **Strategic Multilingualism:** In countries with significant linguistic minorities, such as the Amazigh in the Maghreb, policies of inclusion are a strategic necessity. Integrating minority languages into the

education system, as Morocco has begun to do, is not a threat to Arabic but a vital measure to prevent linguistic conflict and build a more resilient, pluralistic national identity that is not predicated on the suppression of diversity.[18]

Pillar III: Projecting Linguistic Soft Power

Revitalisation cannot be a purely defensive, internal project. To thrive in a globalised world, Arabic must increase its global linguistic capital and cultural prestige. This requires a proactive strategy of projecting linguistic soft power, leveraging the Arab world's cultural and economic resources.

1. **Technology as a Vehicle for Modernity:** A massive, coordinated investment is needed to enrich Arabic digital content and develop advanced Arabic-language technologies. This includes funding for high-quality digital media, the development of sophisticated Natural Language Processing (NLP) tools (e.g., grammar checkers, translation services, sentiment analysis), and the creation of dedicated Arabic social media platforms that are designed to be modern, engaging, and supportive of both standard and colloquial Arabic. This is crucial for making the language relevant and attractive to younger generations.
2. **Culture as Capital:** Inspired by the global success of cultural exports from countries like South Korea and Turkey, Arab states should strategically fund and promote the international distribution of high-quality Arabic film, television series, music, and literature. The global popularity of such cultural products is a powerful tool for building symbolic power, enhancing the language's image as modern and dynamic, and creating organic interest in learning Arabic worldwide.
3. **Economic Leverage:** The Arab world's significant collective economic weight (a combined GDP of approximately \$3.5 trillion) is its most powerful tool for increasing Arabic's global market value. By fostering an integrated regional market and positioning Arabic as the essential language for doing business within it, Arab nations can create powerful external demand for Arabic proficiency. This should be supported by establishing a network of state-funded cultural and language-learning centres abroad, analogous to the British Council or Germany's Goethe-Institute, and by creating prestigious scholarship and exchange programmes to bring international students and professionals to the Arab world to learn the language.

CONCLUSION

This paper has sought to demonstrate that the Arabic language, contrary to prevailing assessments, is undergoing a severe and accelerating process of attrition. The conventional models of language vitality, with their focus on static metrics, have failed to detect the dynamic erosion of Arabic's socio-economic and political foundations. By proposing a Socio-Political-Historical (SPH) framework and a predictive mathematical model, this research offers a more nuanced and, it is argued, more accurate tool for assessing the language's trajectory. The model's projections are stark: a century of accelerating decline that threatens to marginalise the language and, in doing so, unravel the social fabric of the Arab world.

The central conclusion of this analysis is that language attrition must be reframed as a critical national security threat. The weakening of the primary linguistic bond that unites Arab societies risks unleashing centrifugal forces of fragmentation, with potentially devastating consequences for regional stability. The spectre of Balkanisation, once a distant historical analogy, becomes a plausible future scenario in a world of Arabs without Arabic.

However, this trajectory is not inevitable. The choice facing Arab societies and their leaders is not between Arabic and modernity or between heritage and progress. It is between passively succumbing to a chaotic and politically dangerous linguistic decline or actively and strategically managing the language's evolution. The comprehensive framework for revitalisation proposed in this paper—built on the pillars of state regulation, educational reform, and the projection of soft power—offers a pathway for reversing attrition. These policies are not acts of cultural nostalgia but are presented as a strategic, unifying project for the 21st century. The preservation and reinvigoration of the Arabic language is arguably one of the most critical investments the Arab world can make in its own future security, cohesion, and prosperity.

Conflict of Interest: No potential competing interest was reported by the authors

ACKNOWLEDGEMENT

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