

CONTEMPORARY REGIONS OF THE ARAB WORLD:
A FACTOR ANALYSIS AND HIERARCHICAL
CLUSTERING ANALYSIS

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Master of Arts

by
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by

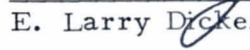
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A THESIS

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ABSTRACT

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Purpose

The purposes of this thesis are: (1) to determine the dimensions of fourteen Arab states (Algeria, Egypt, Iraq, Jordan, Kuwait, Morocco, Lebanon, Libya, Saudi Arabia, South Yemen, Sudan, Syria, Tunisia, and Yemen) on the basis of their political, social, economic, and demographic attributes; (2) based on the result of these dimensions, to ascertain clusters of these states based on common characteristics; and (3) to compare the regional groupings generated by these dimensions with previous delineations of Arab regions.

Methods

The aims of this project are accomplished through the following methods: (1) to gather the most recent available data (1970-72) concerning fourteen states in the Arab world; (2) to factor analyze the variables so that meaningful dimensions can be extracted; and (3) to use the factor scores of the meaningful factors, to delineate regions of the fourteen Arab states through hierarchical clustering analysis.

Findings

Based on the evidence displayed in this study, the following results are drawn:

1. Regional groupings of Arab states found by this study are different from both the traditional regions (the Nile Valley, the Maghrib, the Fertile Crescent, and the Arabian Peninsula) and those found by Bruce Russett in International Regions and the International System (the radical or revolutionary Arabs of the geographic heartland, the Maghrib, and the geographically divided states).
2. The first of four regions determined by fifty-four variables used in this study consists of Algeria, Jordan, South Yemen, Sudan, Tunisia, and Yemen. All the states in the region, excluding Algeria, are economically poor and do not possess adequate natural resources to meet their demands. Another feature of the region, with the exception of Tunisia and, to some extent, Algeria, is political instability.
3. The second region is occupied by Egypt and Lebanon. Both have been subjected to frequent cabinet changes.
4. The third cluster included Iraq, Libya, Morocco, Saudi Arabia, and Syria. Their similarities are in terms of defense, education, and health services.
5. The fourth region is occupied by Kuwait alone. This could be attributed to her affluence and small size.

6. At the level of three groupings, Kuwait joins Egypt and Lebanon. This is due to their higher rank on the "Mass Media and Communication" dimension.

7. It is suggested that future federations should be based on the regional groupings found by this study, not on mere geographic contiguity.

Approved:

John W. Holcombe
Supervising Professor

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CHAPTER I

THE HISTORICAL DEVELOPMENT OF THE IDEA OF ARAB UNITY: POTENTIAL AND HANDICAP

Much of the literature on Arab integration or cooperation has been traditional in nature. Very few scholars have taken advantage of contemporary methods of political science to analyze the Arab countries in a scientific fashion. Most of these traditional studies, if not all, have emphasized the commonalities of history, culture, language, and religion of the Arabs as a ground for political unification. While these could be important factors toward the enhancement of political unification, they have not, so far, translated themselves into the reality of unification. Perhaps other avenues of investigation and evaluation might offer some suggestions toward more reasonable, stable, and concrete integration.

This study is intended to determine some of the regions based on the political, economic, social, and demographic attributes that exist among the Arab states. From the analysis of these characteristics, it is anticipated that more useful regional clusterings, than merely geographic contiguity and cultural similarity, could be constructed. Before endeavoring to pursue this question, it is important

to trace the historical process of Arab unification since the rise of Islam in the Seventh Century A. D. and to examine the pattern in which the concept of Arab unification has thus far come to move closer to partial fulfillment. Such an understanding requires close familiarity with several historical factors of the evolution of the idea of Arab unity.

Islam as a Unifying Factor to the Arabs

In the Seventh Century A. D., the Arabian Peninsula was the scene of a historic development that revolutionized the life of its inhabitants. Islam was born, as a new faith, among the Arabs, giving them their first sense of unity that went far beyond tribal unity. For the first time in their long history, the numerous Arabian tribes were able to be ruled under one central government. The factors that distinguished the Arabs and unified them, besides their new religion, were their common language and culture of pre-Islamic Arabia.

At its peak in the Eighth Century, A. D., the Muslim-Arab Empire stretched "from Spain and the borders of France in the west, to India and the borders of China in the east."¹ This vast empire was ruled by the Arabs for nearly nine centuries, but throughout these centuries Arab influence suffered steady decline. The Arab decline coincided with the rise of the Ottoman Empire and with the

¹Fayez A. Sayegh, Arab Unity: Hope and Fulfillment (New York: The Devin-Adair Company, 1958), p. 17.

fall of Baghdad in 1939, after which the whole of the Arab lands were under Ottoman domination.²

The Arabs Under the Ottoman Empire

Toward the mid-sixteenth century the Arab lands extended from the Algerian-Moroccan border in the west to the eastern boundaries of Iraq, and from the northern limits of Syria to the southern shores of the Arabian Peninsula. From the sixteenth century the Ottomans remained in control of the area until the nineteenth century, when the region of North Africa and the southern and eastern shores of the Arabian Peninsula were gradually disjoined from the Empire and occupied by European powers. Only the Fertile Crescent and parts of the Arabian Peninsula were still united under the Ottoman rule.

With the defeat of the Ottoman Empire in the First World War, the Arab world fell again under the domination of another foreign power, this time the European powers. So, the political unification of the Arab lands, which was maintained over the decades under the Ottoman Empire, was disrupted. The Arab provinces of the Ottoman Empire were not considered colonies or protectorates because the Ottoman rulers had adopted Islam and governed the

²Majid Khadduri, Political Trends in the Arab World: The Role of Ideas and Ideals in Politics (Baltimore: The John Hopkins Press, 1970), pp. 1-7.

Arabs as Muslims, not as Turkish rulers. All the provinces were treated equally until the central government, failing to produce a successful modern organization based on the universalistic ideas of Islam, resorted to a nationalist, secularist political organization based on the supremacy of the Turkish ethnic group. This new trend among the Turkish elites induced the Arabs to demand separation and independence from the Empire.³

The Arab Revolt of 1916

Foreseeing the collapse of the Ottoman Empire in the First World War and the Arab striving for independence, the British took the opportunity to approach leaders of the Arab nationalist movement to collaborate with them against the Turks in exchange for independence. Britain had promised the establishment of an independent Arab Kingdom in the Arab provinces of Turkey in Southwest Asia. This promise was the result of an exchange of letters between Sharif Hussein of Mecca and the British High Commissioner in Egypt, Sir Henry McMahon. The correspondence ended in January 1916, and in June the Arab Revolt started. The Arab Revolt marked their final ties with the Turks and the cooperation with the Allied Powers, mainly Great Britain.⁴

³Sayegh, Arab Unity: Hope and Fulfillment, pp. 22-29.

⁴Kemal H. Karpas (ed.), Political and Social Thought in the Contemporary Middle East (New York: Frederick A. Praeger, Inc., 1968), p. 10.

During the war the Arabs allied with the British, which resulted in the emancipation of their lands from the Ottoman Empire. Under the British command the Arab army had successfully compelled the Ottoman troops to abandon a vast territory, from Mecca to Damascus. Had the West lived up to its promise, to help the Arabs to erect an independent Arab state in exchange for their collaboration, the Arabs might have strengthened their cooperation.

The Arabs needed the economic and technical advantages the West had to offer. But the price that the European powers put on such assistance was domination. Though the Arabs were unwilling to pay such a price, it was exacted anyway. Struggling to be free of such a price, the Arabs came to be suspicious of the merchandise. The European powers lost Arab goodwill by ignoring their demands for complete sovereignty and unity.⁵

Partition and Mandate

At the end of the First World War the Arabs expected the fulfillment of promises made to them by the British for an independent Arab Kingdom. These consisted of various statements and declarations during the war and the Hussein-McMahon correspondence. The Arab reward for their participation was the partitioning of their homeland, thus exchanging the Turks for the British and the French. In

⁵ Khadduri, Political Trends in the Arab World: The Role of Ideas and Ideals in Politics, pp. 271-72.

May 1916, the British had agreed with the French to partition the Arab lands after the disintegration of the Ottoman Empire. Their plan, known as the Sykes-Picot Agreement, called for France to have all of Syria and Lebanon and the oil-rich Mosul-Kirkus region. Britain was to have Haifa and all of Iraq south of the Mosul-Kirkus territory. This plan was kept secret until the Russian Revolution of 1917. The Bolshevik leaders discovered the record in captured Czarist documents and made it public to dishonor the Western false promises to the Arabs. But the British and the French were quick to deny these allegations.

After the Allied Powers emerged victorious from the War, the Arabs came to know their political destiny. The Allied Powers met at San Remo (April 1920) and drew the future map of the area to suit their own interests. The Fertile Crescent was partitioned between France and Britain. It was decided from the first that Britain would have Iraq and Palestine with Transjordan under mandate, and France would have Syria and Lebanon. Thus, the entire Arab world, with the exception of Yemen and central Arabia (now Saudi Arabia), came under European domination.⁶

The Era of Independence

For over a century and a half, from the dawn of the nineteenth century to the Second World War, one Arab land after another

⁶Eugene M. Fisher and M. Cherif Bassiouni, Storm Over the Arab World: A People in Revolution (Chicago: Follett Publishing Company, 1972), pp. 20-25.

fell under direct or indirect European influence. Only after the Second World War did this domination begin to disappear, and the Arabs regained control of their destiny. New states emerged, but their boundaries were drawn by the European Mandatory Powers. Consequently, local identities such as Syrian-Lebanese, were reinforced by the national, educational, and bureaucratic systems that had developed in 1920-45.

Under nationalist pressure Britain began a gradual reduction of its influence in the area. The mandate over Iraq was discontinued in 1932; the Jordan mandate and Britain's remaining privileges in Egypt were also brought to an end after World War II. Finally, France embarked on a new policy to grant full sovereignty to all of her Arab colonies, hoping to improve its image among the Arabs. France followed Britain's policy by surrendering her mandate over Syria and Lebanon and later her North African colonies.

The West, according to the Arabs, had deliberately frustrated the goals of Arab nationalism. It had left the Arabs in a weak position and unable to unite, so that, at the first chance, it could invade them again. The British-French-Israeli aggression on Egypt in 1956 strengthened that belief. The Western attempts to involve the Arabs in military pacts, such as the Baghdad Pact (later CENTO), enhanced their suspicion of the West. They also believed that a strong

United Arab State could not only challenge foreign intrusion in their affairs but also play a leading role in the world.⁷

The Creation of the Arab League

Despite the political, economic, and ideological obstacles to unity, substantial steps were taken by the Arab governments in the early 1940's to set up an organization that would pave the way toward more cooperation. On March 22, 1945 heads of seven independent Arab States, Egypt, Iraq, Lebanon, Saudi Arabia, Syria, Transjordan, and Yemen, met in Cairo and signed an accord to establish a League of Arab States, known today as the Arab League. This new-born organization became the first concrete expression of Pan-Arabism. Among its aims are:

(1) Strengthening relations between member states, (2) coordinating their policies in order to further cooperation and safeguard their independence and sovereignty, and (3) a general concern for the affairs and interests of the Arab countries.⁸

Its establishment created an atmosphere for its members to discuss their common post-war problems. Among these were the military occupation and political domination by the European powers of most of the Arab world and the Zionist ambition to establish a

⁷Karpat, Political and Social Thought in the Contemporary Middle East, pp. 28-29.

⁸Robert W. Macdonald, The League of Arab States (Princeton: Princeton University Press, 1965), pp. 41-44.

Jewish State in Palestine. At that time Arab solidarity was not strong enough to halt the course of events for two main reasons. First, the interests of some of the individual Arab rulers were too often at odds, and second, Britain opposed complete unity, which would jeopardize her interests in the area.

Having failed to achieve Arab unity, the League endeavored to encourage more cooperation among its members in political, military, and economic fields. Politically and militarily, the League was unable to score a major success, as it did in economics. In 1953, two economic agreements were signed, one called for the exchange of goods and the other regulated transit trade. The agreements called for custom exemptions on raw materials produced in the Arab world and 25 per cent reduction of customs duties for most industrial products, mainly processed agricultural goods.

During the 1950's decisions were taken to establish several economic projects such as the Arab Potash Company, the Arab Navigation Company, the Arab Oil Tankers Company, and most importantly, the Arab Development Bank. These joint enterprises encouraged the League to approve the organization of a Council of Economic Union. This pact was signed on June 6, 1962 by five of its members: Egypt, Jordan, Kuwait, Morocco, and Syria. Their goal was to achieve a gradual economic unity. They left the door open for the other states to join, and in December 1963 both Iraq

and Yemen became signatory members to the agreement. Two years later this agreement led to the decision to set up the Arab Common Market.

The Arab Common Market was far more ambitious than previous agreements. It sought the eventual establishment of a unified and integrated economy embracing all Arab States. It called for:

a common external tariff under unified administration; uniform legislation and regulations relating to import and export procedures; uniform transport and transit laws ensuring freedom of transit and of access to harbors and airports; uniform policies relating to agriculture, industry, real estate, and commercial and monetary activities; coordination of labor laws and social security legislation; freedom of travel; unhampered capital transfers, freedom of work, residence and economic activity in any member country and unhampered rights of ownership and inheritance.⁹

Political, social, and economic conditions in the Arab world tend to cast serious doubt on the possibilities of implementing ambitious policies such as these. Diverse economic philosophies and different degrees of economic control by the governments have served as the main deterrents to Arab economic unity. Some states, like Algeria, Egypt, and Syria, have adopted a socialist economy. Lebanon, for example, with its capitalist economy has found it difficult to engage

⁹E. Kanovsky, "Arab Economic Unity," The Middle East Journal, XXI, No. 3 (Spring, 1967), 213-15.

in an economic integration with the socialist Arab countries which might upset the nature of its economy.¹⁰

The main weaknesses which confront the League is that it has absolutely no executive power. Decisions taken by the League's committees or at the ministerial levels or by Heads of States have only the value of recommendations. Even when decisions are unanimous, that does not mean that they will be implemented in each country.

The League failed to live up to its promise, which prompted a sense of insecurity and dissatisfaction among the growing Arab intellectual community. Criticisms were voiced against the existing regimes for their lack of concern and seriousness about Arab unity.¹¹ As a result of the intensified political and psychological frustrations among the masses, the military entered the political scene in a number of Arab countries, promising to work toward Arab unity. However, it has so far failed to accomplish its goal.

Bilateral and Multilateral Unions and Federations

The present state of fragmentation of the Arab world is attributable primarily to external forces. The first step in the process

¹⁰ Alfred G. Musrey, An Arab Common Market (New York: Frederick A. Praeger, Publishers, 1969), pp. 3-4.

¹¹ Arnold Hottinger, The Arabs: Their History, Culture, and Place in the Modern World (Berkeley: University of California Press, 1963), p. 254.

of fragmentation of Arab lands occurred with the establishment of foreign influence in the nineteenth century. Whether in the form of protectorate, coloney, or mandate, Western colonialism not only confirmed these divisions, but encouraged the creation of separate political entities. Each colonial power left considerable impact on the country it had occupied, which introduced new elements of diversity among the Arab states.

While there exist differences of opinion concerning the nature and the form that Arab political unity should take, there is general agreement on the desirability and the inevitability of the goal. The Arab nationalist movement came into existence after the First World War calling for freedom from foreign domination, for socio-economic development, and for political unity. Since that time several Arab leaders have called for bilateral as well as multi-lateral union or federation among the Arab states. Each attempt will be briefly analyzed to show what obstacles it encountered or how far it succeeded.

Union of the Fertile Crescent. There were two proposals to reunite the Fertile Crescent. First, in 1942 Nurial-Said of Iraq published a Blue Book suggesting a federal union in the Fertile Crescent linking Syria, Lebanon, Palestine, and Transjordan to Iraq. The Jordanians put forward a counter-proposal suggesting a Great Syria under the Jordanian monarchy. On April 8, 1943 Prince Abdulla of

Transjordan called upon the Arabs to support his proposal and aid him to reunite the Syrian regions under his leadership.

Egypt responded to Prince Abdulla's appeal by calling for an Arab conference to discuss the prospect for unity. At the Alexandria Conference of 1943 the delegates of Syria and Transjordan agreed on the necessity of a Syrian unity, but they disagreed on the form of government. Since Syria adopted a republican system, its delegate insisted that the form of government should be a republic. Although Transjordan was more inclined toward a monarchical form of government, it suggested that the solution to this problem would be to hold a referendum throughout Syrian regions and let the people choose for themselves the type of government they wished. A compromise was not reached to reconcile these differences of opinion.

Another proposal was put forward calling for a federation between the governments of the Syrian regions without disturbing the formal structure of the governments in the regions. Later it was agreed to hold a conference among the governments of the Syrian regions to discuss the new proposal and work out an agreeable formula acceptable to all parties, but the conference did not take place for unknown reasons. So, the question of monarchy versus republic stood in the way of the first attempt to reunite the Fertile Crescent.¹²

¹²Karpat, Political and Social Thought in the Contemporary Middle East, pp. 245-49.

Attempted Union Between Egypt and Sudan. The condominium agreement of 1899 put the Sudan under the joint administration of Britain and Egypt, but it was Britain who had the firm control over the Sudan. This agreement was reaffirmed again by the Anglo-Egyptian Treaty of 1936. Subsequently, the Egyptian government endeavored to unite the Nile Valley (Egypt-The Sudan) under the Egyptian monarch. In October 1951, the Egyptian government abolished both the condominium agreement and the Treaty of 1936 and named King Farouk "King of Egypt and the Sudan." Britain opposed Egypt's action, claiming that the Sudanese should determine their own political destiny.

In 1952 a statute was drafted calling for the establishment of a Sudanese council of ministers responsible to a bicameral parliament in internal affairs. During the following three years the Sudan was prepared for self-rule, and the possibility of union with Egypt was rejected in favor of complete independence.¹³

Union Between Jordan and Syria. In February of 1957, a union between two neighboring states, Jordan and Syria, was about to take place. Both the Jordanian army and the government were in favor of the union, which threatened the political life of the young

¹³George M. Haddad, Revolutions and Military Rule in the Middle East: The Arab States, Vol. 3 (New York: Robert Speller and Sons, Publishers, Inc., 1973), pp. 174-80.

monarch of Jordan. This situation resulted in a confrontation between the King and his supporters, on one side, and the nationalist leaders, on the other side, which shook the existence of Jordan. After dramatic events in the army camp of Zarga, Hussein was able to reaffirm his personal prestige among the Bouduins of the Arab Legion, who aided him to crush his opponents.

King Hussein emerged as a powerful figure and took several measures to save his throne. Parliament was dissolved and a government of East Jordanians loyal to him was chosen. The proposed union was abandoned, and the nationalist leaders left Jordan to live in exile.¹⁴

In recent history Arab unity reached its peak in February 1958, as a result of three historic developments. First, on February 1, 1958, both Egypt and Syria merged into a single unified state to become the United Arab Republic; second, on the fourteenth of the same month, the Hashimite Kingdoms of Jordan and Iraq formed a federation to be called the Arab Union; and third, Yemen joined the United Arab Republic in a loose confederation to become the United Arab States. The form of the union between Syria and Egypt was republican, revolutionary, and socialist; the Jordan-Iraq federation was monarchical, conservative, and capitalist.

¹⁴Hottinger, The Arabs: Their History, Culture, and Place in the Modern World, pp. 275-76.

The United Arab Republic. The concept of Arab unity has its historical roots in Syria since the First World War, when the European Mandatory Powers divided "Great Syria" into small political entities. The sentiments grew over the years among Syrian nationalists, reaching their climax in 1957. Syria looked beyond its former territories for an Arab state that might be ready to accept its offer for unification. The unchallengeable leadership of President Gamal Abdel Nasser in the Arab world made Egypt the right choice to appeal to for union.

After a series of negotiations between leaders of both countries, Egypt refused to accept the offer unless three conditions were met: "a plebiscite, the dissolution of parties, and the withdrawal of the army from politics."¹⁵ The Syrian leaders accepted these conditions with hesitation. They did not protest putting the union to a referendum, but some felt that the dissolution of political parties and the abandonment of military intrusion in politics would ruin political life in Syria.

Obviously, the Syrian leaders were under severe pressures, externally and internally, to form a union with Egypt. During 1957 the situation on the Syrian-Turkish borders was deteriorating. Iraq intensified its appeal to certain Syrian elements favoring closer ties

¹⁵Monte Palmer, "The United Arab Republic: An Assessment of its Failure," The Middle East Journal, XX, No. 2 (Winter, 1966), 50-53.

within the Fertile Crescent. The Eisenhower Doctrine came into existence in January 1958. Domestically, the growing influence of the communists and the Syrian right wing had alarmed Syrian leaders. Furthermore, the existence of mass support within Syria in favor of unity with Egypt was mounting because of Nasser's popularity.¹⁶

These factors compelled the Syrian elite to accept Nasser's conditions for unity. On February 1, 1958, both countries merged into a single state to become the United Arab Republic. It was the first historical accomplishment toward the revival of Arab unity. Nasser's popularity in both states put him at the top, virtually in control of everything. This irritated some Syrian elites. Those who were given high positions in the central government demanded more authority and greater flexibility.¹⁷

From the moment of its proclamation, the United Arab Republic was faced with a number of obstacles, which led to its collapse four years later. The new union was a source of concern to the ruling apparatus of Syria's neighbors. In 1958 Syria suffered a severe drought which lasted for three years. Aggravating the economic problem caused by this drought, attempts were made to apply solutions of Egyptian economic problems to Syrian situations without

¹⁶Ibid., p. 54.

¹⁷H. B. Sharabi, Governments and Politics of the Middle East in the Twentieth Century (Princeton: D. Van Nostrand Company, Inc., 1962), p. 188.

regard to underlying differences. Some Syrian leaders felt that they were by-passed on important decisions concerning the union. These factors, among many, contributed to the secession of Syria on September 28, 1961.¹⁸

The Arab Union. On February 14, 1958, the two Hashimite Kingdoms of Iraq and Jordan were joined together into a federation to become the Arab Union. The dual purpose of the union was to counter the United Arab Republic and to save the political existence of the Jordanian monarch. King Faisal II headed the union, with King Hussein retaining his throne over Jordan. The plan was to unify the armed forces, foreign policies, educational systems, and customs administrations of both states.

The union did not live long enough to carry out these plans, for a number of reasons. It lacked popular support among the masses and nationalist leaders in both countries. It became a union of governments rather than peoples. Four months after its proclamation, the Iraqi coup took place on July 14, 1958, which ended the Hashimite rule over Iraq and dissolved the union.¹⁹

¹⁸Palmer, "The United Arab Republic: An Assessment of its Failure," 54-63.

¹⁹Philip K. Hitti, The Near East History (Princeton, N. J. : D. Van Nostrand Company, Inc., 1961), pp. 526-29.

The United Arab States. The creation of the United Arab Republic was foreseen by the Arabs as the first step toward an all-Arab unity. The new union left the door open for any Arab state to join in any form it wished. Five weeks after its formation, the Kingdom of Yemen expressed its desire to join in a federation to form the United Arab States. Realizing the vast diversity in socio-economic conditions and form of government between the United Arab Republic and the Kingdom of Yemen, the Charter of the United Arab States stressed flexibility. The Charter called for unification of defense and foreign affairs, coordination of economic and educational systems, and equal rights for all citizens of the Union. Both governments agreed that each would maintain "its internal autonomy and its distinctive socio-political system."²⁰

Late in December 1961 the monarch of Yemen voiced his criticism of Egypt's social and economic policies. Egypt reacted by terminating the United Arab States. Egypt had hoped to bring some reforms to backward Yemen and make it part of a Pan-Arab nation, but the monarch refused all recommendations. The collapse of the federation was probably inevitable since the two states subscribed to entirely different political, economic, and social policies.²¹

²⁰Sayegh, Arab Unity: Hope and Fulfillment, pp. 189-93.

²¹Eric Macro, Yemen and the Western World Since 1517 (New York: Frederick A. Praeger, Publishers, 1968), pp. 124-29.

The Federation of the Arab States of North Africa. After the proclamation of the United Arab Republic, the Arab Union, and the United Arab States, leaders of three North African states, Algeria, Morocco, and Tunisia, called for the unification of their countries. As a result, a preliminary meeting was held on March 19, 1958 between leaders of the Istiglal Party of Morocco and the Neo-Destour Party of Tunisia to arrange for a Pan-Maghribian conference to discuss the proposed federation. One month later leaders of the two parties, with the representatives of the Algerian Front for National Liberation, held their conference in Tangier, Morocco, which was named the "Tangier Conference for the Unification of the Arab Maghrib."

The representatives concluded their conference after deciding that the "federal form" will be the most suitable type of government for the participating states. They also recommended the following steps: (1) to create a permanent committee for consultation on problems of mutual interests; (2) to hold "periodic meetings" between local leaders when it was necessary; and (3) "not to commit separately the destiny of North Africa, in the fields of foreign affairs and defense, until the establishment of federation institutions."²²

The participating states were faced with the war of independence in Algeria and the French political crisis at that time. The

²²Sayegh, Arab Unity: Hope and Fulfillment, p. 202.

federation was delayed until these two problems were resolved.²³

Algeria attained its independence in 1962 and France solved its internal crisis, but the federation was still only on paper.

The Arab Federation of Egypt, Syria and Iraq. In 1963 two military coups occurred in Iraq and Syria which brought the Baath Party to power. The new Iraqi government accused its predecessor, Kassem's regime, of alienating the country from the true path of Arab unity and called for unity with the revolutionary Arab governments. It embarked on a policy of warm friendship and closer cooperation with Egypt. When the new regime in Syria took over, it soon discovered that it could not effectively govern because it lacked popular support. It expressed its desire to revive the previous union with Egypt.

The Baathist regimes in Iraq and Syria demanded a new Arab unity between their countries and Egypt. But this time, the Baath leaders attached new conditions in order to overcome some of the mistrust between themselves and President Nasser. The talks centered on Syria and related events during its unity with Egypt. The Syrian Baathists asked for Nasser's support and endorsement for their rule of Syria, which he refused to give. Once again, both Nasser and the Baathists were unable to reconcile their differences on the question

²³Ibid., p. 204.

of who should dominate the union. Since then, the tripartite unity agreement became a dead document, similar to many before.²⁴

The Federation of the Arab Republics. On December 27, 1969 Egypt, Libya, and Sudan signed an agreement called the "Tripoli Charter" that would allow unified cooperation among the signatories on essential problems of mutual concern. Following Nasser's death, the three countries went further by announcing the creation of a unified "Presidential Council" that would supervise the coordination of the external and internal policies of the participants. On November 17, 1970 a military coup overthrew the Syrian government, and the new rulers immediately petitioned for admission to take part in organizing the federation and were accepted. Later in June 1971, Sudan withdrew due to its domestic problems but promised a more active future role in the federation.

After a series of meetings, Egypt, Libya, and Syria agreed to create the Federation of Arab Republics. A draft constitution was drawn up and put to a national referendum, which gained overwhelming support in the three states. The Presidential Council elected President Sadat of Egypt to head the new union (for a two-year term), and a federal cabinet was chosen. Also, a federal Assembly was chosen

²⁴Enver M. Koury, The Patterns of Mass Movements in Arab Revolutionary-Progressive States (The Hague: Mouton and Co., 1970), pp. 289-90.

consisting of sixty members, twenty from each country. The federal government announced various programs on defense, federal civil servants, foreign trade and development. Other top-level committees were established to study all important questions and present their results to the federal government.

While this was going on, the three states did not rush to achieve complete unification. At this time the Egyptians were more cautious than before, apparently to avoid the mistakes that led to the collapse of former attempts. On the other hand, Qadhdhafi of Libya was most instrumental in pressing for ever-closer cooperation and integration in the union. The general sentiments among Arab intellectuals are that wiser and more mature approaches may foreshadow the process by which Arab unity could be accomplished in the future. Whether this federation will outlive its predecessors remains to be seen.²⁵

²⁵Peter K. Bechtold, "New Attempts at Arab Cooperation: The Federation of Arab Republics, 1971-?", "The Middle East Journal", XXVII, No. 2 (Spring, 1973), 152-62.

CHAPTER II

TRADITIONAL AND CONTEMPORARY REGIONS

This chapter will focus on the traditional and contemporary regions within the Arab world. The traditional clustering consists of four geographic regions: the Fertile Crescent, the Nile Valley, North Africa, and the Arabian Peninsula. Since the early part of the nineteenth century these regions have been subjugated to foreign domination. The result was fragmentation and the emergence of new separate nation-states. The contemporary regions cluster the Arab states on their political, socio-economic, demographic, and other similarities regardless of their geographic contiguity.

Traditional Regions

The Arab world is roughly divided into four regions: North Africa, the Nile Valley, the Fertile Crescent, and the Arabian Peninsula. These four regions consist of a continuous area extending from Morocco in the west to Iraq in the east, a distance of about 3,500 miles. For economic and strategic purposes this area was the target of domination and occupation by four European powers: Great Britain, France, Italy, and Spain.

North Africa (The Maghrib). This region consists of four Arab countries (Algeria, Libya, Morocco, and Tunisia) sometimes called "White Africa," separated from Black Africa by the Sahara. These four states were the first to be colonized by the European Powers and the last to be affected by the wave of Arab nationalism.

Algeria was the first state to be occupied by the French. In 1830 the French took over Algeria from the Turks in order to establish an influence for themselves in the region. The French embarked on a policy to assimilate and colonize Algeria, and eighteen years later the French government declared it a French territory. The French decision resulted in a bloody civil war between the Algerian nationalists and the French forces which intensified in 1954. This war did not end until 1962, when France backed out of her decision and granted Algeria her independence.¹

Tunisia became the second to fall under the French. The reason for its occupation in 1881 was also for French security, but this time against the growing Italian interest. A French protectorate, Tunisia was granted domestic autonomy in 1955 and complete independence a year later. In 1957 the monarchy was replaced by a republican type of government.

¹ Philip K. Hitti, The Near East History (Princeton, N. J. : D. Van Nostrand Company, Inc., 1961), pp. 427-28.

Libya, the Turkish province of Tripoli, was detached by Italy in 1911. Cyrenaica, the Fezzan, and a large portion of the Libyan desert were added to Tripolitania to form today's Libya. World War II ended the Italian occupation. Tripolitania and Cyrenaica came under the administration of the British and the Fezzan of the French. The United Nations General Assembly voted on November 21, 1949 that Libya should become independent, and in December 1951 the country became a sovereign kingdom.

Morocco is the only North African state to have a long tradition of national sovereignty. Because of its strategic location on the strait of Gibraltar, Morocco was the target of big-power rivalry. In 1904 France and Spain divided Morocco into French and Spanish sectors; these became protectorates in 1912. In 1956 France and Spain granted Morocco its independence.²

The Nile Valley. This region includes two states, Egypt and Sudan. For thousands of years Egypt has occupied an important role in the struggle among the world big-powers. From 641 A. D. to 1517 Egypt was part of the Arab Empire, after which the Ottomans occupied it. Since the latter part of the eighteenth century, both France and Britain began to challenge the Ottoman's sovereignty over Egypt. With the opening of the Suez Canal in 1869, the strategic position of Egypt became very important to the European powers.

²Ibid., p. 429.

British troops occupied Egypt in 1882 in order to guard its colonies east of the Canal and in the Orient; it continued under nominal Ottoman influence. After the disintegration of the Ottoman Empire, Egypt became a British protectorate in 1914. Under pressure from the Egyptian nationalists, the country was declared an independent state in 1922, but Britain retained the right to secure and defend its communications. In 1922 Egypt became a Kingdom, and it remained so until the revolution of July 23, 1952 which abolished the monarchy and brought Nasser to power.³

The charismatic leadership of the late President Gamal Abdel Nasser gave Egypt an influential role in the Arab world. He tried several times to rally the Arab states under his rule but failed to accomplish this ambition. He dreamed of a United Arab States but was unsuccessful except in the short-lived union between Egypt and Syria from 1958 to 1961.

In 1820 Mohammed Ali, Pash of Egypt, sent troops to the Sudan and established himself as a ruler. The Mahdist revolt (1881-98) compelled the Egyptian forces to withdraw and abandon their control. In 1899 the country was reconquered again by a joint British and Egyptian military force and was placed under an Anglo-Egyptian condominium, but it was Britain who had the actual power.

³Ibid., pp. 434-39.

In 1953 both Britain and Egypt agreed to the self-government of the Sudan under a transitional government. The new agreement gave the Sudanese people three years to decide their own political future, but in December 1955, the Sudanese Parliament declared the country an independent and sovereign nation which, with the consent of both Britain and Egypt, was proclaimed on January 1, 1956.⁴

The Fertile Crescent. This region is called sometimes "the Arab Crescent" or "the Great Syria." The region extends from Iraq to Syria and is bordered by Iran, Turkey, Egypt, and the Arabian Peninsula. It is known as the heart of the Arab world in terms of geography, politics, and culture. Unlike the surrounding states, the Fertile Crescent has never comprised a unified political unit or state. After the First World War the region was divided into the states of Syria, Lebanon, Iraq, Palestine and Transjordan; after the Palestine War of 1948-49, Palestine and Transjordan later became Israel and Jordan.⁵

The English and the French entered into a secret pact in 1916, better known as the Sykes-Picot Agreement, which was an attempt to redraw the map of the Fertile Crescent. According to

⁴Mandour El Mahdi, A Short History of the Sudan (London: Oxford University Press, 1965), pp. 61-152.

⁵H. B. Sharabi, Governments and Politics of the Middle East in the Twentieth Century (Princeton: D. Van Nostrand Company, Inc., 1962), p. 105.

the plan France would have both Syria and Lebanon in her zone of influence; the British would place Palestine, Transjordan and Iraq under their influence. When the Ottoman Empire was defeated in the First World War, the plan was carried out and once again the Arabs of the region were subjected to another foreign domination.⁶

According to the Anglo-French Accord, the League of Nations gave France a mandate over Syria and Lebanon after the First World War. In 1920 the French drew a border between Syria and Lebanon which resulted in several nationalist protests. Lebanon was proclaimed a republic under French protection on May 23, 1926. Later, on November 26, 1941, Lebanon was granted its independence. In 1946 Syria was granted its sovereignty, and from that time the history of both countries took different courses.⁷

Iraq and Transjordan were designed by the British to be Hashimite monarchies under their mandate. The British installed Faisal I as ruler of Iraq and recognized it as a kingdom in 1922; ten years later the mandate was terminated. Transjordan was placed under the rule of Amir Abdullah Ibn Hussein in 1921. Two years later Britain recognized Transjordan's independence, subject to the mandate. In 1946, Britain abolished the mandate and granted the

⁶George Lenczowski, The Middle East in World Affairs (2d ed.; Ithaca, New York: Cornell University Press, 1956), pp. 70-92.

⁷Ibid., pp. 266-311.

country its independence. The Palestine War had changed its name, Transjordan, to Jordan after it controlled parts of Palestine that were not occupied by Israel.⁸

Palestine was destined to take a different course from the other states in the Fertile Crescent. It became a British mandate in 1922. In the meantime, Jewish immigrants came to Palestine to fulfill a Zionist Plan to create a Jewish State. When the British terminated their mandate and withdrew their troops on May 14, 1948, the leaders of the Jewish National Council proclaimed the establishment of the State of Israel. The Arabs protested and hostilities broke out between both sides; they have not yet been finally resolved.⁹

The Arabian Peninsula. This region occupies a sacred spot in the hearts of both Muslims and Arabs. It is the birthplace of Islam and Arabs alike. Even before Islam the region was never exposed to a strong foreign influence, as were the other Arab regions. The Arabian Peninsula consists of Saudi Arabia, Yemen, South Yemen, and tiny states in southeastern Arabia.

Saudi Arabia occupies approximately 90 per cent of the Peninsula. This new state was founded by the late King Abdulaziz Ibn Saud in 1932. It was the first time after the rise of Islam that

⁸ Jon Kimche, The Second Arab Awakening (New York: Holt, Rinehart and Winston, 1970), pp. 130-71.

⁹ Lenczowski, The Middle East in World Affairs, pp. 312-69.

such vast Arab territories have been unified into one state. The discovery of oil has enabled the Saudi monarch to carry out various developmental programs to build a modern nation-state.¹⁰

Modern Yemen was founded by Immam Yahya after the First World War. Since that time the country was isolated from the outside world of thought and trade. Yahya was confronted with the task of establishing an efficient bureaucracy, but instead he instituted a system of extreme personal rule. The country was kept in a state of medieval backwardness which generated increasing protests by the Yemenis who had seen the "outside" world. The situation deteriorated further, leading to the 1962 military coup.¹¹

The other parts of the Peninsula have been under British influence since the nineteenth century. The strategic location of Aden in Southern Arabia and the discovery of oil on its eastern shores convinced the British to tighten their influence. This area which had been widely unknown suddenly jumped to the center of world attention, not only in the world of economics but also in politics.¹²

¹⁰Richard H. Singer, The Arabian Peninsula (Ithaca, New York: Cornell University Press, 1954), pp. 27-34.

¹¹Manfred W. Wenner, "Yemen," Governments and Politics of the Contemporary Middle East, ed. Tareg Y. Ismael (Homewood, Ill.: The Dorsey Press, 1970), pp. 387-95.

¹²Ibid., pp. 415-49.

The diminishing prestige of Britain in the Arab world after the Suez Crisis of 1956 coupled with a nationalist struggle for independence compelled the British to reevaluate its colonial policy with regard to the area. Britain decided to withdraw gradually from the region by granting independence to Kuwait in 1961, South Yemen in 1967, and Bahrain, Qatar, Oman, and the United Arab Emirates in 1971, thus ending its last direct influence on the area.

The political fragmentation of the Arab world over the past decades hinders any possibility of achieving a total Arab unity in the foreseeable future. This fragmentation encourages the emergence of diverse political systems, educational and socio-economic standards. These barriers are far greater today than at the turn of the century. But the only alternative way to achieve unity, Nabih Amin Faris believes, is through regional federations. After these regional federations become successful, an over-all federal union could be established and a United Arab States could emerge. Therefore, on the basis of the four geographic regions he suggests the following:

1. The Fertile Crescent. This would include Iraq, Syria, Jordan, and Palestine, after the last has been liberated. He includes Kuwait with this unit but excludes Lebanon until "national consciousness is firmly established among the Arabs." He believes that once this has been reached Lebanon will join without hesitation.

2. The Arabian Peninsula. This would contain Saudi Arabia, Yemen, Southern Yemen, and the small emirates along the south-eastern shores of Arabia, like Bahrain, Qatar, Oman, and the Trucial Coast shiekhdoms.

3. The Nile Valley. This would embrace Egypt, Sudan, and Libya, which he considers "an extension of the western Egyptian Desert on the one side and Tunisia on the other."

4. The Maghrib. This would comprise Morocco, Algeria, and Tunisia.

Since 1946 Faris has been advocating the establishment of the United Arab States. Today, he believes that the setbacks suffered by the Arab world would not have taken place if it had been united. The Arab world possesses great potential for unity. He concludes that the Arabs will not be able to confront the necessities of today unless they are politically and economically united.¹³

Contemporary Regions

One of the chief problems of comparative literature of the Arab states is the lack of scientific studies that attempt to compare states of the four geographic regions of the Arab world to each other

¹³Nabih Amin Faris, "A View of Arab Unity," Political and Social Thought in the Contemporary Middle East, ed. Kemal H. Karpat (New York: Frederick A. Praeger, Publishers, 1968), pp. 259-62.

based on criteria other than their shared cultural similarity and geographic contiguity. This writer has not been able to find many behavioral studies that are devoted to analyzing, in terms of regions, some of the social, cultural, demographic, economic, and political attributes that exist among the states within the Arab world. Almost everything which has been written about Arab unity concentrates on the shared historical and cultural homogeneity of the Arab states. While these are enhancing conditions, they have not yet produced a successful unification.

Bruce M. Russett included the Arab states in his study International Regions and the International System. He focused his attention on five criteria in order to delineate international regions. Regionalism among nation-states was viewed on social and cultural homogeneity, similar political attitudes or external behavior, political interdependence, economic interdependence, and geographic proximity.¹⁴ His approach was multidimensional.

He used fifty-four socio-cultural variables for eighty-two countries in the first part of his study. These variables were reduced to five orthogonally rotated dimensions by factor analysis. These five domains were used to group the eighty-two countries into homogenous regions.

¹⁴Bruce M. Russett, International Regions and the International System (Chicago: Rand McNally and Company, 1969), p. 11.

The Arab states did not cluster by themselves to form a distinctive region. On the socio-cultural dimensions, they did not stand out separate from the "Afro-Asian" group. Those states included Tunisia, Iraq, Morocco, Syria, Jordan, Egypt, Algeria, and Lebanon.¹⁵

On international organization memberships, the Arab countries formed a cluster called the "Arabs," but Iran and Israel are included. Russett attributed this to common Arab membership in most of the international organizations and the creation of several local agencies, such as the Arab Postal Union and the Arab Development Bank, which brought the Arab states together. Yemen was not included in this group; it is left unclassified. Both Iran and Israel clustered with the Arabs, even though they are not Arabs, because they are members of all the broader Middle East and Mediterranean organizations of which most of the Arab states are members.¹⁶

Looking at the clusterings as a function of economic interdependence, nine Arab countries grouped together. Yemen was still absent, and the three former French African colonies of the Maghrib are not included. The reason for the exclusion of the Maghrib states, Morocco, Algeria, and Tunisia, is partly because they carried on most of their commerce within the franc area. Russett believed

¹⁵Ibid., pp. 23-24.

¹⁶Ibid., pp. 104-08.

that this could be viewed as geographic rather than purely a political or culturally-based grouping because this time Italy and Cyprus are included.¹⁷

Both the international organization membership regions and those based on trading patterns included more Arab groups than Middle East groups, mainly because in the 1960's the Arab countries moved closer toward each other than in the 1950's. The economic relations among members of the trade clustering shared historic bonds within the Ottoman Empire. Membership in international and regional organizations did not exist until the Arab states retained their full sovereignty.

Based on all of his criteria, Russett found three clusters among the Arab states. The first was called the radical or revolutionary Arabs of the geographic heartland: Egypt, Syria, Iraq, and Sudan. The second is called the Maghrib (North African) states, consisting of Algeria, Morocco, and Tunisia. The third included the geographically divided states of Jordan, Libya, Lebanon, and Kuwait. Both Saudi Arabia and Yemen could not be fitted in any of these three groupings. He believed that Yemen will remain outside these groupings until its political situation is resolved. He was suspicious of the success of political unification among what he called

¹⁷Ibid., p. 137.

the radical states in the foreseeable future. But the potential among the Maghrib states is greater than anywhere else in the Middle East.¹⁸

Russett carried out his study a decade ago and since then the Arab states have undergone major political, social, and economical changes. Politically, there have been changes in leadership and in governmental institutions. Yemen has resolved its political situation and is on the way toward development. Both Britain and France have granted full sovereignty to their former colonies, thus ending foreign influence in the Arab world. Economically, careful plans have been adopted to ensure progress and self-sufficiency. The Arab Common Market was born in 1964 to promote economic cooperation among the Arab states.

In his study "East-West Interaction Patterns" Johan Galtung viewed the world as containing a number of nations, ranked according to many criteria, such as size, wealth, military strength, and degree of development, involved in various interactions. Galtung's basic assumption of rank theory was that if the international system met two ordering principles, it is referred to as a feudal system. These two principles were:

- (1) The rankings have a tendency to be concordant, in the sense that a nation that ranks high on one dimension has a tendency to also rank high on other dimensions; and a nation that

¹⁸Ibid., pp. 183-84.

ranks low on one has a tendency to rank low on other dimensions as well.

(2) The interaction has a tendency to be rank-dependent, in the sense that there is much interaction between nations high in the ranking system, less between one nation that is high and another nation that is low, and much less between two nations low in the system. Thus the degree of interaction is strongly dependent on the total rank of the pair.¹⁹

Galtung's work has generated several studies of regional integration, of which Per Olav Reinton's "International Structure and International Integration" was one. Dealing mainly with trade indicators, Reinton found good prediction by rank theory for the Latin American system. He concluded that rank theory predicts well for any system of nations.²⁰

It was Reinton's generalization that led William R. Thompson to test Galtung's theory in regard to the Arab states. Of the Arab states, Thompson studied only thirteen, Algeria, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Saudi Arabia, Sudan, Syria, Tunisia, the United Arab Republic, and Yemen. The others, Southern Yemen, Muscat Oman, Trucial Oman, Bahrian, and Qatar, were excluded due to a lack of sufficient data and the fact that they did not constitute significant actors in terms of the 1965 analysis.

¹⁹Johan Galtung, "East-West Interaction Pattern," Journal of Peace Research, III, No. 2 (1966), 146.

²⁰Per Olav Reinton, "International Structure and Integration," Journal of Peace Research, IV, No. 4 (1967), 335.

Thompson used two kinds of behavioral measures, trade and state visits, for 1965. The trade measure was based on the relation of imports to exports between pairs of nations. State visits "include official bilateral visits or exchanges by a head of state, a head of government, and/or a foreign minister to and from a state within the Arab sub-system."²¹

Inter-Arab interaction of trade and state visits were not predicted well by rank theory. "Comparing the postulated hierarchy with the two actual frequency sets yields a Kendall concordance coefficient W of only .278, where perfect concordance would equal 1.00."²²

One of the intermediate steps categorized the Arab states by two attribute indices. As indicated in Table I, the Arab states were grouped into three categories, high, medium, and low, by their rank on power-communication variables and on "status-set" variables. His index of power-communication included: "(1) daily newspaper circulation, (2) radio distribution, and (3) annual increase of radios; plotted against power: average rank of (1) total population, (2) area, and (3) GNP." The "status-set" index consists of "the average rank of (1) GNP, (2) gross defense expenditures, integrated with a prestige factor which assigns points for adherence to regional values."²³

²¹William R. Thompson, "The Arab Sub-System and the Feudal Pattern of Interaction: 1965," Journal of Peace Research, VII, No. 2 (1970), 154.

²²Ibid., p.158.

²³Ibid., p.156.

TABLE I

States Within the Arab Sub-System Ranked by Two
Indexes: Power-Communication
and Status-Set

Rank	Power-Communication	Status-Set
High	Algeria U. A. R.	U. A. R.
Medium	Sudan Morocco Iraq Syria	Iraq Algeria Morocco Kuwait Saudi Arabia
Low	Saudi Arabia Tunisia Libya Kuwait Lebanon Jordan Yemen	Sudan Syria Lebanon Tunisia Jordan Yemen Libya

Source: William R. Thompson, "The Arab Sub-System and the Feudal Pattern of Interaction: 1965," Journal of Peace Research, VII, No. 2 (1970), 155.

Using his category for high and medium intensity of interaction, the pairs of Arab nations that interact the most on state visits were: (1) Algeria and U. A. R., (2) Iraq and Kuwait, (3) Jordan and Kuwait, (4) Jordan and Morocco, (5) Kuwait and Saudi Arabia, (6) Saudi Arabia and U. A. R., and (7) U. A. R. and Yemen. Pairs of states that interacted most on trade were: (1) Algeria and Morocco, (2) Algeria and Tunisia, (3) Lebanon and Saudi Arabia, (4) Lebanon

and Syria, (5) Libya and Tunisia, and (6) Saudi Arabia and U. A. R.²⁴

These groupings may be thought of as regions within the Arab World.

²⁴Ibid., p. 165.

CHAPTER III

THE RESEARCH DESIGN

This study is focusing on the Arab countries for three reasons. First, some Arab states have attempted to achieve political unification, as shown in Chapter I, during the past four decades, but they have failed to accomplish their goals. Second, a number of factors, among them strategic location and the discovery of oil in the Arab World, have worked to stimulate high journalistic and scholarly interest in the area over the years. Third, this writer is a native of the area under investigation. Hopefully, his acquaintance with its history will contribute to making the study more fruitful.

The first basic objective of this study is to determine the dimensions of fourteen Arab states on their political, social, economic, and demographic characteristics. Second, on the basis of these dimensions, the states will be grouped into regions, for purposes of comparison, in a more comprehensive fashion than based merely on geographic adjacency or preconceived historic and cultural homogeneity.

Data Collection

Various considerations went into the choice of the starting and cut-off dates for the study. The author decided to gather the

most recent data available on fourteen Arab states. He found that the 1970-72 data are the most recent; therefore, the availability of the data determined the date. The data were derived from such commonly used statistical sources as: The United Nations' Demographic Yearbook, Statistical Yearbook, International Trade Statistics, Yearbook of Labor Statistics, World Health Statistics Report, Vol. II. Also used were: The World This Year, The Almanac of World Military, The New York Times Encyclopedic Almanac, Britannica Book of the Year, and Arab Political Documents.¹

Reliability of data is a very complex problem confronting students of political science. The experience of this writer suggests more careful examination of data sources, especially if the study focuses on developing countries. Certainly, some data collecting agencies are more reliable than others because they are more scientific in their approach and also staffed with persons with advanced professional training in their respective fields. Among these are the Statistical Office of the United Nations and the Yale Political Data Program.

Approximately 5 per cent of the data were missing. The author estimated these figures, based on group means and his personal impressions.

¹ The full citation for each of these data sources is found in the bibliography.

Operationalization

The Arab World consists of eighteen independent states but only fourteen, Algeria, Egypt, Iraq, Jordan, Kuwait, Morocco, Lebanon, Libya, Saudi Arabia, South Yemen, Sudan, Syria, Tunisia, and Yemen, are the subject of this study. The remaining four, Bahrain, Oman, Qatar, and the United Arab Emirates, are excluded due to a lack of sufficient data.

There are fifty-four variables chosen for the study, grouped under the following domains: (1) Political; (2) Demographic; (3) Energy; (4) Defense; (5) Health and Vital Statistics; (6) Economics; (7) Labor Force; (8) Education; (9) Communication and Culture; (10) Transportation; and (11) Social Services. This study is not an exact replication of a previous work; therefore, no factor comparison is planned.

These domains have been used by many scholars of political science in their studies of regionalism or integration. For example, the specific variables of the political domain used in this study are:

1. Parliamentary representation
2. Political parties
3. Freedom of the press
4. Number of attempted coups
5. Number of successful coups
6. Number of cabinet changes

Similar variables were used by Arthur S. Banks and Robert B. Textor in their study A Cross-Polity Survey.² The data for variables 4-6 were collected by the writer of this thesis from Arab Political Documents and converted from single event reports to aggregate form.

The energy domain consisted of the following variables:

1. Electrical power for the public sector
2. Total production of energy
3. Total consumption of energy
4. Consumption of energy per capita

These variables were included in Brian J. L. Berry's study of regionalization of nation-states based on economic development. Berry used forty-three variables to find regional delineations.³

The Health and Vital Statistics domain contained the following variables:

1. Birth rate per 1,000 population
2. Death rate per 1,000 population
3. Infant mortality per 1,000 population
4. Life expectancy
5. Inhabitants per hospital bed
6. Inhabitants per physician

²Arthur S. Banks and Robert B. Textor, A Cross-Polity Survey (Cambridge, Mass.: M.I. T. Press, 1963), pp. 67-97, passim.

³Brian J. L. Berry, "Basic Patterns of Economic Development," Essays on Geography and Economic Development, ed. Norton Ginsburg (Chicago: University of Chicago Press, 1970), pp. 78-107.

These were among fifty-four socio-cultural variables studied by Bruce M. Russett in his work International Regions and the International System.⁴ These three domains are reported here as examples. For a complete list of the variables used in this thesis, see the Appendix.

Methodology

In analyzing the data two statistical techniques will be employed in the study, factor analysis and hierarchical clustering.

Factor analysis is used to profile the data to determine which variables form separate dimensions. One of the aims of factor analysis is to locate a small number of highly intercorrelated clusters of indices within a large number of variables for the purpose of data reduction. The R-technique of factor analysis reduces the number of variables to a set of factors that are empirically independent. The idea is to delineate those which are more powerful and homogeneous variables, thus permitting ambiguous ones to be ignored.⁵

Hierarchical clustering is to be used to determine which entities cluster together on the basis of similarity. Politics are clustered in such a way that a polity falling into a given cluster possesses more attributes in common with other polities in that cluster

⁴Bruce M. Russett, International Regions and International System (Chicago: Rand McNally and Company, 1969), pp. 14-35.

⁵R. J. Rummel, Applied Factor Analysis (Evanston: Northwestern University Press, 1970), pp. 12-32.

than with polities in any other cluster.⁶

In both techniques the data will be analyzed three different ways to see how the results vary. First, the fifty-four variables will be analyzed and reported. This is the primary analysis. Second, twenty-nine variables based on "rate" numbers will be dealt with. Third, the remaining twenty-five variables, "absolute" variables, will be examined separately.⁷

An analysis using all the variables (some controlling for population and some not) is the most widely used by political scientists. By picking out the "rate" variables for separate analysis, the influence of population size is eliminated. On the other hand, the analysis of the "absolute" variables emphasizes the impact of size.

⁶Russett, International Regions and International System, pp. 49-58, and Donald J. Veldman, Fortran Programming for the Behavioral Sciences (New York: Holt, Rinehart and Winston, 1967), pp. 308-10.

⁷A "rate" variable is one in which population size is controlled, such as per cent of urban population and birth rate per 1,000. For "absolute" variables there is no control for population size. Examples are army strength and gross national product.

CHAPTER IV

DIMENSIONS OF ATTRIBUTES OF ARAB STATES

At this stage, computations were carried out in order to delineate the factors which best describe the variables under study. The factors that accounted for at least 6 per cent of the total variance were selected for analysis and presented in tabular form. Each factor was labeled on the basis of the variables that loaded highly.

Since the fifty-four separate variables include a combination of twenty-nine "rate" variables and twenty-five "absolute" variables, they will be analyzed in three different fashions. First, the overall fifty-four variables will be examined, and meaningful dimensions reported; second, the "rate" variables will be studied; and third, the "absolute" variables will be analyzed separately. The notion behind this is to see how much the results of these analyses differ.

Overall Dimensions

Table II presents the factor loadings from the factor analysis of the overall dimensions among Arab States.¹ The group of variables

¹ Factor loadings of .50 or greater are reported in the tables presented in this chapter.

TABLE II

Overall Dimensions Among Arab States

Variable	Factor Loading
Factor I	
Defense and Education	
20.5%	
18. Annual Defense Expenditure	+.98
39. Number of Students in Higher Institutions	+.97
16. Number in Armed Forces	+.96
37. Number of Students in Technical Institutions	+.95
12. Electrical Power for the Public Sector	+.94
36. Number of Students in Primary and Secondary Schools	+.93
38. Number of Students in Teaching Institutions	+.93
8. Total Population	+.86
19. Defense Expenditure as Percentage of Gross National Product	+.78
26. Calories Per Day Per Capita	+.76
29. Gross National Product	+.74
14. Total Consumption of Energy	+.68
11. Natural Increase in Population Per 1,000	-.53
Factor II	
Mass Media and Communication	
18.6%	
9. Density Per Square Mile	+.97
48. Daily Newspaper Circulation Per 1,000 Population	+.96
47. Annual Cinema Attendance Per Capita	+.94
45. Foreign Mail Per Capita	+.91
33. Per Cent of Population in Manufacturing	+.75
40. Literacy Rate	+.72
44. Domestic Mail Per Capita	+.72
43. Number of Telephone Receivers Per 1,000 Population	+.64
41. Number of Radio Receivers Per 1,000 Population	+.59
42. Number of Television Sets Per 1,000 Population	+.59
3. Freedom of the Press	+.55
21. Death Rate Per 1,000 Population	-.75
20. Birth Rate Per 1,000 Population	-.88

TABLE II--Continued

Factor III Affluence 17.9%	
15. Consumption of Energy Per Capita	+.97
49. Number of Motor Vehicles in Use Per 1,000 Population	+.93
35. Per Cent of Population in Services	+.93
30. Gross National Product Per Capita	+.88
42. Number of Television Sets Per 1,000 Population	+.73
43. Number of Telephone Receivers Per 1,000 Population	+.71
46. Foreign Mail Sent/Foreign Mail Received	+.69
23. Life Expectancy	+.68
44. Domestic Mail Per Capita	+.63
27. Exports	+.56
10. Per Cent of Urban Population	+.55
12. Total Production of Energy	+.51
34. Per Cent of Population in Construction	+.50
32. Per Cent of Population in Agriculture	-.79
Factor IV Geographic Size 7.9%	
7. Area	+.83
27. Exports	+.70
12. Total Production of Energy	+.64
29. Gross National Product	+.54
1. Parliamentary Representation	-.91
Factor V Deficiency in Health Services 7.7%	
25. Inhabitants Per Physician	+.90
31. Per Cent of Gross National Product from Agriculture	+.83
24. Inhabitants Per Hospital Bed	+.80
17. Armed Forces as Per Cent of Population	-.55
34. Per Cent of Population in Construction	-.59

were reduced to five factors which accounted for 71.6 per cent of the total variance.

The first factor is designated "Defense and Education" based on the variables which load heavily. They include Annual Defense Expenditure, Number of Students in Higher Institutions, Number in Armed Forces, Number of Students in Technical Institutions, Number of Students in Teaching Institutions, and Defense Expenditure as Per Cent of Gross National Product. This factor accounts for the largest single segment of the total variance, 20.5 per cent. The variables that cluster around this factor indicate both the defense strength and educational status of the state.

The second factor is named "Mass Media and Communications." It includes variables with high positive loadings such as daily newspaper circulation per 1,000 population, annual cinema attendance per capita, and foreign mail per capita, and variables with negative correlations, such as death rate per 1,000 population and birth rate per 1,000 population.

The third factor is labeled "Affluence" because most of the variables that load highly on it are indicative of wealth and a higher standard of living. Variables with a strong, positive loading include consumption of energy per capita, number of motor vehicles in use per 1,000 population, per cent of population in services, and gross national product per capita. It is interesting to note that the only variable loading negatively on this factor is per cent of population in agriculture. This tends to support the assumption that the smaller

proportion of the population engaged in agriculture, the higher the living standard.

The fourth factor is given the title "Geographic Size." Variables that correlate positively with it include area, exports, total production of energy, and gross national product. Parliamentary representation is negatively correlated with size. Generally, the states with greater parliamentary representation are the smaller states.

The fifth factor is called "Deficiency in Health Services." When the number of inhabitants per physician and hospital bed increases, this is a sign of inadequate health facilities. Both armed forces as per cent of population and per cent of population in construction load negatively.

In this study, the factor scores are the values each state has on each of the dimensions extracted. They show whether a state is high or low on a particular dimension examined earlier. Table III displays how the fourteen Arab States are ranked on each of the five factors.

It is not surprising to find that Egypt ranks the highest of all the Arab States on Factor I. This is true because she maintains a large defense establishment in relation to the rest of the Arab World. Egypt also outnumbers the other Arab countries in terms of student enrollments.

TABLE III

Factor Scores of Overall Dimensions
Among Arab States

Factor I	Factor II	Factor III	Factor IV	Factor V
Egypt (3.47)	Lebanon (3.45)	Kuwait (3.52)	Libya (2.04)	Yemen (3.24)
Iraq (0.17)	Kuwait (0.19)	Libya (0.28)	Saudi Arabia (1.56)	Sudan (0.42)
Saudi Arabia (0.12)	Egypt (0.14)	Egypt (-0.05)	Sudan (1.06)	Morocco (0.17)
Algeria (0.07)	Libya (0.09)	Yemen (-0.12)	Algeria (0.88)	Egypt (0.16)
Syria (0.04)	Tunisia (0.09)	Iraq (-0.18)	Iraq (0.58)	Lebanon (0.09)
Morocco (-0.12)	Syria (-0.04)	Jordan (-0.19)	Lebanon (-0.07)	Algeria (0.04)
Kuwait (-0.21)	Algeria (-0.14)	Algeria (-0.20)	Egypt (-0.29)	Kuwait (-0.09)

TABLE III--Continued

Factor I	Factor II	Factor III	Factor IV	Factor V
Sudan (-0.36)	Sudan (-0.32)	Saudi Arabia (-0.25)	Kuwait (-0.44)	Saudi Arabia (-0.24)
Jordan (-0.40)	Iraq (-0.35)	Syria (-0.35)	Yemen (-0.59)	Syria (-0.28)
Tunisia (-0.41)	Jordan (-0.49)	Sudan (-0.37)	Morocco (-0.81)	Iraq (-0.38)
Lebanon (-0.44)	Morocco (-0.51)	South Yemen (-0.45)	Syria (-0.83)	Libya (-0.45)
Libya (-0.53)	Yemen (-0.53)	Lebanon (-0.52)	Tunisia (-0.89)	Tunisia (-0.47)
Yemen (-0.60)	Saudi Arabia (-0.68)	Morocco (-0.53)	Jordan (-1.06)	South Yemen (-1.02)
South Yemen (-0.75)	South Yemen (-0.72)	Tunisia (-0.57)	South Yemen (-1.18)	Jordan (-1.21)

Iraq occupies the second highest position on the same dimension, but its factor score is much lower than Egypt's. While Saudi Arabia ranks third, the gap between the states becomes narrower. For example, the distance between Saudi Arabia and Algeria is only 0.05. It also is worth noticing that the difference between Algeria and Syria is only 0.03, and between Tunisia and Lebanon the difference is 0.03, which supports the notion of factor scores indicating proximity of cases on a factor. As might be expected, both Yemen and South Yemen rank at the bottom on this dimension.

Lebanon enjoys the highest number of daily newspaper circulation per 1,000 inhabitants, annual cinema attendance per capita, foreign mail per capita, and the highest literacy rate among the Arab countries. All of these criteria push Lebanon to the highest score on Factor II. Kuwait ranks second, but again the factor scores drop significantly to make the subsequent differences relatively close. It is interesting to find both Libya and Tunisia registering the same factor score (0.09).

One of the wealthiest countries in the world and certainly number one in the Arab World is Kuwait. This is a justification for her position on Factor III. Libya is the second highest country, but, as might be seen in both Factor I and Factor II, the distance between the state that occupies the first place in size of factor score and the state in second place is great.

Libya's total production of energy and high revenue from exporting oil makes her number one on Factor IV. For the same reasons, Saudi Arabia occupies the second place. While Sudan is not a major producer of energy or a major exporting state, its size makes it the third highest country on this dimension. Yemen ranks the first in terms of inadequate health services, as Factor V indicates. Sudan is the second highest state on this dimension, but with a great difference in factor scores between Sudan and Yemen.

"Rate" Dimensions

The group of variables chosen for analysis in this section reveal five primary factors that survive the 6 per cent cut-off point. Together these five factors account for 81.4 per cent of the total variation. These factors with their loadings are displayed in the following table (Table IV).

Factor I is given the title "Mass Media and Communications." Although the variable with the highest positive loading is density per square mile, most of the other variables with positive loadings support the description of this factor. Three variables, namely, daily newspaper circulation per 1,000 population, annual cinema attendance per capita, and foreign mail per capita, disclose a high level of awareness and communication with the outside world. It is interesting to report that the variables that deal with death rate and birth rate per 1,000 population load highly negative on the factor.

TABLE IV
Dimensions of "Rate" Variables

Variable	Factor Loading
Factor I Mass Media and Communication 28.2%	
9. Density Per Square Mile	+.98
48. Daily Newspaper Circulation Per 1,000 Population	+.97
47. Annual Cinema Attendance Per Capita	+.93
45. Foreign Mail Per Capita	+.87
33. Per Cent of Population in Manufacturing	+.75
44. Domestic Mail Per Capita	+.68
40. Literacy Rate	+.67
43. Number of Telephone Receivers Per 1,000 Population	+.60
42. Number of Television Sets Per 1,000 Population	+.56
41. Number of Radio Receivers Per 1,000 Population	+.55
21. Death Rate Per 1,000 Population	-.72
20. Birth Rate Per 1,000 Population	-.86
Factor II Affluence 26.6%	
15. Consumption of Energy Per Capita	+.96
49. Number of Motor Vehicles in Use Per 1,000 Population	+.95
35. Per Cent of Population in Services	+.94
30. Gross National Product Per Capita	+.91
43. Number of Telephone Receivers Per 1,000 Population	+.73
46. Foreign Mail Sent/Foreign Mail Received	+.73
42. Number of Television Sets Per 1,000 Population	+.73
44. Domestic Mail Per Capita	+.66
23. Life Expectancy	+.61
32. Per Cent of Population in Agriculture	-.74
Factor III Deficiency in Health Services 11.7%	
31. Per Cent of Gross National Product from Agriculture	+.91
24. Inhabitants Per Hospital Bed	+.88
25. Inhabitants Per Physician	+.87

TABLE IV--Continued

Factor IV Defense Expenditure 8.7%	
19. Defense Expenditure as Per Cent of Gross National Product	+ .91
26. Calories Per Capita Per Day	+ .91
Factor V Demography 6.2%	
10. Per Cent of Urban Population	+ .79
11. Natural Increase in Population Per 1,000	+ .68

"Affluence" is plainly apparent in Factor II. Variables that exhibit wealth and a higher standard of living load heavily on this factor. This factor and the variables loading on it have appeared as Factor III in the overall dimensions. The loadings differ somewhat with the exception of the variable that expresses the number of television sets per 1,000 population, which loads equally on both dimensions (+.73).

The third factor, "Deficiency in Health Services," indicates a positive relationship between per cent of gross national product from agriculture and inadequate health services provided by the government. The three variables that load heavily on this factor are also the variables that appear on the analogous factor in the overall dimensions.

Defense expenditure as per cent of gross national product and calories per capita per day show a close interrelationship and

best describe the dimension that is determined by Factor IV, "Defense Expenditure." The two variables load equally strong on the factor (+.91). The dimension of "Demography" is evident on Factor V. Both variables that describe this factor (per cent of urban population and national increase in population per 1,000 inhabitants) show high, positive correlations.

The factor scores based on the five factors extracted from the analysis of the "rate" variables are displayed in Table V. There will be comparison, when possible, between scores based on the overall dimensions and these factors.

Since Lebanon secured the first place on Factor II of the overall dimensions describing "Mass Media and Communication," it is not surprising to find her again in the same position on Factor I in this section. Also, the gap is still wide between the country occupying the first place and the other thirteen states. Egypt surpasses Kuwait with the second highest score, while the latter becomes the third highest. These two countries were in the reverse order on the analogous factor in the previous section.

Kuwait retains the same rank on Factor II as she did on the similar factor in the overall variables analysis. Libya still is second, far from Kuwait in terms of factor scores. South Yemen and Iraq have the same factor score (-0.35).

TABLE V
Factor Scores of "Rate" Dimensions

Factor I	Factor II	Factor III	Factor IV	Factor V
Lebanon (3.50)	Kuwait (3.44)	Yemen (3.42)	Egypt (2.87)	Morocco (2.22)
Egypt (0.11)	Libya (0.63)	Morocco (0.11)	Jordan (0.84)	Jordan (1.00)
Kuwait (0.06)	Yemen (0.03)	Syria (0.01)	Syria (0.75)	Kuwait (0.84)
Morocco (-0.7)	Saudi Arabia (0.00)	Jordan (-0.01)	Saudi Arabia (0.20)	Iraq (0.83)
Syria (-0.08)	Egypt (-0.07)	Lebanon (-0.02)	Iraq (0.18)	Syria (0.60)
Algeria (-0.15)	Lebanon (-0.28)	Kuwait (-0.05)	Kuwait (0.17)	Tunisia (0.23)
Tunisia (-0.18)	South Yemen (-0.35)	Egypt (-0.05)	Sudan (-0.19)	Algeria (0.20)

TABLE V--Continued

Factor I	Factor II	Factor III	Factor IV	Factor V
Jordan (-0.21)	Iraq (-0.35)	Sudan (-0.05)	Lebanon (-0.32)	Lebanon (-0.34)
Libya (-0.24)	Sudan (-0.40)	Algeria (-0.27)	South Yemen (-0.43)	Sudan (-0.53)
Yemen (-0.38)	Tunisia (-0.45)	South Yemen (-0.33)	Yemen (-0.51)	Yemen (-0.59)
Sudan (-0.45)	Syria (-0.49)	Tunisia (-0.55)	Morocco (-0.53)	Saudi Arabia (-0.86)
Iraq (-0.57)	Algeria (-0.50)	Iraq (-0.56)	Tunisia (-0.54)	South Yemen (-1.06)
Saudi Arabia (-0.66)	Morocco (-0.56)	Saudi Arabia (-0.65)	Algeria (-1.06)	Egypt (-1.08)
South Yemen (-0.68)	Jordan (-0.65)	Libya (-1.01)	Libya (-1.44)	Libya (-1.46)

Yemen is by far number one on the third dimension, indicating a lack of health services provided by the government. Three states record the same factor score, namely, Kuwait, Egypt, and Sudan (-0.05).

So far no Arab state has surpassed Egypt in terms of defense expenditures as per cent of gross national product, and that is the reason for her ranking the highest on Factor IV. Jordan ranks second and Syria third because of expenditures based on their physical contiguity with Israel. Libya ranks last on this dimension, but this picture has definitely changed since 1970 as the new regime is determined to modernize the military and play a major role in Arab affairs.

Morocco heads the states on Factor V with a factor score of 2.22. While Jordan ranks second, the gap is wide between her and Morocco. Three countries are somewhat close on their factor scores, Kuwait, Iraq, and Syria. Again, the gap becomes wide with a sizable drop in the factor scores of these three states before reaching the scores of Tunisia and Algeria.

"Absolute" Dimensions

The "absolute" dimensions are composed of eight factors that reveal some measureable characteristics of the Arab states on defense and education, foreign trade, size, both extreme and moderate governmental instability, transportation, political parties, and social

services. Ninety-four per cent of the total variance is explained by these eight factors. (See Table VI.)

TABLE VI
Dimensions of "Absolute" Variables

Variable	Factor Loading
Factor I Defense and Education 34.8%	
39. Number of Students in Higher Institutions	+.98
18. Annual Defense Expenditure	+.97
37. Number of Students in Technical Institutions	+.96
16. Number in Armed Forces	+.96
36. Number of Students in Primary and Secondary Schools	+.95
12. Electrical Power for the Public Sector	+.93
38. Number of Students in Teaching Institutions	+.93
8. Total Population	+.87
29. Gross National Product	+.73
14. Total Consumption of Energy	+.65
Factor II Foreign Trade 14.2%	
27. Exports	+.96
12. Total Production of Energy	+.94
52. Old Age Social Program	+.52
1. Parliamentary Representation	-.52
Factor III Geographic Size 10.3%	
7. Area	+.84
51. Railroad Tracks	+.69
1. Parliamentary Representation	-.76
Factor IV Extreme Governmental Instability 8.8%	
5. Number of Successful Coups	+.92
3. Freedom of the Press	-.81

TABLE VI--Continued

Factor V	
Transportation	
7.3%	
50. Number of Miles of Surfaced Roads	+ .89
28. Imports	+ .57
Factor VI	
Political Parties	
6.5%	
2. Political Parties	+ .91
52. Old Age Social Program	+ .51
Factor VII	
Moderate Governmental Instability	
6.4%	
6. Number of Cabinet Changes	+ .80
4. Number of Unsuccessful Coups	+ .80
Factor VIII	
Social Service	
6.0%	
54. Family Allowance	+ .80
14. Total Consumption of Energy	+ .53

"Defense and Education" best describes Factor I. There is a close relationship between this factor and Factor I of the overall dimensions. For example, the variable expressing number in the armed forces loads identically on both dimensions (+.96).

Factor II is named "Foreign Trade" due to the high loadings of variables dealing with trade. A somewhat similar factor appears among the overall dimensions (Factor IV). While parliamentary representation shows a moderate negative loading on this factor (-.52), it loads highly negative on the similar factor of the overall dimensions (-.91).

Factor III is labeled "Geographic Size." The variable with the highest loading deals specifically with land size. Again, it is interesting to note that parliamentary representation loads negatively on this dimension.

Factor IV is awarded the title "Extreme Governmental Instability" because it expresses characteristics of a high number of precarious regimes. It reveals that a high number of successful coups has a negative relationship with freedom of the press.

A dimension of "Transportation" is delineated by Factor V. There is a positive interrelationship between both variables (number of miles of surfaced roads and imports) that load highly on this factor. The political party variable seems to be the only major one on Factor VI. The old age social program shows a moderate positive loading on this factor, as well as on Factor II.

The label "Moderate Government Instability" seems to be the best description of Factor VII. The two variables (number of cabinet changes and number of unsuccessful coups) that make up the distinctive feature of this factor have the same loading (+.80). The division of the governmental instability measures into two separate dimensions indicates that moderate instability and extreme instability should be studied as two different phenomena.

Factor VIII is given the title "Social Service." The variable with the highest positive loading indicates a high level of support for family assistance by the state.

Most of the states retain the rank on Factor I of the "absolute" dimensions (Table VII) that they have on Factor I of the overall

TABLE VII
Factor Scores of "Absolute" Dimensions

Factor I	Factor II	Factor III	Factor IV
Egypt (3.50)	Libya (2.14)	Sudan (2.62)	Syria (2.53)
Iraq (0.16)	Saudi Arabia (1.57)	Algeria (1.06)	Iraq (1.34)
Syria (0.02)	Kuwait (1.33)	Saudi Arabia (0.77)	South Yemen (0.63)
Algeria (0.01)	Iraq (0.78)	Libya (0.54)	Algeria (0.53)
Saudi Arabia (-0.03)	Algeria (-0.06)	Morocco (0.47)	Sudan (0.51)
Morocco (-0.08)	Syria (-0.07)	Iraq (0.08)	Libya (-0.22)
Sudan (-0.27)	Egypt (-0.23)	Egypt (-0.21)	Yemen (-0.33)
Tunisia (-0.30)	Lebanon (-0.45)	Tunisia (-0.43)	Egypt (-0.44)
Kuwait (-0.31)	Jordan (-0.50)	South Yemen (-0.51)	Morocco (-0.47)
Jordan (-0.48)	Tunisia (-0.83)	Jordan (-0.54)	Kuwait (-0.47)
Lebanon (-0.48)	South Yemen (-0.89)	Yemen (-0.60)	Tunisia (-0.53)
Libya (-0.48)	Morocco (-0.89)	Lebanon (-0.69)	Saudi Arabia (-0.69)

TABLE VII--Continued

Factor I	Factor II	Factor III	Factor IV
Yemen (-0.60)	Sudan (-0.94)	Kuwait (-1.19)	Jordan (-0.71)
South Yemen (-0.66)	Yemen (-0.95)	Syria (-1.36)	Lebanon (-1.68)
Factor V	Factor VI	Factor VII	Factor VIII
Algeria (3.20)	Lebanon (2.08)	Iraq (2.00)	Iraq (1.61)
Tunisia (0.43)	Morocco (1.58)	Yemen (1.27)	Kuwait (1.35)
Lebanon (0.33)	Syria (0.98)	Lebanon (1.22)	Saudi Arabia (0.82)
Libya (0.13)	Libya (0.75)	Jordan (0.88)	Morocco (0.69)
Syria (0.04)	Iraq (0.54)	Algeria (0.11)	Algeria (0.53)
Yemen (-0.11)	Sudan (-0.15)	Egypt (0.06)	Lebanon (0.35)
Jordan (-0.17)	Tunisia (-0.16)	Sudan (0.00)	Tunisia (0.28)
Saudi Arabia (-0.18)	Egypt (-0.25)	Libya (-0.15)	Sudan (-0.15)
Egypt (-0.18)	Algeria (-0.55)	Saudi Arabia (-0.38)	Yemen (-0.29)
Morocco (-0.27)	Saudi Arabia (-0.70)	South Yemen (-0.47)	Egypt (-0.51)
South Yemen (-0.34)	Jordan (-0.74)	Syria (-0.61)	South Yemen (-0.55)
Iraq (-0.63)	South Yemen (-0.95)	Kuwait (-1.05)	Syria (-0.57)

TABLE VII--Continued

Factor V	Factor VI	Factor VII	Factor VIII
Kuwait (-0.74)	Kuwait (-1.05)	Tunisia (-1.33)	Jordan (-1.21)
Sudan (-1.50)	Yemen (-1.38)	Morocco (-1.57)	Libya (2.34)

dimensions. Egypt remains at the top because of its large investment in the defense field and higher number of students in all of the educational fields. Iraq still ranks second on both defense and education. Syria exchanges her rank with Saudi Arabia, while Algeria, Morocco, Lebanon, Libya, Yemen, and South Yemen remain in the same order.

Both Libya and Saudi Arabia continue to hold first and second place on Factor II, which further indicates a close relationship between this factor and Factor IV of the overall dimensions. South Yemen and Morocco show identical factor scores (-0.89).

There is no doubt that Sudan is the largest Arab country in area; this helps her to become number one on Factor III. Furthermore, Algeria, Saudi Arabia, and Libya are ranked in consecutive order in terms of size.

Syria and Iraq are considered the most unstable states of the Arab World. In the past decade, both countries have been the subject of military coups that have affected their stability. South Yemen occupies the third position on this dimension of extreme instability (Factor IV). Algeria and Sudan reveal very similar behavior

on this factor. But Morocco and Kuwait are the only states on this dimension with identical factor scores (-0.47).

Algeria is the highest state on Factor V. The statistics reveal that Algeria has the highest number of miles of surfaced roads in comparison to the other Arab states. On this dimension Saudi Arabia and Egypt have the same factor scores (-0.18). The size of Kuwait forces her to rank number thirteen. But Sudan ranks last on this dimension because of an inadequate number of miles of surfaced road despite its large geographic area.

The number of political parties determines the rank each state achieves on Factor VI. Regardless of their numbers, they are not based on free competitiveness with each other, at least in practice, as the case of their counterparts in the Western World. While Lebanon has a multiparty system, the presidency, the premiership, and some ministerial posts are reserved for certain religious sects.

Some Arab states are subject to frequent cabinet changes and abortive military coups. Iraq has the highest number of both, as Factor VII indicates. Yemen ranks the second highest because she experienced a number of cabinet changes during the Civil War between 1962 and 1970. Lebanon and Jordan are also the scene of constant cabinet changes.

Iraq ranked first on Factor VIII, which deals with social welfare services. It is not surprising to see Kuwait achieve the

second highest score because of the number of social programs provided by the government. Saudi Arabia is the third highest on this factor because in recent years the Saudi government has initiated several welfare programs to assist needy families.

This chapter has considered dimensions among Arab states. In the next chapter, we turn to the central question of this thesis, the determination of regions in the Arab World.

CHAPTER V

GROUPINGS OF ARAB STATES

The factor scores computed for the factors extracted from the three separate analyses, the overall, "rate," and "absolute" dimensions, will serve as data for the hierarchical clustering computations. The purpose is to determine the regions of Arab states and then compare them with the traditional and contemporary regions discussed in Chapter II. Therefore, regions at the level of four and three groupings will be displayed in tabular form, while certain other groups will be discussed on the basis of their distinctiveness.

Overall Groupings

The hierarchical groupings selected for display based on the factor scores from the five factors extracted by the analysis of the overall variables are shown in Table VIII. The table reveals that there are three regions of two or more states and one isolated state at the level of four groupings. Region 1 includes the largest number of states. It is clear that, with the exception of Algeria, all the states in that region are economically poor; their natural resources are not adequate. Another characteristic of the region, excluding Tunisia, and, to some extent, Algeria, is political instability. Egypt and

TABLE VIII

Arab Regions Based on Factor Scores Derived
From an Analysis of Fifty-Four Variables

Region	States
1	Algeria, Jordan, South Yemen, Sudan, Tunisia, and Yemen.
2	Egypt and Lebanon.
3	Iraq, Libya, Morocco, Saudi Arabia, and Syria.
4	Kuwait.
	At the level of three groups, Kuwait joins Egypt and Lebanon.

Lebanon make up Region 2. Both states have experienced a number of cabinet changes over the years. This executive instability could account for much of the clustering of these two states.

The second largest clustering in this analysis is Region 3. Neither the traditional nor contemporary notions of regions seem to prevail in this grouping. The similarities for this region are in terms of defense, education, and health services. Four of the countries in Region 3 (Iraq, Saudi Arabia, Syria, and Morocco) had similar scores on the "Defense and Education" dimension. In addition, Libya, Iraq, Syria, and Saudi Arabia share somewhat common characteristics in health services.

Kuwait remains an independent entity, occupying Region 4 alone. The reason for that could be attributed to her tremendous wealth and small size. Also, Kuwait enjoys one of the most free mass media in the Arab World.

At the level of three groups, Regions 1 and 3 remain exactly the same as their counterpart at four groups. But Region 2 is different because Kuwait joins Egypt and Lebanon to form that clustering. This might not come as a surprise when one recalls that those three states rank the highest on the "Mass Media and Communication" dimension.

The difference between this regional analysis and traditional regions is immediately evident when Jordan and Tunisia are grouped together as the two most similar states. The second most similar states are Iraq and Saudi Arabia. While Saudi Arabia has a tradition of stable government, unfortunately Iraq has experienced a long series of precarious regimes. But their differences in political stability and other political characteristics should not cause one to ignore their similarities on other attributes. Income from petroleum accounts for the largest revenue in both states. Also, Iraq ranks second and Saudi Arabia third on the dimension designated as "Defense and Education."

It is interesting to note that Sudan and Yemen combine together to form a two-state region at the level of eight groupings. There are at least two characteristics which might contribute to their

association. Since the early 1960's, the two states have gone through a period of unstable governments and internal upheaval. There was a civil war in Yemen, royalists versus republicans, and a rebellion in the southern provinces of Sudan. Furthermore, both are among the less developed countries in the Arab World, with a high proportion of the indigenous population in agriculture.

"Rate" Groupings

Four and three groups were chosen for the presentation, in tabular form, of "rate" groupings. These were based on the factor scores from the five dimensions extracted by the factor analysis.

Table IX shows that the largest clustering of states is Region 1. It is a mixture of the four traditional regions. But two regions

TABLE IX

Arab Regions Based on Factor Scores Derived
From an Analysis of Twenty-Nine
"Rate" Variables

Region	States
1	Algeria, Egypt, Jordan, Libya, Morocco, Saudi Arabia, South Yemen, and Sudan.
2	Iraq, Kuwait, and Syria.
3	Lebanon.
4	Tunisia and Yemen.
At the level of three groups, Lebanon joins the states that comprise the first region.	

stand out the most. Both states that comprise the "Nile Valley" are apparent in this region. Also, with the exception of Tunisia, "The Maghrib" region is found in this clustering.

Among the Arab clusters that Bruce M. Russett came up with, one was called the "radical or revolutionary Arabs of the geographic heartland," which included Egypt, Sudan, Syria, and Iraq.¹ In this analysis, this particular region was split into two groupings. Egypt and Sudan join several other states, as Region 1 indicates. On the other hand, Iraq and Syria, in addition to Kuwait, constitute Region 2.

It is not strange to discover that Lebanon forms a single entity to make up Region 3. This is the result of some obvious features. The Lebanese do not possess the highest per capita income in the Arab World, but they are, indeed, ahead in other respects. The highest literacy rate and newspaper circulation per 1,000 are found in Lebanon. Also, according to the United Nations statistics used in this study, they have the lowest birth rate per 1,000 as well as the lowest death rate per 1,000 among the Arab states.

What is more surprising in this analysis is to find Yemen and Tunisia clustering together to comprise Region 4. These states

¹ Bruce M. Russett, International Regions and the International System (Chicago: Rand McNally and Company, 1969), p. 183.

are commonly thought to belong to different traditional regions.

Russett found Yemen unclassified, and his reason was due to its pre-occupation with its civil war in the 1960's.² But the main justification for their clustering is probably in terms of defense expenditure as per cent of gross national product.

Looking at other groups, one finds very interesting clusters of states worth reporting. One of them is the clustering of Iraq and Syria to form Region 3 at the level of twelve groups. Both are members of the traditional region "the Fertile Crescent" and Russett's region "the radical or revolutionary Arabs of the geographic heartland." In 1963 the prospect for unity between Iraq and Syria with Egypt was quite possible after a military coup in both states by leaders of the Baath Party. However, the attempt failed to go beyond the conference table as a result of a power struggle. A decade later the same party is still in control of both states, but with no sign of narrowing the gap between the ruling elites for the sake of unity.

"Absolute" Groupings

The scores from eight factors were used as data to determine regions based on the "absolute" variables. Only four and three groups will be presented in Table X.

²Ibid.

TABLE X

Arab Regions Based on Factor Scores Derived From an
Analysis of Twenty-Five "Absolute" Variables

Region	States
1	Algeria, Iraq, and Syria.
2	Egypt.
3	Jordan, Kuwait, Lebanon, Morocco, South Yemen, Tunisia, and Yemen.
4	Libya, Saudi Arabia, and Sudan.
	At the level of three groups, Regions 3 and 4 are combined.

At the level of four groups Algeria, Iraq, and Syria comprise Region 1. Iraq and Syria have continued to group together in one region, either by themselves or with one or more states. The three states ranked consecutively on the "Defense and Education" and "Foreign Trade" dimensions. Moreover, one of the characteristics of two states in the region, Iraq and Syria, is the lack of political stability. Also, both states are the only ones where the Baath Party is in control of the governments.

As expected, Egypt appears to be an independent entity, constituting Region 2. This is true because Egypt outnumbers the other states in the Arab World in many "absolute" respects. Among them are total population, army strength, and number of students in the educational establishments.

Region 3 is one of the most difficult ones to describe. Its components represent a conglomeration of rich and poor, literate and illiterate, and precarious and stable polities. For example, Kuwait is the wealthiest and most stable of all; Lebanon, on the other hand, is the most highly educated state in the region, but it is not politically stable. There are, however, major similarities. Yemen and South Yemen are low on most dimensions. Lebanon and Kuwait are both comparatively wealthy.

Libya, Saudi Arabia, and Sudan gather around each other to form Region 4. The main justification for their clustering is size, because they are among the largest states in the Arab world. But what is interesting is that the three states are members of different traditional regions and those clusters determined by Russett.³ One of the dissimilarities between Saudi Arabia and Libya, on one side, and Sudan, on the other, is the huge proven reserve of oil. While Saudi Arabia and Libya are among the Arab states blessed with an abundance of petroleum, which enhances development, so far Sudan is deprived of this precious resource.

The difference at the level of four groups is the combination of Regions 3 and 4 into a single cluster. As a result, it becomes the largest region in this analysis. For the first time, the traditional

³Ibid.

region of the "Arabian Peninsula" is clearly seen in a cluster. The second most obvious traditional region is "North Africa," with all the states present with the exception of Algeria.

Beside the clusterings delineated at the fourth and third levels, there are other regional groupings worthy of discussion at this stage of analysis. At the level of thirteen groups, Yemen and South Yemen, join together to become the two most similar states. Their resemblance did not come as a surprise or a matter of coincidence for anyone well acquainted with the history of both states. They are geographically contiguous and even their names indicate that both states were one unit until the United Kingdom colonized South Yemen for strategic purposes.

At the present time, Yemen and South Yemen have virtually no domestic resources strong enough to cope with the growing demands of their population. This situation led both of them to be heavily dependent upon foreign aid and subject to outside influence. Not only that, but it also generated constant rivalries among the elites of each state. It is for the well-being of both states to re-unite very soon before the gap gets wider, hence, jeopardizing any chance in the future.

The second most similar states are Morocco and Tunisia. They join together to form a two-state cluster at the level of twelve groups. The two states are members of both the traditional region

and the contemporary region found by Russett called "North Africa."⁴ Morocco and Tunisia share a common characteristic in the degree of governmental instability. The political situation in both states is moderately stable, even though there are more conspicuous protests in Morocco than in Tunisia. The two states have a low number of cabinet changes and no successful coups.

Conclusions

The classification of the attributes into three categories, overall, "rate," and "absolute," is an attempt to determine the best type of regionalization of the Arab States. It should be emphasized that regionalization varies according to the kind of variables manipulated to delineate regions. Therefore, these findings are limited to the data used in this project and also must be considered as the starting point from which more studies in this field may be made.

The separate analyses using "rate" variables and "absolute" variables were exploratory. Since the theory of regionalization neither emphasizes nor eliminates the importance of size of the constituent states, it is the overall analysis of fifty-four variables which is evaluated in this conclusion. Table XI summarizes the regions considered in this thesis: the traditional regions, the regions as determined by Russett, and the regions delineated by this study.

⁴Ibid.

TABLE XI
Summary Table of Arab Regions

Traditional Regions	
1	Maghrib (North Africa) Algeria, Libya, Morocco, and Tunisia.
2	The Nile Valley Egypt and Sudan.
3	The Fertile Crescent Syria, Lebanon, Iraq, Transjordan, and Palestine. ^a
4	The Arabian Peninsula Saudi Arabia, Yemen, South Yemen, Kuwait, Bahrain, Oman, Qatar, and Trucial States. ^b
Regions Determined by Russett	
1	The Radical or Revolutionary Arabs of the Geographic Heartland Egypt, Syria, Iraq, and Sudan.
2	The Maghrib (North Africa) Algeria, Morocco, and Tunisia.
3	The Geographically Divided Jordan, Libya, Lebanon, and Kuwait.
Regions Determined by this Study	
1	Algeria, Jordan, South Yemen, Sudan, Tunisia, and Yemen.
2	Egypt and Lebanon.
3	Iraq, Libya, Morocco, Saudi Arabia, and Syria.
4	Kuwait. At the level of three groups, Kuwait joins Egypt and Lebanon.

^aTransjordan and Palestine became Jordan and Israel after the Arab-Israeli War of 1948.

^bTrucial States became United Arab Emirates in 1971.

It is evident that geographic proximity is the dominant factor among the traditional regions. This is not meant to ignore the similarities of their components in terms of culture, language, and historical experience. They are indeed very important elements in the Arab World, but they are not the subject of this study. Many Arab intellectuals and leaders have constantly been calling for unity solely on these grounds.

Russett's clusterings differ significantly from that of the traditional regions; they are not based on geographic premises. But it is interesting to note that two traditional regions seemed to continue undisturbed. First, in his cluster "the radical Arabs" the two states that comprise the "Nile Valley," namely Egypt and Sudan, are grouped together. Also, Syria and Iraq are members of the "Fertile Crescent" region. The second cluster is the "Maghrib" (North Africa) region, which appears to be continuing as a separate entity with the exception of Libya.

The third cluster does not bear close resemblance, as do the other two, with that of the traditional regions. It is true that the region is composed of geographically separated states, representing three traditional regions: Jordan and Lebanon in the "Fertile Crescent," Libya in "North Africa," and Kuwait in the "Arabian Peninsula."

The regions found in this study are different from the traditional regions and Russett's clusterings. The traditional regions

have been drawn on merely geographical grounds, which is not the case in the regional groupings of this study. In both contemporary studies, Russett's and this one, the statistical techniques are somewhat similar, but the data are quite different. The result is that the components of the regional groupings in these studies are not identical. This may be due to the changing status of each state over the years. Also, Russett uses virtually all nation-states as his population, while this study concentrates on Arab states.

One thing not fully understood by many nationalists in the Arab world is that over the years each state has developed its own individual character; thus, making total unification in the near future a hard task to accomplish. This did not mean, in any way, that Arab unity is impossible to achieve, but to proceed in the right direction requires a full realization of the obstacles. Moreover, any kind of unification erected on mere emotions is a total failure.

It is the conviction of this writer that the road toward total Arab unity seems long, but it can be travelled once it is built on concrete foundations. But more genuine cooperation among the Arab states is a prerequisite to make this goal possible. Several critical questions are frequently raised by advocates of Arab unity concerning how to maximize the chances for achieving a high degree of integration among the Arab states: how to build a coherent political unification from divided states and how to enlist the support and dedication of those elites who are responsible for the future destiny of those states.

All the barriers which hinder any attempt toward unification are indeed the product of over a half century of political fragmentation. This fragmentation has led to the emergence of diverse political systems as well as socio-economic standards. But in order to achieve a coherent and fruitful cooperation among all the Arab states, this writer suggests the following:

1. More sovereignty must be delegated to the Arab League and its specialized agencies for the sake of enhancing more constructive cooperation in all fields among the Arab states. There are a great number of attempts toward collective cooperation among many countries of the international community. For example, the nations of Western Europe are proceeding in the direction of achieving a complete collective cooperation in all areas of mutual concern. There is no reason why the Arab states cannot benefit from this experience.

2. A few federations might be established on the bases of regional groupings, as a step toward minimizing the number of political entities in the Arab World. However, any new federation must take into consideration all mistakes committed by previous unions, such as the Egyptian-Syrian Union. With all kinds of diversities in the Arab World, whether in the form of political institutions, geographical regions, or socio-economic standards, federation is the most suitable type of system. This could be achieved on the basis of regional groupings arrived at in this study.

It is the genuine hope of this writer that his study has achieved its intended goal. It is also fully realized that it has not resolved the lack of unity among the Arab states, but at least it may offer some insights and suggestions worthy of consideration. More serious efforts are desperately needed to embark on the journey of unification.

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LIST OF VARIABLES

1. Parliamentary Representation
0 = Absent
1 = Present
2. Political Parties
0 = No party
2 = One dominant party
1 = Only one party
3 = Two or more
3. Freedom of the Press
0 = Strict Control
2 = Essentially free
1 = Moderate Freedom
4. Number of Unsuccessful Coups (1965-1970)
5. Number of Successful Coups (1965-1970)
6. Number of Cabinet Changes (1965-1970)

7. Area
8. Total Population
9. Density Per Square Mile
10. Per Cent of Urban Population
11. Natural Increase in Population Per 1,000

Domain III: Energy

12. Electrical Power for the Public Sector (million kwh)
13. Total Production of Energy (million metric tons)
14. Total Consumption of Energy (million metric tons)
15. Consumption of Energy Per Capita (in kilogrammes)

Domain IV: Defense

16. Number in Armed Forces
17. Armed Forces as Per Cent of the Population
18. Annual Defense Expenditure
19. Defense Expenditure as Per Cent of Gross National Product

Domain V: Health

20. Birth Rate Per 1,000 Population
21. Death Rate Per 1,000 Population
22. Infant Mortality Per 1,000 Births
23. Life Expectancy
24. Inhabitants Per Hospital Bed
25. Inhabitants Per Physician
26. Calories Per Capita Per Day

Domain VI: Economics

27. Exports (in millions of dollars)

28. Imports (in millions of dollars)
29. Gross National Product
30. Gross National Product Per Capita
31. Per Cent of Gross National Product from Agriculture

Domain VII: Labor Force

32. Per Cent of Population in Agriculture
33. Per Cent of Population in Manufacturing
34. Per Cent of Population in Construction
35. Per Cent of Population in Services

Domain VIII: Education

36. Number of Students in Primary and Secondary Schools
37. Number of Students in Technical Institutions
38. Number of Students in Teaching Institutions
39. Number of Students in Higher Institutions
40. Literacy Rate

Domain IX: Communication and Culture

41. Number of Radio Receivers Per 1,000 Population
42. Number of Television Sets Per 1,000 Population
43. Number of Telephone Receivers Per 1,000 Population
44. Domestic Mail Per Capita

- 45. Foreign Mail Per Capita
- 46. Foreign Mail Sent/ Foreign Mail Received
- 47. Annual Cinema Attendance Per Capita
- 48. Daily Newspapers Circulation Per 1,000 Population

Domain X: Transportation

- 49. Number of Motor Vehicles in Use Per 1,000 Population
- 50. Number of Miles of Surfaced Roads
- 51. Number of Miles of Railroad Tracks

Domain XI: Social Services

- 52. Old Age, Invalidity, and Survivors Social Programs
- 53. Health, Sickness, and Maternity Social Programs
- 54. Family Allowances Social Programs

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