Original Paper

A Semantic Analysis of Normal Derivatives of Body Part Terms

in Jordanian Arabic

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Abstract

This study deals with nouns derived from body part terminology in Jordanian Arabic. It aims at identifying those nouns and examining their semantic association with body part terms. It indicates that a large number of the nouns are semantically related to their corresponding body parts; thus, their meaning could be predicted from the meaning of body part terms. Further, the physical characteristics of position, shape and function of body parts are the basis of the semantic association. However, very few of the derived nouns are not semantically related to body part terms. In addition, all the derived nouns designate objects in a variety of lexical semantic domains external to the body part domain. Finally, it is concluded that Jordanian Arabic has the capability of expanding its lexicon on the basis of body part terminology.

Keywords

semantic, analysis, noun, derivatives, Jordanian arabic

1. Introduction

Semantic extensions and morphosyntactic derivations based on the human Body Part (BP) terminology have drawn linguists" attention. For instance, Freidfich (1969, 1970) studies the semantics of the Tarascan suffixes of space, and the concept of shape in grammar. Stark (1969) studies the anthropological structure of BP terminology in Quechua. Werner and Begishe (1970) deal with the lexemic typology of anatomical terms in Navajo. Liston (1972) examines the semantic structure of BP terms in Serbo-Croatian. Lewis (1974) looks upon the anatomy and vocabulary items for illness in Gnau. McClure (1975) researches the structure of the domain in relation to ethno-anatomy in German, Romanian and Saxon. Matisoff (1976) investigates the BP contact relationships in Austro-Thai and

Sino—Tibetan. Miller (1977) explores the linguistic, social and medical aspects of Delaware anatomy. Andersen (1978) studies the lexical universals of BP terms based upon data from various languages including Huastec, Pocomchi, Finnish, Hausa and Swahili. Finally, Petruck (1986) investigates BP terms and their morphosyntactic and semantic extensions in Hebrew.

The aim of the present paper is to investigate nouns derived from BP terminology in Jordanian Arabic (JA)¹. The paper will deal with the following issues: the BP terms that constitute the basis for derived nouns, the semantic relationship, if any, between BF terms and their derived nominal forms, and, finally, the morphosyntactic patterns of derived nouns.

This study is important. BP terminology and their derived nouns have never been studied in JA. Thus, it will supplement such studies as those mentioned above, providing data for further research in the Field of lexical Semantics. Finally, derived nouns seem to designate objects or actions in domains other than the BP domain; consequently, these external semantic domains should be dealt with in JA.

2. Derived Nouns

The first set of derived nouns exhibits the morphological pattern <u>CaCTC</u> which is based upon the BP terms, the stems or source of those nouns. This pattern is observed in the Following derived words:

Table 1. Nouns Derived from CaCīC

1) <u>BP Term</u>		Derived Noun	Gloss
ras	"head"	ra?īs	"president"
^C ein	"eye"	ma ^C īn	"rhombus"
ragabah	"neck"	ragīb	"guardian, observer; sergeant"
wijih	"face"	wajīh	"leader, distinguished person"
ḍahur	"back"	ḍahīr	"supporter, backer"

All these nouns are derived by inserting the long vowel $/\overline{\imath}/$ or by changing the vowel / i / into a long one. They are all masculine gender nouns. There is also a semantic relationship between the BP term and its corresponding derived noun. Consider \overline{ras} and $\overline{ra?\overline{\imath s}}$. These forms are semantically related in the sense that both are positioned at the top of some entity; \overline{ras} is at the top of the body, and $\overline{ra?\overline{\imath s}}$ could be viewed as a person who is at the top of people; i.e., he is the chief or leading person of a group of people or some association. If this viewpoint is convincing, then we can say that this semantic relatedness is due to the position of the BP.

Also, there is a semantic relationship between <u>Cein</u> and <u>maCin</u> on the basis of the shape of the BP. Both are figures with oblique angles. Thus, there is a similarity existing between this BP and geometric figures like the rhombus. By the same token, <u>ragabah</u> and <u>ragīb</u> seem to be semantically related. In terms of position, the neck is an upper part of the human body or above other body organs like the chest,

belly, etc.; thus, the noun <u>ragīb</u> could be considered as a person that is above other people in the sense that he observes or watches what they are doing. Likewise, <u>wijih</u> and <u>wajīh</u> seem to be semantically associated in that <u>wijih</u> is the front part of the head and <u>wajīh</u> is the most eminent, notable, distinguished person (or front part) of a given group or tribe. Accordingly, the position of the BP serves as the basis of this semantic relationship. Finally, the position of the BP <u>dahur</u> serves as the basis of its semantic association with the derived noun <u>dahir</u>. First, <u>dahur</u> is the rear surface of the human body from neck to hip; now, <u>dahir</u> meaning "back in soccer or football" is placed in the rear part of the soccer team; that is, <u>dahir</u> names a football or soccer player who is positioned behind the front line. Second, <u>dahur</u> is used to support the whole body in the same way <u>dahir</u> meaning "supporter, helper or backer" functions as a person or an entity that backs or assists some other person(s) or entities.

To sum up, the first group of words are nouns derived from BP terms whose position and/or function is the basis of the semantic relationships existing between BP terms and derived nouns.

Another set of nouns derived from BP terms are given in (2) resulting from a morphological process which prefixes the prefix $\underline{\text{ta}}$ to the stem, lengthens the last vowel /i/, and deletes the first vowel in the stem.

Table 2. Nouns Derived from CaCCTC

2) <u>BP Term</u>		<u>Derived Noun</u>	Gloss
ka ^C ib	"ankle"	tak ^C īb	"dicing, cubing"
baṭin	"belly"	tabṭīn	"covering the inside of sth."
wijih	"face"	tawjīh	"instruction, guidance"
^C ein	"eye"	ta ^C yīn	"appointment, specification"
șidir	"chest"	tașdīr	"exportation, preFace"
warid	"vien"	tawrīd	"importation, provision"
kitif	"shoulder"	taktīf	"fettering or tying by hands"
ḍahur	"back"	taḍhīr	"endorsement"
jilid	"skin"	tajlid	"(book) binding"

All these derived nouns the morphosyntactic pattern of which is <u>CaCCTC</u> are masculine and signify the process of doing something, In addition, there seems to be semantic relatedness between these nouns and the body parts from which they are derived.

First, in terms of shape, $\underline{ka^Cib}$ and $\underline{tak^Cib}$ are similar. The former has a cubic shape, and any entity resulting from the process $\underline{tak^Cib}$ would be shaped like the $\underline{ka^Cib}$. Similarly, if $\underline{tak^Cib}$ means "dicing", we will also get small entities or objects cut into cubes or dice which are $\underline{ka^Cib}$ -like. Thus, the shape of $\underline{ka^Cib}$ seems to be the basis of this semantic relationship between $\underline{ka^Cib}$ and $\underline{tak^Cib}$.

Second, batin and tabfin seem to be semantically associated in terms of function. The function of the

former is to contain or keep the abdomen of the stomach inside the body; i.e., it functions as a container; the function of the latter is to cover the inner part of some entity like a piece of cloth or a jacket with some material.

Third, the derived noun <u>tawj</u> Th is also associated with the BP <u>wijih</u>. The BP indicates some duality or qualities of a person whom you meet or talk to; that is, the human face is probably an index of one"s character. BY the same token, <u>tawj</u> Th is the process of indicating the way to do something, or the process of giving or teaching information about a given subject or entity. Consequently, we would say that both <u>wijih</u> and <u>tawj</u> Th are regarded as a means to an end in terms of function.

Fourth, the BP term $\frac{C_{ein}}{C_{ein}}$ and the derived noun $\underline{ta^Cy\overline{n}}$ are semantically associated in that the BP is intended to be a means of vision, of looking at, or of observing-objects around, and the process of $\underline{ta^Cy}$ \overline{n} is also intended to select or name a person who will scrutinize or take care of a given position. Therefore, the function of both $\frac{C_{ein}}{C_{ein}}$ and $\underline{ta^Cy}$ \overline{n} seems to be alike; hence, the semantic similarity exists between the BP and its derived noun.

Fifth, there is a semantic relationship between the BP term <u>warid</u> and <u>tawr Td</u>. The former is meant to carry or convey blood from all the body parts to the heart, and the latter is the process or act whereby goods are brought into a country from abroad. Thus, the function of the human body veins is the basis of this semantic relatedness between <u>warid</u> and <u>tawr Td</u>.

Sixth, the derived noun <u>takt</u> $\overline{1}$ seems to be similar to <u>kitif</u>. When a person"s hands are fettered or tied behind the back or in front of the chest, the hands become shoulder-like in shape. Further, fettered or tied hands do not allow the person to move his hands or his shoulders. Thus, the semantic relationship between <u>kitif</u> and <u>takt</u> $\overline{1}$ is based upon both the shape and the inability of the person to move this body organ.

Seventh, a semantic relationship exists between <u>dahur</u> and <u>tadh</u> <u>Tr</u> in the sense that when you endorse something, you sign, write down or make a comment on the back of some object.

Eighth, the relationship of the derived noun $\underline{\text{tasd}} \, \overline{\text{tr}}$ to the BP $\underline{\text{sidir}}$ seems to be idiosyncratic. While the BP refers to the upper front part of the body, $\underline{\text{tasd}} \, \overline{\text{tr}}$ designates the process of sending goods out or to another country for sale. Hence, the two terms are not semantically associated.

Finally, the derived noun <u>tajl</u> <u>Td</u> "binding" is semantically associated with the BP <u>jilid</u>. The skin is a membranous tissue which covers the human body; similarly, the derived word signifies the act of covering an object like books with a band or some other material that stitches and fastens together and encloses between covers all the parts of an object; the covers, thus, serve as the skin of that object. Accordingly, the position and function of the human BP constitute the basis of the semantic association of <u>tail</u> <u>Td</u> with the BP term <u>jilid</u>.

To recapitulate, apart from $\underline{\text{sidir}}$ and $\underline{\text{tasd}}$ $\overline{\text{Ir}}$, all other derived nouns in set (2) above seem to be semantically associated with BP terms in terms of function and /or shape.

The third set of nouns derived from BP terms are given in (3) below. The derived nouns make up the morphosyntactic pattern <u>CuCāCiC</u>, resulting from a morphological process which attaches the prefix mu- to a BP term and lengthens the first vowel in the BP term as can be seen in the following:

Table 3. Nouns Derived from CuCaCiC

3) <u>BP Term</u>		Derived Noun	Gloss
kabid	"lever"	mukābid	"the one who suffers hardshipe"
regabah	"neck"	muragib	"observer,inspector, supervisor"
c _{ein}	"eye"	$mu^{\mathbf{C}}\overline{a}yin$	"spectator, viewer, onlooker"
lisān or ?ilsān	"tongue"	mulāsin	"the one who verbalizes something"

In terms of gender, all these derived words are masculine. Besides, what these derived nouns signify seems to be associated with their corresponding BP terms.

First, <u>mukābid</u> is semantically associated with <u>kabid</u> in the sense that when a person suffers from or undergoes grief, pain, etc., in JA we view such hardships as a means of hitting, negatively influencing, or causing pain in that person"s liver. Therefore, the state of this person <u>mukābid</u> seems to be related to BP <u>kabid</u>.

Second, <u>regabah</u> and <u>murāgib</u> are semantically related to each other in that <u>murāgib</u>, <u>like regabah</u> which is positioned at the top part of the human body as if it were looking over the body organs below it, is supposed to look over or direct the operation of an organization or institution in terms of work and workers and other related matters. Thus, the position of the BP seems to be the source of this semantic relatedness.

Third, the function of the BP $\frac{C_{ein}}{C_{ein}}$ seems to constitute the grounds for the semantic relationship between it and its related form $\frac{mu^Cayin}{ayin}$. The BP is designated to help a person see around in the same way that $\frac{mu^Cayin}{ayin}$ is meant to check or examine some object to make sure that the object is in a good condition.

Finally, <u>lisān</u> or ? <u>lisān</u> and <u>mulāsin</u> are semantically related. <u>Lisān</u>, a speech organ, is used in speaking or producing sounds; <u>mulāsin</u> refers to a person who verbalizes or puts something into words using <u>lisān</u> as a speech organ. Consequently, the function of the body organ <u>lisān</u> serves as the basis of the semantic relationship existing between <u>lisān</u> and the derived noun <u>mulāsin</u>.

In fine, it is mostly the function of the body organs that furnishes the grounds for the semantic association between the derived nouns and their corresponding BP terms listed in (3) above.

There are other nouns derived from BP terms given in (4):

Table 4. Nouns Derived from CaCaCaC

4) <u>BP Term</u>		Derived Noun	Gloss
bețin	"belly"	baṭ a nah	"a retinue"
^C aéab	"nerve"	^C aṣ a bah	"a band, headcloth, bandage,etc
şidir	"chest"	ṣadārah "	"first place, preeminence"

These derived nouns display the morphosyntactic pattern $\underline{\text{CaCaCaC}}$. Further, they are all feminine. Except for $\underline{^{\text{C}}}$ asab and its derived noun, all other nouns seem to be semantically associated with their corresponding BP terms.

<u>Batin</u> and <u>batānah</u> are semantically associated in that both refer to some entity which is hidden or concealed; they also refer to the inner or internal part or side of some entity. Further, if we take <u>batānah</u> to mean "a retinue"—a group of individuals or trainers accompanying, attending, or moving along with a given person of rank—then we say that the retinue is intended to safeguard or protect some personage; if this is convincing, we can claim that both <u>batin</u> and <u>batānah</u> are designated to protect some entity; the former could be considered a container of the stomach or bowels, thus protecting them; and the latter is similarly intended to protect some personage. Accordingly, the semantic association between the BP and the derived noun is apparent on the basis of function.

The position of the chest serves as the basis of the semantic extension observed in <u>sadārah</u>. The position of the BP which is the upper front part of the body is eye -catching in the sense that it is a highly transparent and predominant organ in the body; similarly, <u>sadārah</u> naming a supremely eminent, conspicuous part of an object, usually a room, is also eye-catching. Consequently, the semantic association between the two terms is based on the outstanding characteristics of the position of the BP term and the noun derived from it,

Finally, the association between $\frac{C}{asab}$ and $\frac{C}{as\overline{abah}}$ seems to be idiosyncratic. While the former refers to one"s nerves or nervous system, the latter designates either a band or a group of people having some common purpose or goal like $\frac{C}{as\overline{abit}}$ sarr \overline{agin} "a band of robbers", or a head cloth or a bandage covering the head or binding a wound in the body. Therefore, there is no semantic relatedness between the BP and the derived noun.

The fifth group of nouns derived from BP terms is given in (5) below, all demonstrating one more morphosyntactic pattern in JA which is <u>CaCiC</u>:

Table 5. Nouns Derived from CaCiC

5) <u>BP Term</u>		Derived Noun	Gloss
șidir	"chest"	ṣ a dir	"going out, export"
warīd	vein"	wārid	"newcomer, arrival, import"
ḍahur	"back"	<u> ḍā</u> hir	"exterior"

bațin	Belly	bāţin	"interior"
gadam	"Foot"	gadim	"one arriving, newcomer"
?i ðin	"ear"	?ā ðin	"attendant"
galb	"heart"	gālib	"model, mold"

Regarding gender, these derived forms are masculine. Further, some of these nouns are semantically associated with the body parts from which they are derived, whereas others lack this semantic association as can be seen in the following discussion.

The relationship of $\underline{s}\overline{a}\underline{d}\underline{i}\underline{r}$ "to $\underline{s}\underline{i}\underline{d}\underline{i}\underline{r}$ is idiosyncratic in that the former designates an object which is going out or being exported in JA. Similarly, the idiosyncratic relationship between $\underline{?}\underline{i}\underline{\delta}\underline{i}\underline{n}$ and $\underline{?}\overline{a}\underline{\delta}\underline{i}\underline{n}$ is apparent in that $\underline{?}\overline{a}\underline{\delta}\underline{i}\underline{n}$ names a person whose duty is to look after some object or person; thus, this derived noun is not related to $\underline{?}\underline{i}\underline{\delta}\underline{i}\underline{n}$ which is an organ of hearing.

Finally, there is no semantic similarity between <u>galb</u> as a human body organ and the derived noun <u>galib</u> which signifies either a frame on or around which some object is made, or a pattern, example or standard that may be used for imitation or comparison.

However, in the case of <u>warīd</u> and <u>wārīd</u>, a semantic relationship seems to exist based on the function of the BP. The <u>warīd</u>, as I have stated earlier, functions as a carrier of blood to the heart; likewise, the noun <u>wārīd</u> stands for any objects or goods being brought or carried into a country or institution from abroad. Thus, the function of the BP plays a significant role in constituting the grounds for the association between warīd and wārīd.

Also, and <u>dahur</u> and <u>dāhir</u> are semantically related in that both the human BP, back, and <u>dāhir</u>, meaning "exterior", are both visible and apparent. Accordingly, this characteristic common to both the BP and the noun seems to be the source of the existing semantic relatedness.

Further, as is the case with <u>dahur</u> and <u>dāhir</u>, <u>batin</u> which, as I have already pointed out, refers to an internet BP, and <u>bāṭin</u> which also refers to the interior of some entity, are semantically related in that they both signify the interior of some object.

Finally, there seems to be a semantic relationship between \underline{gadam} and \underline{gadim} in terms of function. The human foot is intended to be used as a means of standing (you stand on the foot), walking or movement. Similarly, the derived noun \underline{gadim} names a person who has arrived from some place either on foot (i.e., walking), or by some other means of transportation. Therefore, the function of the BP is the basis of this semantic extension.

The sixth group of derived nouns constitute the morphological pattern <u>CaCCaCiCCiC</u> as can be seen in (6).

Table 6. Nouns Derived from CaCCaCiCCiC

6) BP Term		Derived Noun	Gloss
baṭin	"belly"	baṭṭāniyyih	"blanket"
Kitif	"shoulder"	kattafiyyih	"shoulder strap"
rukbah	"knee"	rakkābiyyih	"a piece of cloth covering the knee

These nouns are all feminine, and are semantically associated with the BP names from which they are derived.

First, <u>batin</u> is meant to cover or contain the stomach and the bowels; <u>battaniyyih</u> names a large piece of rectangular woolen fabric used as a covering on bed to protect from cold. Thus, since both the BP and its derived noun are used as a sort of covering, they are semantically associated.

Second, the position of the BP term <u>kitif</u> furnishes the grounds for the semantic extension observed in the derived noun <u>kattafiyyih</u> which names a piece of cloth which is worn on the body shoulder

Finally, the position of <u>rukbah</u> is the basis of the semantic relationship between it and its derived noun <u>rakkabiyyih</u> which names an article of clothing covering the knee.

In sum, JA has names or nouns designating pieces of clothing the ultimate goal of which is to cover and protect the body parts from which they are derived.

Other nouns derived from body parts result from a morphological process which prefixes <u>?im-</u> to be BP term, changes the first vowel to /a/, and geminates the second consonant of that term, thus making up the pattern <u>CiCCaCCiC</u> as can be exemplified in (7):

Table 7. Nouns Derived from CiCCaCCiC

7) <u>BP Term</u>		Derived Noun	Gloss
wijih	"face"	?imwajjih	"inspector, supervisor"
?iðin	"ear"	?im?aððin	"announce of the time prayer"
sidir	"chest"	?imṣaddir	"exporter"
sarid	"vein"	?imwarrid	"supplier, importer"
gadam	"foot"	?imgaddim	"offerer, applicant, presenter"
Jilid	"skin"	?imjallid	"binder"

As far as gender is concerned, these derived nouns are masculine. Further, except for <u>sidir</u> and <u>?imsaddir</u>, all other nouns seem to be semantically associated with their corresponding BP terms.

First, <u>?imwajjih</u> that names a person whose job is to inspect or supervise the operation or services of a given institution trying to ensure that rules and standards are being followed is semantically associated with the term <u>wijih</u> in that the <u>?imwajjih</u>, like <u>wijih</u> which represents the front part or aspect of the body or some other entity, stands for the most distinguished, outward person or side of the institution or

department he is supervising or inspecting. Thus, the position of <u>wijih</u> is the source of this semantic extension.

Second, <u>?iðin</u> and <u>?im?aððin</u> are semantically associated in that, like <u>?iðin</u> which is the organ of hearing, <u>?im?aððin</u> designates a person who calls for or announces the hour of prayer; his voice or announcement is meant to be heard or listened to publicly. Accordingly, the function of the body part ?iðin is the basis of the semantic extension observed in this derived word.

Third, ?imwarrid is semantically related to warīd in the sense that it fulfills the same function as that of warīd; i.e., the ?imwarrid"s task is to import or bring in goods from an outside source which he provides others with. Therefore, the function of warīd which is to carry blood to the heart from all over body organs is extended to the field of business or commerce.

Fourth, the semantic relationship of <u>?imgaddim</u> to <u>gadam</u> is due to the function or use of the BP. <u>Gadam</u>, as I have stated earlier, is meant to help a person move; now, what is presented by the <u>?imgaddim</u> could be viewed as an entity, abstract or tangible, brought to the public. Accordingly, the function of both the BP and derived noun seems to be alike, and they are thus semantically related.

Fifth, a semantic association exists between <u>jilid</u> and <u>?imjallid</u>. The sole purpose of <u>jilid</u> is to hold and protect all other parts of the body; now, <u>?imjallid</u> names a person who binds books or other entities with some material used and considered as a skin which, like the human body skin, covers and fastens all the particles or parts or pages of a book. Thus, the function of <u>?imjallid</u> is exactly the same as that of <u>jilid</u>; hence, the semantic association exists between this BP and its corresponding derived term.

Finally, the relationship between <u>sidir</u> and <u>?imsaddir</u> seems to be idiosyncratic. <u>?imsaddir</u> refers to a person who exports or sends goods to another country.

Another set of nouns derived from BP terms forms the morphological pattern <u>CaCaCCuC</u> resulting from a morphological process prefixing <u>ta-</u> to the BP term, geminating the second consonant and changing the last vowel of the BP term to the vowel /u/. These nouns are given in (8):

Table 8. Nouns Derived from CaCaCCuC

8) BP Term		Derived Noun	Gloss
gadam	"foot"	Taqaddum	"progress, advancement"
wijih	"face"	tawajjuh	"favoritism"
^C aṣab	"nerve"	ta ^C așșub	"fanaticism, tribalism, racialism
faxið	"thigh"	tafaxxuð	"subdivision"

All these nouns are masculine, and seem to be semantically associated with the body terms from which they are derived.

In the case of gadam and tagaddum, the semantic similarity is apparent. I have already stated that the former is a means of moving forward; the latter expresses the same meaning in that it is the state of

forward movement or development. Thus, the function of <u>gadam</u> is the basis of the semantic extension observed in the derived word.

<u>Wijih</u> and <u>tawajjuh</u> seem to be semantically related. I have previously stated that the state of one"s <u>wijih</u> could tell us some idea about one"s personality or character. Now, <u>tawajjuh</u> is also a state which describes a person"s character. Thus, since both the BP term and the derived word play a significant role in determining the character of a person, I would say that they are semantically related.

 $\underline{\text{Ta}^{\text{C}}}$ assub seems to be semantically similar to $\underline{\text{C}}$ asab in the sense that the former designates the state or condition of a person who is an excessively enthusiastic supporter of a given organization; the source of this excessive enthusiasm is one"s $\underline{\text{C}}$ asab or $2\underline{\text{C}}$ asab "nerves" which, as I have stated earlier, is the source of a man"s sensations being carried by one"s nervous system between the brain and all other body organs. Accordingly, this derived noun is similar to $\underline{\text{C}}$ asab.

Finally, the semantic relatedness between <u>faxi</u>ð and <u>tafaxxu</u>ð has its source in the claim that I have made: The human thigh could be regarded as one part or entity which is being divided into two identical thighs. If this is valid, then we can say that <u>tafaxxu</u>ð describes the state of one tribe or family that is being divided into smaller parts or groups. Consequently, the semantic relatedness between the BP term <u>faxi</u>ð and the corresponding derived noun becomes obvious.

The ninth group of nouns derived from BP terms in JA result from a morphological process which attaches the prefix <u>?im-</u> to the body term, lengthens the second vowel, and suffixes <u>-ah</u> or <u>-ih</u> to the BP term as can be seen in (9);

Table 9. Nouns Derived from CiCCaCaC (ah)

9) <u>BP term</u>		Derived Noun	Gloss
(i) ^C ein	"eye"	?im ^C āyanih	"examidabion"
(ii) ragabah	"neck"	?imragabah	"observation, censorship"
wijih	"face"	?imwājahah	"confrontation, facing"
ḍahur	"back"	?imdaharah	"demonstration"

All these nouns are feminine, and form the morphosyntactic pattern <u>CiCCaCaC</u> [ah]. Further; apart from <u>dahur</u> and <u>?imdaharah</u>, other nouns are semantically similar to the BP terms from which they are derived.

In the first place, consider $\frac{C_{ein}}{ein}$ and $\frac{?im^{C_{ayanih}}}{ein}$. The former is a means of sight; the latter designates the act of looking at or examining an entity to get information. Thus, the semantic similarity is due to the fact that both $\frac{C_{ein}}{ein}$ and $\frac{?im^{C_{ayanih}}}{ein}$ are a means of perceiving some object.

Secondly, I have pointed out that <u>ragabah</u> could be considered in shows of its position as a means of looking at all other body organs below it. If this is the case, I can then say that <u>?imrāgabah</u> is semantically related to it in that it names the act done by an authorized person of examining or looking

at some object to ensure that some established rules or principles are being observed and respected.

Thirdly, <u>wijih</u> and <u>?imwājahah</u> are semantically associated in that the latter shows an act of bringing some object or people face to face with other objects or other people.

Finally, the relationship between <u>dahug</u> and <u>?imdāharah</u> seems to be idiosyncratic in the sense that the latter designates the act whereby people publicly show their feelings or opinion of some entity.

The tenth group of nouns are derived from BP terminology by means of a morphological process which prefixes <u>?im-</u> to the BP term and geminates the second consonant, yielding the morphosyntactic pattern CiCCaCCaC in JA as can be seen in (10):

Table 10. Nouns Derived from CiCCaCCaC

10) <u>BP Term</u>		Derived Noun	Gloss
ka ^C ib	"heel"	?imka ^{CC} ab	"a cubic object"
gadam	"foot"	?imgaddam	"a major (military rank),foreman
jilid	"skin"	?imjallad	"a volume"

These nouns are all masculine and semantically associated with the body parts from which they are derived. In the case of ka^Cib and ?imka^{CC}ab, the shape of the BP is the basis of the semantic extension; the ?imka^{CC}ab names an entity which is cube-shaped; that is, it has the same shape as that of the BP. Regarding ?imgaddam which names a military rank, its semantic association with gadam stems from the possibility that a soldier has achieved this rank by moving or advancing forward or onward through several stages in an orderly progression. Therefore, the function of the BP foot is metaphorically extended to the field of military affairs.

Finally, ?imjallad is semantically related to jilid in that, like jilid which holds the whole body, it names one book or volume of a collection of several same books bound together in the same way the skin holds the whole human body. Further, the semantic relationship between jilid_and_?imjalled could be attributed to the fact that both terms name one part of a whole entity. That is, the semantic similarity between the BP and the derived form is of the part-whole relationship. Consequently, jilid and ?imjallad are semantically associated.

Another group of nouns derived from body parts forms the morphosyntactic class <u>CaCCaC</u> by a morphological process which prefixes <u>ma-</u> to the BP and deletes the first vowel in the BP term. These nouns are given in (11).

Table 11. Nouns Derived from CaCCaC

11) <u>BP Term</u>		Derived Noun	Gloss
șidir	"chest"	mașdar	"origin, source"
ḍahur	"back"	maḍhar	"appearance"
rijil	"leg"	marjal	"boiler, cooking kettle"

These nouns are masculine, and seem to be semantically related to the BP term from which they are derived. First, if we consider the body chest as the source of emotions, then we can account for the semantic relationship of <u>masdar</u> to <u>sidir</u> on the grounds that <u>masdar</u> like <u>sidir</u>, designates the source or origin of an object.

Second, <u>madhar</u> seems to be semantically related to the BP <u>dahur</u> in that both <u>dahr</u> and <u>madhar</u> can be seen or observed, thus indicating outward qualities of a given object.

Finally, the shape of the <u>rijil</u> which is long and thin is the basis of the semantic extension. The derived noun <u>marjal</u> is cylindrical in shape being supported by straight sides like the body legs. Thus, <u>marjal</u> is semantically associated with <u>rijil</u> in terms of shape.

JA has so many other miscellaneous nouns derived from BP terminology. In what follows, I will state every BP and all the nouns derived from it regardless of the morphosyntactic class of the derived nouns.

First, from the BP term sin "tooth", JA has derived the following nouns:

Table 12. Nouns Derived from Miscellaneous Nouns

12) <u>BP Term</u>		Derived Noun	Gloss
sinn	"tooth"	Sinnih	"habitual practice, law"
		masann	"grindstone, strop"

The noun <u>sinnih</u>, feminine in gender, designates habitual practices, laws, sayings, doings, etc., of some entity. For instance, in the compound <u>sinnit ?al-hayāh</u> (law the-life), <u>sinnit signifies</u> the laws or nature of life; also, in <u>sinnit ?an- nabiyy Muhammad</u>—Peace Be Upon Him - , it designates the Prophet's saying and doings. Therefore, the derived noun does not seem to be semantically related to <u>sinn</u>. However, the masculine derived noun <u>masann</u> is semantically related to the BP terms. <u>Sinn</u> is used for seizing_and chewing food, the act of chewing food should be repeated continuously; otherwise, the food would not be ground. Likewise, if one wishes to sharpen tools like knives, one should constantly rub those tools against a grindstone_or a strop. Accordingly, the similarity between the way we grind or chew food by means of teeth and the manner we sharpen a given tool by means of a strop accounts for the semantic relationship between <u>sinn</u> and <u>masann</u>.

Second, from the term wijih, JA has derived the following nouns:

Table 13. Nouns Derived from wijih

13) <u>BP Term</u>		Derived Noun	Gloss	
wijih	"face"	wijhah	viewpoint"	
		w a jhah	"fecade"	

These two nouns are feminine. In the first place, $\underline{\text{wijhah}}$ is not semantically associated with $\underline{\text{wijih}}$. The derived noun names a trend or viewpoint as can be seen in the compound $\underline{\text{wijhit nadar}}$ (viewpoint sight) "a point of view". Nevertheless, $\underline{\text{wajhah}}$ is semantically related to $\underline{\text{wijih}}$ in that they both name the front portion of the head and the front portion of an entity like a building, respectively, which are visible portions. In brief, the position of the BP term serves as the basis of the semantic association.

Third, from the BP term <u>lahim</u> "flesh", JA has derived the following nouns:

Table 14. Nouns Derived from lahim

14) <u>BP Term</u>		Derived Noune	Gloss
laḥim	"flesh"	milḥamih	"slaughter"
		laḥḥ a m	"butcher, welders"
		?ilḥām	"a solder"

The feminine noun <u>milhamih</u> is semantically associated with <u>lahim</u> in that the purpose of <u>milhamih</u> is to get meat for food by killing animals. Likewise, the masculine noun <u>lahham</u>, in the sense of "butcher", is semantically associated with <u>lahim</u> in that a butcher"s sole purpose is to kill animals for food. Further, <u>lahhām</u>, meaning welder or solderer, is also related to <u>lahim</u> in that the substance or metal used by a solderer is as soft and molten as flesh. Thus, the quality of both the body flesh and the soft metal used by a <u>lahhām</u> serves as the basis of the semantic similarity between the BP term and this derived noun. Finally, the masculine noun <u>?ilhām</u> is also semantically associated with <u>lahim</u>. We all know that when the body flesh burns, it melts; now, <u>?ilhām</u> designates a fusible metal used when melted at a given heat for joining other metal surfaces together. Thus, this characteristic of melting of the body flesh furnishes the grounds for the semantic similarity that exists between the BP and <u>?ilhām</u>.

Fourth, JA has got other derived nouns from the BP term ?iðin "ear" mentioned in (15)

Table 15. Nouns Derived from ?iðin

15) <u>BP Term</u>		Derived Noun	Gloss
?iðin	"ear"	?aðān	"a call to prayer"
		meiðanih	"a minaret"
		ma?ðun	"an official authorized to perform civil marriages"

The first two nouns <u>?aðān</u> which is masculine and <u>meiðanih</u> which is feminine are semantically related to <u>?iðin</u> in terms of function. As I have stated earlier, the BP is the organ of hearing; likewise, <u>?aðān</u> is a means of letting people hear or know the hour of prayer in the Islamic World. By the same token, <u>meiðanih</u> designates a tall tower an a mosque from which Muslims are called to prayer. Thus, the goal of <u>?iðin</u>, <u>?aðān</u> and <u>meiðanih</u> is the same in that they can all be considered as a means of hearing something or letting people know something. Hence, there is a semantic association between the BP and these two derived nouns.

However, the masculine noun $\underline{\text{ma?}} \delta \overline{\text{un}}$ is not semantically associated with the BP. This is the case because this derived noun names an official or a person who is authorized by the government to perform civil or legal marriages. Nevertheless, one may arrive at some semantic relationship between $\underline{?i}\delta \underline{\text{in}}$ and $\underline{\text{ma?}}\delta \overline{\text{un}}$ considering the metaphorical extension of the BP in JA which means "a permit"—i.e., an official or authorized statement, verbal or written, given to a person to do some act – as is illustrated in below:

ma^Cak ?iðin ?itrawwih hassa^C?

with + you ear to go now

Given this metaphor of $\underline{?i\eth_{in}}$, one could claim that the noun $\underline{ma?\eth_{\overline{un}}}$ is semantically associated with this metaphor of the BP in that $\underline{ma?\eth_{\overline{un}}}$, like the metaphor, has a permit or an official statement giving him the right to carry out his duty. If this is valid, then we can say that $\underline{ma?\eth_{\overline{un}}}$ is semantically associated with $\underline{?i\eth_{in}}$ in JA.

Fifth, there are other nouns derived from $\frac{C_{ein}}{C_{ein}}$ in JA. These nouns are given in (16):

Table 16. Nouns Derived from ^Cein

17) <u>BP Term</u>		Derived Noun	Gloss
c _{ein}	"eye"	?i ^C weinat	"eyeglasses, spectacles"
		?a ^C yān	"distinguished, important people"
		^C ayynih	"sample, specimen"

The nouns $\underline{?i^C}$ wein $\overline{a}t$ and $\underline{^C}$ ayynih are feminine, and $\underline{?a^C}$ -yan masculine. Besides, they exhibit some semantic association with the BP. The noun $\underline{?i^C}$ wein $\overline{a}t$ names glasses worn in front of the eyes to help a person see objects around. Therefore, the function of both the BP, the organ of vision, and this derived noun is the basis of the semantic similarity between them. Further, $\underline{?a^C}$ y $\overline{a}n$ that refers to noblemen or peers seems to be semantically related to $\underline{^C}$ ein in that the former as is shown in the compound \underline{majlis} $\underline{?al-?a^C}$ y $\overline{a}n$ "house of lords" names those people who are expected to keep an eye on all other people in the society. Accordingly, the function or task of the people named by this derived word

[&]quot;Do you have a permit for going home/leaving now?"

furnishes the basis for the semantic association between it and the BP term. Finally, $\frac{C}{ayynih}$ seems to be semantically associated with $\frac{C}{ein}$. The derived word designates a portion of some object intended for verification, testing, or being seen or shown. In addition, $\frac{C}{ayynih}$ is a part representing the whole of some entity, and so is the body eye in the sense that it is just a part of the whole body. Thus, the purpose of $\frac{C}{ein}$ and $\frac{C}{ayynih}$ and the part - whole relationship denoted by both words seem to be the source of the semantic relatedness between the BP and the derived noun.

Sixth, JA has derived two more nouns from the BP kaff given in (17):

Table 17. Nouns Derived from kaff

18) BF Term Derived Noun Gloss	
kaff "hand palm" ?ikfūF "gloves"	
kaffih "a pan or a receptacle(of a balance	

The first noun is masculine, and the second Feminine. Both are semantically similar to <u>kaff</u>. The noun <u>?ikfūf</u> names an article of clothing which covers the hand. Further, it is similar to <u>kaff</u> in that this covering has exactly the same shape of the hand including the palm part. Likewise, <u>kaffih</u> which names one of the two matched pans or receptacles of a scale or balance is also semantically associated with the BP in terms of both shape and function. A pan is circular, wide and shallow in shape similar to the shape of <u>kaff</u> although the BP is not circular. Further, like <u>kaff</u> which holds objects, <u>kaffih</u> is also used for holding liquids and solid materials. Therefore, the shape and function of this BP serve as the basis of the semantic relatedness between those derived nouns and the BP term.

Seventh, JA has derived the noun <u>rammāš</u> a winker" from the BP term <u>rimiš</u> "eyelid". This word is masculine and semantically related to the BP. <u>Rammāš</u> names the agent or person who does the act of winking. The basis of the semantic association is the fact that the eyelids are mobile—they can move up and down very quickly—and a winker moves the eyelids, thus closing: and opening the eye very quickly. Consequently, both rammāš and rimiš are semantically associated.

Eighth, there are other nouns derived from the BP term <u>tahunih</u> (pl. <u>tawahin</u>) given in (18):

Table 18. Nouns Derived from tahunih

19) <u>BP Term</u>	Derived Noun	Gloss
ṭāḥūnih	"molar" ṭaḥūnih	"grinder"
	miṭḥanih	"mill"
ṭahīn		"flour"
	ṭaḥḥ a n	"miller"

The nouns <u>tahūnih</u> and <u>mithanih</u> are feminine, and <u>tahūn</u> and taḥḥān masculine. All these words are semantically associated with the BP; the source of the association is the function of the molar: It is used for crushing, pulverizing or breaking up food into fine particles. <u>Tahūnih</u> names a device or instrument for grinding as can be seen in the compound <u>tahūnit gahwa</u> "a coffee grinder". <u>Mithanih</u>, like <u>tahūnih</u>, names a machine or device by means of which a solid or coarse substance like grain is ground. <u>Tahūn</u> signifies the output, product or substance resulting from grinding. Finally, taḥḥān stands for the person who operates tends a mill. Consequently, given the function of <u>tāhūnih</u>, the semantic association of these derived nouns with the corresponding BP becomes highly apparent.

Ninth, from <u>gadam</u> "foot" JA has also derived the masculine noun <u>gaddum</u> "an adz". It is similar to the BP in the sense that it names a hand cutting metal tool which is <u>gadam</u>-shaped. Accordingly, the shape of <u>gadam</u> is the basis of the semantic association of this derived noun with the BP term.

Tenth, there are two more nouns derived from the BP <u>sidir</u> "chest": <u>sadāri</u> "bras" and <u>sidriyyih</u> "a vest or waistcoat" which are feminine. Like so many other derived words, <u>sadāri</u> is semantically associated with the BP; the derived noun which has the same size and shape of one's chest names an undergarment used by women to shape or support their breasts. Similarly, <u>sidriyyih</u> is semantically similar to <u>sidir</u> in terms of the position of the BP, which is the front upper part of the body. <u>Sidriyyih</u> designates an article of clothing, a vest or a waistcoat, worn under a jacket on the body part. "That there would be names for articles of clothing derived from body part terms is not particularly surprising given the purpose of clothing and given the physical clothing and the body" (Petruck, 1986, p. 237). Eleventh, from the BF term ^Casab, JA has derived three more nouns given in (19):

Table 19. Nouns Derived from ^Casab

20) <u>BP Term</u>	Derived Noun	Gloss
^C asab "	"nerve" ^C aşabiyyih	"nervousness,fanaticism"
	?i ^C ṣāb	"bandage"
	^C uşbah	"association,band"

The feminine noun $\frac{C}{asabiyyih}$ seems to be semantically associated with the BP. The BP is the source of the impulses of sensation or emotion in the human body. Similarly, the derived noun is an abstract noun which designates excessive enthusiasm zeal for emotions for some people or entity, or which describes the state or condition of someone who gets on his nerves. Thus, since both the BP and this noun make reference to the nervous system, we assume they are semantically associated. However, the noun $\frac{2i^{C}sab}{sab}$ which is feminine has no semantic relationship to the BP; in JA, this noun designates a strip of soft cloth used for dressing, binding or covering a wound. Likewise, the feminine noun $\frac{C}{usbab}$ does not bear any semantic relationship to $\frac{C}{asab}$ as can be seen in the compound $\frac{C}{usbab}$?il-?umam "League of Nations" where the derived noun signifies an association.

Twelfth, another noun is derived from the BP term rag "head"; this is $\underline{ri?\overline{asih}}$ "presidency", the gender of which is feminine. This derived form is semantically associated with \underline{ras} . I have already maintained that \underline{ras} is at the top part of the body; now $\underline{ri?\overline{asih}}$ names the office or the term of the office occupied by a president who presides over a society, country, or any other organized body. Thus, the position of the BP is the basis of the semantic relationship between \underline{ras} and $\underline{ri?\overline{asih}}$.

Finally, two more nouns are derived from the BP term jilid "skin"; these are the feminine noun jildih "a piece of leather" and the masculine noun jallad "the one who lashes or strikes with a whip". The noun jildih, like jilid, names a piece of leather, animal skin, or hide used for holding together or tying some object or objects. Therefore, the function of jilid is the basis of the semantic association of jildih with the BP term. Likewise, jallad is semantically similar to jilid in the sense that it names a person who hits, strikes or punishes somebody or something using a whip or an instrument made of leather or animal skin. Consequently, this BP is extended to instruments or tools made of the body skin or some other Soft of leather.

3. Conclusion

The present work has examined nouns derived from BP terminology in JA. We have realized that most of the nouns are semantically as associated with the BP from which they are derived. Consequently, the meaning of such nouns could be readily inferred or predicted from the meaning of the BP terms basically because the semantic feature of the BP terms have spread onto the derived nouns. Nevertheless, there are other nouns, which are a few in number, whose meaning cannot be similarly predicted mainly because such nouns as kafif, Casabah, and ?a*in signify and express objects or notions the relationship of which to BP terms is idiosyncratic. Accordingly, one can conclude the following: Nouns whose meanings are predictable from the meaning of BP terms need not be listed in the lexical entries of their own.

Further, the derived nouns are used to designate concrete and abstract objects in a variety of lexical semantic domains in JA culture like geometry, clothing, trading, anguish, emotions, religion, and the like. Such semantic domains are apparently external to the BP domain. However, the physical characteristics of position, shape and function of BP terms furnish the basis of the extension of the BP terms to outside lexical semantic domains.

Finally, it is obvious that JA has the capacity of expanding its lexicon by means of deriving words from already existing words. The present paper has presented a pretty large number of nouns derived from BP terminology in JA.

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Notes

Note 1. Following the Basran grammarians who maintain that the verb is derived from the verbal noun (called ?al-masdar) in Arabic (?al-?anbari n.d.: 171-176), I assume that all words are derived from nouns. Hence, the body part terms constitute the stem or base form from which the nouns under consideration are derived in Jordanian Arabic.