# Antonymy and Related Terms * 

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## 1. Introduction

The significance of the present work is two fold: first, to determine a borderline between a large web of relations that has been viewed in the field of lexical semantics as antonymy, opposition, oppositeness, contras $t$, etc. ,and second, to locate antonymy within an umbrella term, viz. incompatibility. Much theoretical knowledge in the present study has been derived from pioneers' works as Lehrer, Lyons, Cruse, Leech, Ljung and others. Diagnosing this large web of relations and terms is grounded on the following hypotheses: (1) earlier pilot work in lexical semantics indicated, to a greater or lesser degree, that the notions of oppositeness, opposition, and antonymy are used interchangeably. It is suggested here that the meaning of each of the notions differs,(2) it is also suggested that the relations holding between the 16 notions under investigation are not the same, and (3) building on hypothesis (2), it is presupposed that the meaning of the notions, though highly related, are different. Most of the discussion below is supported by congruencies and hierarchies which surely help in understanding the notions and their relations.

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## 2. The Problem

Investigating a cluster of terms and notions like the one at hand may arise certain queries like the following:
(1) Is there any difference between terms like opposition, and oppositeness?
(2) Out of the 16 investigated terms which entail which?
(3) Can we distinguish a terminological congruence of terms like opposition, antonymy, contrast, etc.?
(4) Can we categorize types of oppositeness? If yes, on what basis?

## 3. The Aims

The main purpose of the present study is to
(1) locate antonymy within the so - called incompatibility, and
(2) explain the network relation holding between the notions under investigation.

## 4. Incompatibility

The foundation-stone of the whole issue of oppositeness, generally speaking, and of antonymy more specifically is incompatibility. Lehrer (1974: 24) (cf. Lyons, 1963 and 1968: $458 \mathrm{ff})$ defines incompatibility as part of the sense-relations referring to "[w]ords that contrast in a taxonomy...". Elsewhere (cf. Lyons, 1977: 288) words incompatibility denotes a senserelationship "... which holds between lexemes in many-member sets...". That is, it involves a contrast between sets or members of sets, e.g., animals vs.plants, as can be seen below:

| Set 1: animals |
| :--- |
| lion dog etc.  <br> VS.    |

## Fig -1- <br> A Sample of Contrasting Sets

For Cruse (1986: 93), it is "... [a] relation between classes with no members in common...". Thus, incompatibility,
by this definition, refers to varieties of oppositeness. Yet, in the present study, oppositeness will be dealt with independently, to a certain extent, taking into consideration, basically, the property of inherent banality distinguishing it from other incompatible terms (however, see 4.2 for details). For the time being, it is sufficient to say that incompatibility exhibits a relation (i.e. a contrast) between terms which are not inherently binary (cf. Cruse, ibid: $109, \mathrm{n} 8)$.We will benefit from this brief note since it is an explicit statement for granting that the sense-relation, viz. incompatibility embraces antonymy.

### 4.1. Incompatibility and Opposition

Defined in the way shown above, the relation of incompatibility does map neatly the sense of opposition ${ }^{1}$ and contrast. Accordingly, we understand that the sort of relation holding between incompatibility and opposition is one of relation and its meaning, respectively. This is due to the fact that incompatible terms, within a taxonomy, come face to face with each other. That is, they oppose one another, in such away that they tend to show aspects of differences. Lion can be juxtaposed to flower and all other members subsumed under plants. Though one might infer the same result with regard to oppositeness and opposition (since the former involves the latter), it would be erroneous to conceive of both terms (i.e. incompatibility and oppositeness) as equivalents.

### 4.2. Incompatibility and Contrast

The meaning of contrast is embedded in our daily life encounters, e.g., an action of contrasting between say people, things, entities, etc. which involves a manifestation of some key differences between them (Hornby, 1989: 256 f). Linguistically, "[the] term is used... for a difference between units, especially one which serves to distinguish MEANING in a language" as Crystal (1985: 73) puts it. James (1980), for

Prof. Dr. Dinha T. Gorgis \& Dr. Huda F. Al-Halawachy instance, argues for a number of linguistic phenomena which elucidate more of differences than similarities between cultures. So, what can be said about the sort of relation holding between incompatibility and contrast? As embodied in the definition of incompatibility above (see4.1), the relation, viz. incompatibility denotes a contrast between sets and set members. This also means that incompatibility entails both opposition and contrast. Thus, one may ask: Can opposition and contrast be regarded as semi-equivalent terms, or not?

## 5. Oppositeness vs. Incompatibility

Adopting Cruse's (1986: 109, n8) explicit statement mentioned above (see4.1), it is reasonable to say that the senserelation, viz. incompatibility includes oppositeness. It is true that oppositeness and incompatibility share general characteristic features, yet oppositeness retains certain properties, e.g., binarity (see5.3.) which comes to be seminal in distinguishing members of both relations. For instance, lion and flower represent incompatible terms, but cannot be considered as one type of oppositeness, while other terms, e.g. alive: dead, up: down, happy: sad and the like are said to be so. Thus, one may ask: What would dominate this divergence between these two groups of lexical terms? Generally speaking, it should be noted that what marshals all types of oppositeness is their dependency upon dichotomization (cf. Lyons, 1977: 271). A decade earlier, Lyons (1968: 461) remarked that "[d]ichotomization is a very important principle in the semantic structure of language". Upon this understanding, it must be noted that this ineluctable feature of twoness must be held for true opposite pairs as Cruse (1986: 258) puts it. A clue to a possible characteristic of dichotomous pairs such as: long: short, good: bad, old: young and so on simply comes from diagnosing their meanings. That is to say, members of these pairs, which are conceivable as opposites are
complementary to each other in meaning; they share a number of features of meaning yet show certain marked contrasts (cf. Nida, 1975: 17). What can be inferred, here, is that a sense of similarity must exist between these lexical terms so that they can be judged as opposites (cf. Lyons, 1977: 286), i.e. the difference is NOT absolute. In this light, however,
[ $t$ ]he paradox of simultaneous difference and similarity is partly resolved by the fact that opposites typically differ along only one dimension of meaning. [I]n respect to all other features they are identical, [yet] their semantic closeness along the dimension of difference [would] occupy opposing poles, hence the feeling of difference.
(Cruse, 1986: 197)
This sense of similarity holds between opposite terms belonging to certain notional or conceptual areas ${ }^{2}$. Therefore, it is immediately clear that it is possible to categorize various opposite pairs into various semantic fields that match up with each pair. Take the case of size, weight, direction and so forth.

The above discussion mirrors that inherent binarity is a principal property of opposites. Since it is a logical necessity, this property would be based on a uni- dimensional axis which has no more than two extremes. Yet, it is not enough to designate opposites by means of this property. The reason is such that it will be possible to find pairs expressing binary contrasts, but they are not satisfactory opposites. Hence, another ingredient of oppositeness could be missing, viz. directionality (Ibid: 259 ff ). At this stage, a radical question may be raised here: Is directionality a key element to all types of oppositeness? Antonyms as one type of oppositeness (see5.4. below) obviously are not so far off this trait since, for instance, long: short, denoting length, are above and under average, respectively (cf. Sapir, 1949: 134). What is highly

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significant is that directionality plays an effective role in the identification of opposite terms, generally speaking, and of antonymy, more specifically. To be sure, the property of directionality embraces the concepts of both scale and grading.

### 5.1. Oppositeness and Opposition

Opposition and oppositeness have been used interchangeably in the literature by some scholars. For instance, Cruse (1986: 197f) explains, on one hand, the notion of oppositeness with respect to binarity supported by certain pairs, e.g., good: bad, top: bottom etc. On the other hand, he attempts to uncover the nature of oppositeness by devoting a section entitled "The Nature of Opposition" (257 ff), starting with the following statement ${ }^{3}$ :

Opposition is a special case of incompatibility. Long and short, for instance, are incompatibles, since nothing can be at once long and short (relative to the same reference point); but obviously their relationship is different from that between dog and cat.

Here, it might appear that their is a sort of a terminological discrepancy, as far as opposition and oppositeness are concerned. Since good: bad as one type of oppositeness involves the meaning of opposition holding between members of this pair, it would be appropriate to say that oppositeness and opposition can be matched up as a relation and its meaning, respectively. Clearly, this reinforces our intuition so far remarked displaying that oppositeness and opposition are two different terms.

### 5.2. Oppositeness and Contrast

Once we diagnose all types of oppositeness, it would be clear that such types include a contrasting process between
their members, along with different dimensions. Consider the following contrastive pairs: right: left, kind: cruel, strong: weak and so forth. Thus, oppositeness includes contrast. Now, we may stop, at this point, and think for a while: Does incompatibility involve the meaning of opposition and contrast in the same way as oppositeness? Obviously, incompatibility implies an action of contrasting between sets or members of sets that oppose each others, commonly focusing on differences more than similarities. Yet, oppositeness entails the meaning of both opposition and contrast between members of pairs depending on how we look at these pairs along dimensions. In other words, the sense of opposition and contrast, here, depends on the angle from which we view members of these pairs, i.e., whether similar or different. Upon this understanding, it would be possible to state that opppsition ${ }^{4}$ connotes the meaning of contrast. That is, they are approximately equivalents from two different perspectives with respect to the two relations, viz. incompatibility and oppositeness.

### 5.3. Binarity vs. Non-binarity

A term like liquid fails to manifest a real opposite with solid or gas. The reason is that liquid is part of a three-term system, i.e., liquid, solid, and gas (cf. Hurford and Heasley, 1983: 114). The contrast here is non-binary. These can be found, usually, in the form of related terms, bounded with each other in terms of cycles or ranks (These concepts will concern us later, see n.5). Relying on the relation of incompatibility, so far discussed, it is highly significant to note that incompatible terms which are subsumed under sets can be captured in terms of binarity that involves, certainly, the meaning of opposition. For example, the term lion can be juxtaposed to flower to frame binary incompatible terms. But, lion equally opposes to further members of the set plants. Such a binary relation, thus, is not inherently encapsulated with such lexical terms. On the

Prof. Dr. Dinha T. Gorgis \& Dr. Huda F. Al-Halawachy contrary, all binary oppositions or contrasts (as discussed above, see4.2) are framed, almost always, in terms of many members that accord with each other. Strictly speaking, male: female stands as a binary contrast holding the meaning of opposition according to a single parameter, viz. sex. So such a parameter stresses the property of inherent binarity holding for such a pair as one example of many others.

To sum up the argument, let us make the picture more revealing. Supposing that $X=$ incompatibility, $A=$ opposition, $\boldsymbol{B}=$ contrast and $Y=$ oppositeness, we can have:
$X \subset$ both $A, B$
$Y \subset$ both $A, B$
$\therefore X=Y$, where $\subset$ means includes.
This is only true in mathematics, whereas in logical semantics and in the light of the remarks so far presented, notice that $\boldsymbol{X} \neq \boldsymbol{Y}$; rather $\boldsymbol{X} \backslash \backslash \boldsymbol{Y}$ (where $\backslash \backslash$ means parallel to); that is both incompatible and oppositeness are equal in status. And this is evident in a pair like strong: weak vs. lion: flower.

### 5.4.Oppositeness: Taxonomies

The topic of classifying oppositeness is too thorny to be exhausted comprehensively. One major problem has to do with terminologies with types, especially what concerns antonymy (cf. Lehrer and Lehrer, 1982: 483). Thus, in the literature, oppositeness has been classified differently by various scholars, e.g., Lyons (1968: 460 ff; 1977: 281 ff), Palmer (1981: 94 ff ), Fromkin and Rodman (1988: 214 ff ), also Cruse (1986: 198 ff ), to name but a few. Of all available taxonomies, I found Cruse's (1986) taxonomy (reproduced below) more adequate to follow:

Oppositen

antipodals reversives conversesounterpart and orthogonal Fig -2Classification of Oppositeness

This is but a rough sketch, which will be reformulated in the following argument, given only to show that antonymy is located as a subordinate term to oppositeness. Though oppositeness is taken, here, as a super ordinate term, one might be faced with a terminological overlapping as far as oppositeness and antonymy are concerned. The reason is that antonymy has widely been used in the literature as an equivalent to refer to all types of opposites. This is made clear in Lyons (1977: 286) who writes: "... antonymy was coined in the nineteenth century to describe... oppositeness of meaning..." (cf. also Lyons, 1968: 460). Not surprisingly, then, most authors have addressed the standard technical term referring to all types of oppositeness as antonymy. But, oppositeness replaces antonymy since it is more precise in the usage for the reason that members of opposite pairs are related to each other in various ways, e.g., high: low, left: right, front: back, etc. (see again Lyons, 1977; 270f). Along with this line of thinking, Hurford and Heasley (1983: 114) remark the falsity of such a traditional view (i.e., using antonymy for all

Prof. Dr. Dinha T. Gorgis \& Dr. Huda F. Al-Halawachy opposites), for it "... is not adequate, as words may be opposite in meaning in different ways, and some words have no real opposites" (cf. also Kempson, 1977: 84). From this platform, "[a]long one parameter, man stands in opposition to woman, but along another parameter man stands in opposition not to woman, but to boy" as (Kempson: ibid) remarks (cf. also 4.2 above).

It would be convenient to approach a taxonomy where oppositeness is taken as the umbrella lumping different types one of which is antonymy (cf. again Kempson, 1977: 84).From this exposition, we can infer the following: Incompatibility is dealt with as a super ordinate term to oppositeness. And since antonymy is subordinate to oppositeness as explained above, then, by definition, it would be appropriate to locate antonymy under incompatibility. For instance: terms like good, excellent, very good, average, fair, poor, bad, etc. are incompatible with each other, being situated in a taxonomy, namely, a scale of MERIT with respect to the antonymic pair good: bad ${ }^{5}$.To round off the argument, we feel that the sort of relations holding between incompatibility, oppositeness, and antonymy, can be best captured in a form of a tabulated features where incompatibility is the super ordinate term which embraces oppositeness that includes antonymy.

Table-2-
A Matrix of Features Defining Incompatibility, Oppositeness and Antonymy

| General <br> features | incompatibility | Oppositeness | Antonymy |
| :---: | :---: | :---: | :---: |
| Binarity | + (not inherent) | + (inherent) | + (inherent) |
| Scaling | - | + (not all types) | + |
| Gradability | - | + (not all types) | + |

### 5.4.1. Complementarity:

Complementary opposites seem to be, conceptually, the simplest of all various types of opposites (cf. Kempson, 1977: 84 and Cruse, 1986: 198). Pairs like; dead: alive, true: false, male: female, married: single, etc. stand for this type. In essence, what holds between such members is that they thoroughly bisect a conceptual domain, so to speak, into two mutually exclusive parts. In other words, if one member of a pair is operative, then this necessarily excludes the possibility of a third term between them (see among others, Cruse, ibid: 198f; Lyons, 1968: 461; Leech, 1981: 99; Hurfored and Heasley, 1983: 114 and Gairns and Redman, 1986: 25). Consider, for illustration, the following:

1. a) If an answer is true, then it is not false.
b) If an answer is false, then it is not true ${ }^{7}$.

As such, complementarity might seem to be combined with the concept of contradiction distinguished from antonymy that is combined with contrariety. Thus, we would find ourselves in the realm of a traditional logical view which dates back to Aristotle (see Lehrer and Lehrer, 1982: 483; Ogden, 1933 cited in Zimmer, 1964: 22 and Lyons, 1977: 272). That is, with contradictory opposites, the negation of one term ALWAYS implies the assertion of the other along a given dimension (cf. Zimmer, ibid: 21 ff; Lyons, ibid: 271f and Crystal, 1985; 73). For complementary opposite, the same thing is applicable. But, sometimes some complementary opposites are dealt with as being operative on a scalar dimension, e.g., dead: alive (see for details, Lehrer, 1974: 28 and Leech, 1981; 99).

### 5.4.2. Directionality

Many lexical opposites involve oppositeness in terms of directionality. The most basic framework of directional opposites is illustrated as follows: "... two bodies A and B moving in straight line at speed $\left(\mathrm{S}_{1}\right)$ and $\left(\mathrm{S}_{2}\right)$, respectively, are moving in opposite directions if the speed $A$ relative to $B$ is

Prof. Dr. Dinha T. Gorgis \& Dr. Huda F. Al-Halawachy equal to the sum of $\left(S_{1}\right)$ and $\left(S_{2}\right) "$ (see also Lyons, 1977: 282 in terms of the main principle of motion). It seems that the term direction lends itself, almost always, to describing opposites of this type. For Cruse (1986: 223f) a direction is "... a potential path for a body moving in a straight line..." Nevertheless, there are various subtypes which are included with the major notion of directionality, e.g., antipodal and orthogonal, reverses, converses, and counterparts. Consider: north: south and north: east; rise: fall; above: below and hill: valley.(for details see, Cruse, 1986: 224 ff ).

### 5.4.3. Antonymy as a Linguistic Phenomenon

At first sight, it seems that a contrary opposite may correspond to antonymy (see definitions of contrary opposite given by(Zimmer, 1964: 21 and Crystal, 1985: 73).But it is not the case for antonymy has to do with gradable opposites and complementarity with un gradable opposites. This lies in the fact that there are many contraries which would not be judged as opposites, e.g., red: blue, tree: dog, square: abstract, etc ${ }^{8}$. (see Lyons, 1977: 272). In such a case, as far as antonymy is concerned, "..., gradable opposites manifest the property of polarity more strikingly than do other opposites" (Ibid: 279).Thus, such a restriction of terminologies noted above (i.e., gradable vs. un gradable opposites)'... leaves the terms "contradictory and contrary" free for employment in the sense in which they have been defined by logicians (Lyons, 1977: ibid) (cf. also Bolinger, 1968: 212).

It should be clear then that both antonymy, and contrariety share resemblance in terms of the fact that "... the denial of one of the opposites does not automatically, imply the assertion of the other..." as Ljung (1974: 75) remarks. Yet, gradability remains the characteristic feature combined thoroughly with antonymic pairs. The pair, good: bad is a good candidate. Notice that the negation of the term good does not necessarily imply that judgements concerning certain
people or objects must be negative, i.e., bad all the way through. Such being the case, certain terms are found to lie between good and bad to form a series as follows; good $\backslash$ fair poor $\backslash$ bad. In this sense, the term series is used here to mean a sort of dimension or more precisely scale ${ }^{9}$ which encapsulates degrees or points. Consequently, certain relations linked to these degrees can be captured, e.g., excellent $\backslash$ good $\backslash$ average $\backslash$ poor $\backslash$ failing. Thus, average stands for the neutral term within the set; whereas excellent... failing and good... poor form the bracketing sets of opposition (see Nida, 1975: 108).Table -3below is intended to show the distinction between the terminologies thus far presented more readily and explicitly.

## Table -3 - A Matrix of Features Defining Oppositeness and its Subclasses

| General | Oppositeness |  |  |
| :---: | :---: | :---: | :---: |
| Features | Complementarity | Directionality | Antonymy |
| Incompatibility | + | + | + |
| Opposition | + | + | + |
| Contrast | + | + | + |
| Binarity | + | + | + |
| Scalability | - | - | + |
| Gradability | - | - | + |

## 6. The Place of Antonymy in Lexical Semantics

Some writers have described antonymy with respect to markedness; that is one member of each pair seems to function always as the unmarked or generic cover-term for the quality involved (cf. Givon 1970: 817 following Vendler, 1963). Furthermore, it is said that each antonymic pair posses a positive and negative member ${ }^{10}$; "... the positive member is the one denoting unusually great possession of the common quality involved in both members" (Ljung, 1974: 74). For Zimmer (1964; 21 ff) and Lyons (1968; 461), antonymy involves a pair of adjectives which are related in such away that the assertion
of one member implies the denial of the other-but not the other way round. On the other hand, Lehrer (1985: 397) remarks that " $[\mathrm{g}]$ radable antonyms are words typically adjectives, that name opposite parts, usually ends, of a single dimensional scale. The scale has a middle point, usually a middle interval". That is to say, "[these terms] occur as end point on a scale... " (Lehrer, 1974: 26). This should mean that antonyms are dominated by the super ordinate property of $\boldsymbol{G R A D I N G}$.

To shed some light on these key notions, we would offer, the following examples:
2. This soup is hot. (Lehrer, 1974: 26).

Here hot is relative to an implicit norm which could be relevant to soup or some other liquid. Yet, the sense of HOTNESS changes once the CONTEXT changes, e.g.:

## 3. Paris is hot in summer.

It can be easily noticed that a single antonymic pair overlaps with more than one semantic field, so to speak, which is consequently ruled by a dimension corresponding to that field. Hot: cold, is a case in point, since as explained in sentences (2) and (3), hot is used within two fields, respectively; one is relevant to the TEMPERATURE of tasting (i.e. seasoning) liquids, foods, drinks and so forth, the second field is relevant to the TEMPERATURE of weather (i.e., weather forecast). Similarly, cold lends itself to more than one field (and, hence, interpretation) (cf. also, Lehrer,1970: 349ff; 1975: 901ff and 1978: 95ff).

### 6.1. A Diagnostic Test for Antonyms

The following three conditions, as tentatively proposed by Lehrer and Lehrer (1982: 485 ff ), must be met to accept an antonymic pair proper:
1.Dijointness comes first; that is, antonymic pairs show a sense of opposition or contrast.
2.Field, around which antonymy is centralized (i.e., scale) must be divided into twofold portions.
3.Meaning postulate; what is being implied by meaning postulate is a sort of a proposition expressing some aspects of the involved predicate. This proposition must be true by virtue of the meaning of the predicate itself.

As far as dijointness is concerned, Lehrer and Lehrer (Ibid. p. 485) say that it is "... a necessary but not sufficient condition". This is because "... married and inanimate [, for instance,] are applicable to disjoint sets, but they are not antonymous". Similarly, the second condition is not workable either. Take the case of LENGTH along with long: short operates. Obviously, one cannot infer that long describes all those objects which are not short. The reason is due to the existence of a mid interval point of the scale (i.e., where you can describe an object as being, for example, neither long nor short). Even the third presupposed factor has nothing to do with capturing the core of antonymy. Examine the following:
4. a) X is long entails X is not short but,
b) X is not long does not entail X is short (see 1982 p .486 ) (notice that this can be combined with the second condition).

Such a test evidently enabled Lehrer and Lehrer (Ibid. p. 487) to characterize antonymy in the following manner:
$A$ and $B$ are antonyms if everything that
is $A$ is not $B$ and everything that is $B$ is
not $A$ (in other words, $A$ and $B$ are
disjoint) and everything that is $A$ is more
(less) $\varnothing$ (on the appropriate scale) then
every thing that is $B$; but there are some
things that are more (less) $\varnothing$ than
anything that is $B$ that are not $A$
( $\varnothing$ refers to any antonymic adjective) (cf. Cruse, 1986;204)
Lehrer and Lehrer ( 487 ff ) have hinted at such a range of values expressed by such words like: excellent and terrible. These are connected to the properties good and bad,

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Prof. Dr. Dinha T. Gorgis \& Dr. Huda F. Al-Halawachy respectively. Another primitive characteristic is added, viz. "... the distance from the mid interval, or more precisely, similarity of distance from the mid interval". This stems from a comparative judgement (i.e., the position of the terms on the scale in terms of the mid interval). To support the weight of this notion, two interpretations are proposed as far as the terms excellent and good are concerned. Therefore, on the one hand excellent, is interpreted as a hyponym of $\operatorname{good}$ as explained in the following states:


Fig -3-
A Representative Stage: Initial State
On the other hand, excellent is considered as an extension of good:


Fig-4 -

## A Representative Stage: Secondary State

Consider the following examples which are meant to be explicit instances of the to positions:

## 5. This food is not good, it is excellent (Incompatible

 interpretation)6.This food is good-it is even excellent (Hyponymy interpretation, i.e. extension)

It is, the last interpretation which is preferable; one can draw on this final inference by testing the validity of such
terms (i.e., good and excellent) with an expression as not only, e.g.:

## 7. That food is not only good, it is excellent

8. That is not only a cat, it is a bitch.

The expression not only seems to be successfully operative to the hyponym interpretation rather than to the incompatible one. Yet, notice that it is not sufficiently informative ${ }^{11}$ to say that food is good to mean it is excellent. At first sight, all of this seems to stress one major point, viz. that excellent is a hyponym of good, but it may wrongly be interpreted as the following diagram shows;
*

| $\leftarrow$ bad | M | good $\rightarrow$ |
| :--- | :--- | :--- |
|  |  | excellent |

Fig -5-

## A Representative Stage: Final State

To sum up the argument, the notion of similarity from the mid interval point becomes evident in the way that "[e]xcellent is farther from the mid interval on the evaluation scale of good..., the least excellent thing is farther than the least good thing". Likewise "... terrible is farther from the mid interval on the scale of bad" ${ }^{12}$ (cf. Lehrer and Lehrer:1982, 489).

## 7. The Concept of Scale: Taxonomies

Generally speaking, all types of antonymy are governed by scales ${ }^{13}$ because they name the norms relevant to the pairs in question. Basically, there are two types of scale as far as the classification of antonymy is concerned. The first one is a single scale or mono scalar system in Cruse's (1976: 291) and Cruse and Togia's, (1995: 115) words, respectively. The origin of this scale (i.e., the zero point) is at the negative end (i.e., the negative term), and the property defined by this scale is

Prof. Dr. Dinha T. Gorgis \& Dr. Huda F. Al-Halawachy determined by the positive term rather than its negative counterexample. The second type of scale is a bi scalar system in which two subtypes of scale are involved; one representing the major scale on which the scale is named and the second a minor scale. The chief value of viewing scales in such away is twofold; firstly to mirror a proper way of constructing a quality of something. And, secondly, it is aimed at capturing the relationship holding between terms like: excellent, good and bad, or that of warm, hot and cold. For special interest, these two folds will help open the way of establishing both LINGUISTIC and EXTRALINGUISTIC distributional patterns of antonymic pairs with respect to MARKEDNESS.Relying on this premise, what is required, now, is an insightful way of conceptualizing the immense number of terms with respect to scales.

### 7.1. Subclasses of Antonymy

Antonyms have been dealt with by Cruse (1976: 281ff) as, a more or less homogenous class which can be divided into three subclasses, or possibly four, according to his more recent work ${ }^{14}$ (cf. 1986: 206). This division is attested on certain semantic properties of antonymic pairs obtained from questions of the form how $X$ is it ? and on comparative forms. Such a classification is built on "... the relationship between the meanings in the positive degree, and their meanings in the comparative degree" (Cruse, 1976: 282) Let us consider first the function of members of antonymic pairs in the comparative form. This can be explained as follows:
9.a) X is short, but X is longer than Y .

The comparative degree of long DOES NOT presuppose that X is long, i.e. the comparative usage does not presuppose the applicability of the positive degree. The same thing can be said of short as in:
b) X is long, but X is shorter than Y (cf.Ibid)

One might be tempted to ask: What would control such variation among antonyms in general and even among members of the same pair more specifically ? It is committedness ${ }^{15}$ as proposed by Cruse (1976: 283); it "...describes any use of an adjective X in connection with a noun A, in which $\boldsymbol{A}$ is $\boldsymbol{X}$ is implied or presupposed". That is to say, certain members of antonymic pairs exhibit this sense of committed ness which others reject. Similarly, the behaviour of antonyms via their corresponding comparative form calls for two expressions, namely, pseudo comparative and true comparative; the former matches up with uncommitted ness, and the latter with committed ness, respectively (see Cruse, 1986: 206 ff).

Now, let us examine the behaviour of antonymic members in how-question. For the most part, the semantic nature of the question involved manifests the semantic nature of the term itself (i.e. whether it is un/marked). Such being the case, however, one can draw on the following observation: As far as this semantic property is concerned, one element of prosodic features shares a role here, viz. stress. In line with this thinking, members of antonymic pairs function differently with respect to the possibilities of forming questions on the pattern of how X is it? with the nuclear stress on X (however, it seems that all antonyms occur normally in such a construction) (cf. Cruse, ibid: 208; see also ch.4).

At this point, one find that classifying antonymy into subgroups becomes necessary, taking into consideration the strategy discussed above (i.e. how-question and the comparative) for testing the most distinctive features of members of each subgroup. According to Cruse (1976; 1986; and Cruse and Togia, 1995) antonyms can be classified as follows:

## GROUP -1- POLAR ANTONYMS

## Antonymy and Related Terms

Prof. Dr. Dinha T. Gorgis \& Dr. Huda F. Al-Halawachy Members of such pairs operate on a mono scalar system. Moreover "... [they] have an evaluatively neutral objectively descriptive sense as one of their principal meanings,..., the scaled property which underlies them can be measured in conventional units such as inches, grams or miles per hour" (1976: 284). Long: short, for instance, is a good candidate for such a group, (see Fig -6- below).

# LENGTH 

| short | long |
| :---: | :---: |
| Fig -6- |  |
| The Scale of Length |  |
| (based on Cruse a | 95: 115 |

## GROUP -2- OVERLAPPING ANTONYMS

They "... have an evaluative polarity as part of their meaning: one term is commendatory (e.g., good, pretty, polite, kind) and the other is deprecatory (e.g., bad, plain, rude, cruel)" (1986: 208). Such pairs can be represented on a scale as follows:

MERIT


Fig -7-
The Scale of Merit
(based on Cruse and Togia, 1995: 116)

## GROUP -3- EQUIPOLLENT ANTONYMS

This type constitutes a small number of terms which "... refer to distinctly subjective sensations or emotions (e.g., hot: cold, happy: sad), or evaluations based on subjective reactions...(e.g., nice: nasty, pleasant: unpleasant)" (Cruse,

1986: 208). although antonymic pairs of this type are operative along bi scalar system similar to Group 2, yet they are differently arranged. This is due to the fact that "[t]he scales are arranged end -to- end with adjacent zeroes" different from that with overlapping pairs since one zero point is situated along with the major scale. Equipollent antonyms are shown diagrammatically as follows:


Fig -8-
The Scale of Temperature

## GROUP -4- PRIVATIVE ANTONYMS16

"... [T]hey characteristically refer to situations where the desirable state is less the presence of some valued property than the absence of an undesirable one such as dirt or danger" (1986: 208). Such members of this group can be straightforwardly captured in our daily-life situations. Consider, for instance, a traffic plate which reads: Danger Ahead. The term danger or, dangerous would be the less desirable quality than its partner safe. This is clearly, a common norm among human beings; that is, to prefer safe to danger (see ch. 4 for further details on this group).

## 8. The Concept of Grading

GRANDING ${ }^{17}$ is a term which is borrowed from Sapir (1944), to whom we shall refer below. But first, let us see how Crystal (1985: 140) defines it:
[It is a]term used in GRAMMER and SEMANTICS to refer to an analysis of the sense relationship between LEXICAL items in terms of the possibility of comparison. In semantics, gradable terms are best illustrated by ... ANTONYMS ... . In grammar, the term ... refer[s] to various types of grammatical MODIFICATION... used as

Antonymic pairs such as: wide: narrow, big: small, etc. manifest the sense of gradability since what
... [they] have in common [is] the fact that they may be seen in terms of degrees of the quality involved. Thus, a road may be wide, or very wide and one road may be wider than another (Palmer, 1981: 94).
Implicit in the last sentence of the above quotation is an important key notion; wide, by itself, shows up a degree of gradability, i.e. it is implicitly graded. Yet, in the remote past, this was not adequately comprehended by logicians and philosophers as Lyons (1968: 466) contends. It was, thus, a puzzle to PLATO, for instance, to conceive simultaneous coexisting opposite qualities, e.g., tallness and shortness of the same object. Therefore, the following sentence, according to him, was peculiar:
10. X is taller than Y but shorter than Z (cf. Ibid; 1977: 274). Recently, logicians HAVE SOLVED the problem by explaining that "... such words as big and small, or good and bad, do not refer to independent, "opposite" quantities, but are merely lexical devices for granting as "more than" or "less than" with respect to some implicit norm" (Lyons, 1968: 465f). In a similar way, linguists also explain apparent paradox in for example: 11. Small elephants are big animals ${ }^{18}$.

We understand that in saying: 'The elephant is small', small here is a norm related adjective or relative adjective in the elephant world itself. Surely a one-year old elephant is small compared with older ones. Thus, we have different norms of size for different entities. These entities or classes are represented by the head noun in question (see for details, Warren, 1988: 160)

As for the grammatical construction of grading, which involves a comparison, Lyons (1977: 273f) highlights the fact that grading can be made explicitly, semi-explicitly, and implicitly.

EXPLICITLY ${ }^{19}$ comparative sentences can be viewed in sentences like:

## 12. My house is bigger than yours.

13. My house is bigger than it used to be (based on Lyons, 1968: 463)
It seems that the above two sentences offer a useful description of the explicit grading which falls into two subtypes. Sentence (12) shows that two objects may be compared with respect to a certain property which may be greater in degree for one than the other. Whereas sentence (13) shows that two states of the same object may be compared with respect to the involved property (for details, see Lyons, 1968: 463, cf. also Lyons, 1977: 273)

As with semi-explicit grading it results from "... the use of some comparative construction without explicit mention of the standard comparison" (Lyons, 1977: 274). Consider:
14. Our house is bigger (ibid), where
the standard comparison must be formally mentioned in the context.

The third type of grading is implicitly operative in sentences. This important insight was first brought into focus by Sapir (1944). Simply, such contrasts (or gradable antonyms in our terminologies) like small and large give us a deceptive feeling of absoluteness if compared with colour terms like red and green. The point is that the former group can not be applicable to every type of experience in the sense in which the latter is applicable to every experience in which colour can have a place. The point of departure between both groups (and even among members of group one itself) varies according to CONTEXT (for details, see Sapir, 1949: 122f).

## 9. Conclusion

To sum up, we can summarize the whole issue at hand as shown in Fig -8- which traces the relations holding between antonymy and related terms. In this study, only opposition, oppositeness, binarity antonymy (certainly including polar, overlapping, equipollent, and anto-complementary), scalability, and grading are treated while all other relations appearing on the figure deserve separate studies. As such, it is possible to draw on the following inference with respect to the relations holding between such terms as follows:
1 necessarily involves $\mathbf{2 , 3}$
4 necessarily involves 2,3
2 semi-equivalent to 3
1 may include 4
1 is parallel to 4
1 does not equal 4
1 (non-inherently) involves 5
4 (inherently) involves 5
4 includes 6,7,8
8 included in 1
6,7 do not equal 8
8 includes $9,10,11$
12 includes 8
9 is included in $\mathbf{1 3}$
$\mathbf{1 0 , 1 1}$ are included in 14
$\mathbf{1 2}$ is subsumed under $\mathbf{1 5}$
15 includes 16, 17, 18
15 does not equa


A Graphic Representation of Incompatibility and All other Subordinate Related Terms

Prof. Dr. Dinha T. Gorgis \& Dr. Huda F. Al-Halawachy
Notes

## 1. Crystal (1985:214f) defines opposition as:

 a term used in LINGUISTICS to refer to linguistically important differences between UNITS. The term is used primarily in PHONOLOGY, where contrasts between DISTINCTIVE FEATURES of sound, or between the presence and absence of a feature, are referred to as oppositions.What is significant here is that opposition, basically, operates on the principle of displaying differences on which incompatibility, as a sense-relation, operates too.
2. Grouping antonymic pairs into different groups is governed by such notional areas. One point must be mentioned here that those non-opposable terms may often be drawn from certain notional areas. Similarly, colour-terms have no corresponding opposites (except for white: black). This is also applicable to adjectives referring to emotional states such as: amazed, angry, disappointed which term no opposites (see Cruse, 1986: 258).
3. In the same way, Cruse (1986: 223) starts his discussion on directional opposites, which is one type of oppositeness, saying: "underlying many lexical opposites there is a type of opposition which we shall call directional". Elsewhere, he explains one of the subgroups of directional opposites, viz. antipodal assigning that: "Building on the notion of oppositeness of direction, a category of antipodal opposites can be defined,..." (224). Hence notice the inconsistency of using both terms, namely, opposition and oppositeness.
4. Roget's thesaurus (1946: 493f) presents the notion of opposition which he combines with further terms like contradiction and contrariety.
5. Some linguists have pointed out different types of manymember sets (i.e. incompatibility), as opposed to binary opposites such as: ranks, scales and cycles (see, for instance, Crystal, 1985: 155).Since antonymy is gradable, hence this proves our thesis that antonymy is included in incompatibility. Lyons (1977: 289), for instance, sets forth that terms which are arranged on a scale like \{excellent, good, fair, poor, bad, atrocious $\}$ can be taken as incompatible (i.e. one or two of them when contrasted explicitly). Yet, within this set, good: bad is used in a general sense than others. This is a typical lexical scale, i.e. antonymy which is located with binary contrast assigning the end poles of the scale.
6. For complementary opposites, notice the variation of terminology used by the authors (see n. 4 above). For Kempson (1977:84), it is true antonymy; Leech (1981: 99) has used the term, viz. binary taxonomy; for Hurford and Heasley (1983: 114), it is binary antonyms; and the last but not least Gairns and Redman (1986: 25) have adopted terms such as: complementaries, binary antonyms or binary taxonomy.
7. It is possible to cancel either or both implications which are determined by both members of the pair. Male and female may enhance this. Both assign the normality of a person or animal under certain biological and behavioural characteristics; that is, with respect to sex. But this sense of normality may be changed into the opposite since there are such terms like herphrodite or homosexual concerning animals and humanbeings, respectively (for details, see Lyons, 1968: 462; 1977: 279, Cruse, 1986: 200 and cf. also Lehrer, 1974: 28f).

## Antonymy and Related Terms

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8. According to some semanticists, e.g. Katz (1964, 1966), such lexemes are regarded as antonyms. Yet, this is a broad interpretation of the term antonymy (cf. Lyons, 1977: 272, fn3).
9. In this light, however, the distinction between the terms, viz. dimension and scale becomes necessary. Thus, "[o]bjects are compared with a standard degree of comparison within a particular dimension,..." and " $[t]$ he ordered range of possible degrees within a dimension is called the scale for that dimension" as Murphy (1993: 11) puts it.
10.Bierwisch (1967 quoted in Lehrer, 1974: 122f) has proposed such a set of features as positive vs. negative to analyze certain adjectives and nouns in German. The feature, namely, $\pm$ polarity separates polar opposites into either + pol or - pol. Thus, the unmarked term of the pair has the + feature (cf. also Lyons, 1968: 476; Clark, 1969: 390 and Givon, 1970: 820).
11.In this light, Gricean (1975) maxim of quantity is highly seminal here since the details a speaker gives must be informative.
12.In order to show the relationship that holds between terrible and good, excellent and bad, an important point is raised by Lehrer and Lehrer (1982: 489), viz. the terms good and bad are said to be perfect antonyms where as excellent and bad or terrible and good are imperfect ones. This sense of perfect ness is judged in terms of the distance from the mid interval. Thus, "[t]wo antonyms are perfect antonyms if they are the same distance from the mid interval; otherwise the are imperfect antonyms Members which are included in scales must be distinguished from others that are included in entities like cycles or ranks. The first thing to know about the members of these entities is that they are incompatible and involve ordering. Though the key word, here, is
ordering and that it is a property shared by members of the three entities, yet it does not hold similarly for them. In other words, these members can be ordered either serially or cyclically, hence both scales and ranks operate along with the former type whereas cyclic sets operate along the latter one (for significant details, see Lyons, 1977: 288 ff, Cruse, 1986: 187). More revealing, graded terms can only be operative along with scales rather than ranks (cf. Cruse, 1986: 192).
13.".
14.Examples of further studies mentioned by Cruse (1976: 281), with respect to antonymy, are those of Bierwisch (1967); Lyons (1968); Givon (1970) and Ljung (1974). Among them, only Bierwisch points out differences among antonymy, yet his treatment is restricted to German.
15.Committedness according to Cruse (1976: 283) "is one type of markedness", to determine the un/marked members of antonym pairs. But, basically, both terms(i.e. committedness and markedness) can not be used interchangeably only (For relevant notions, see ch.4).
16.This terminology is based on Trubtezkoy (1939). Yet, in Cruse's (1980) terminologies these members are termed as gradable complementaries (cf. Lehrer, 1985: 416). And in his more recent work (1995) they are termed as antocomplementaries (see ch.4).
17.Notice that the distinction which we have pointed out earlier to hold between contraries and contradictorie is highly sensitive to the concept of grading. Thus, Lyons (1977: 272) remarks that "....the fact that gradable antonyms can generally be taken as contraries, rather than contradictories, is a consequence of gradability not its cause".

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18. The same result can be inferred when dealing with two phrases compared to each other, viz. small elephants and big mice (To list but a few, see Palmer, 1981: 95; Fromkin and Redman, 1988: 214 and Kempson, 1977: 85).
19.There are certain alternatives, in English, for explicit grading, yet they are less common in use like verbs and adjectives (see Lyons, 1977: 273).

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Prof. Dr. Dinha T. Gorgis \& Dr. Huda F. Al-Halawachy

## ألفاظ التضاد التدرجيةّ وما ينضوي تـتنها <br> المستخلص

أ. .د.دنــا طوبيا كوركيس و م.د .هدى فاضل الحلاوجي
نحن نعيش في عالم مليء بالمنضادات، وهكذا نتزع الدراسة الحالية إلى بحث منظم لمناقثة أفكار من قبيل التضاد والتقابل، بصورة عامة، وفي ألفاظ النضاد التنرجية بصورة خاصة، وتبعاً لللك فإن اهتمامنا ينحصر في تعريف وشرح بضع من المصطلحات والأفكار ذات العلاقة وبضمنها النقابل، التضاد ، التتاقض، المقياس والتندرج. تمثل الإستراتيجية المنتقية بجمع 16 من الأفكار ذات العلاقة والتي تدت معالجتها في أدبيات علم الدلالة للمفردات فضلاً عن تقصي جذورها التاريخية، تعاريفها، أمثلتها وتصنيفاتها وما إلى ذلك. وتظهر النتائج إن تحديد موضع ألفاظ التضاد التنرجية ضمن هذه المصطلحات، أو حتى وضع حدود بين هذه المصطلحات ليس بالأمر الهين من الناحية الدلالية، وعلى الرغم من استعمال هذه المصطلحات في الحياة اليومية عموماً إلا أنها تتداخل مع بعضها بعضاً بطريقة أو بأخرى، ومن المؤمل أن يصل هذا البحث إلى مسح واضح يبين مجموعة من العلاقات المتتشابكة إلى حدٍ كبير ، والتي تسبب تبايناً بين المختصين في علم الدلالة المفرداتية .


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