

**Orientational Metaphors of Up and Down,
and Front and Back**

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Orientalional Metaphors of Up and Down, and Front and Back——

According to Lakoff and Johnson (1980:3), our ordinary conceptual system is fundamentally metaphorical in nature and metaphor is pervasive in everyday life, not just in language but in the way we perceive reality. This paper supports their findings and extends the application of vertical axis metaphors to horizontal axis metaphors. PART I deals with orientational metaphors of UP and DOWN, and PART II examines orientational metaphors of FRONT and BACK. PARTS I and II explore the dimensions of a conceptual system that governs the choice of these expressions. In PART III these findings are compared with those reported by Cooper and Ross (1975) and discoveries are made as to correlations between the semantic principles of frozen conjuncts and a conceptual system of orientational metaphors.

0. Introduction

The purpose of this paper is to examine orientational metaphors which deal with spatial concepts exemplified by upward-downward movements, and forward-backward movements. Lakoff and Johnson (1980:14-21) have previously explored up-down spatialization metaphors in relation to human physical bases and cultural experiences. Based on their findings, this paper expands the notions of up and down metaphors, extends the application to front and back metaphors by taking data from British and American English, and provides an analysis of the implication of spatial orientational metaphors.

Lakoff and Johnson (1980) have discussed the following conceptual meanings that govern the formation of orientational metaphors:

1. HAPPY IS UP; SAD IS DOWN
2. CONSCIOUS IS UP; UNCONSCIOUS IS DOWN
3. HEALTH AND LIFE ARE UP; SICKNESS AND DEATH ARE DOWN
4. HAVING CONTROL OR FORCE IS UP; BEING SUBJECT TO CONTROL OR FORCE IS DOWN
5. MORE IS UP; LESS IS DOWN
6. FORESEEABLE FUTURE EVENTS ARE UP (AND AHEAD)
7. UNKNOWN IS UP; KNOWN IS DOWN
8. HIGH STATUS IS UP; LOW STATUS IS DOWN
9. GOOD IS UP; BAD IS DOWN
10. VIRTUE IS UP; DEPRAVITY IS DOWN
11. RATIONAL IS UP; EMOTIONAL IS DOWN

The first four, namely HAPPY IS UP, CONSCIOUS IS UP, HEALTH AND LIFE ARE UP, and HAVING CONTROL OR FORCE IS UP and their respective counterparts are based on

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physical bases of posture and strength. MORE IS UP; LESS IS DOWN belongs to a different metaphor, namely, a container. FORESEEABLE FUTURE EVENTS ARE UP is another kind of metaphor based on a posture with eyes looking forward. UNKNOWN IS UP; KNOWN IS DOWN is constructed on an experiential basis, whereas HIGH STATUS IS UP; LOW STATUS IS DOWN is constructed on the bases of social and physical sizes. GOOD IS UP; BAD IS DOWN concerns personal well-being, whereas VIRTUE IS UP; DEPRAVITY IS DOWN has something to do with social well-being. RATIONAL IS UP; EMOTIONAL IS DOWN has physical and cultural bases in which 'being in control' is associated with 'being rational.'

The analysis of our data supports the findings made by Lakoff and Johnson, and adds the following:

12. WELL-INFORMED IS UP
13. COMPLETION IS UP; PROCESS IS DOWN
14. ACTION OR IN OPERATION IS UP; INACTION OR NO LONGER IN OPERATION IS DOWN
15. NORTH IS UP; SOUTH IS DOWN
16. NEW IS UP
17. BUILT IS UP; DESTROYED IS DOWN
18. IMPROVEMENT IS UP; FAILURE IS DOWN

All of these meanings have social and cultural bases except for NORTH IS UP; SOUTH IS DOWN, which has a geographical basis.

The findings made on front and back orientational metaphors will be dealt with in PART II. In the following sections each of these concepts will be discussed with data taken from dictionaries and the LOB Corpus extracted by the KWIC concordance. The text base of the KWIC concordance is the Lancaster-Oslo Bergen (LOB) Corpus of Present-day British English. The data from the LOB are indicated by their identification number as G04-104-13. Dictionaries include Hornby's *Oxford Advanced Learner's Dic-*

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tionary (henceforth abbreviated as H), *The Longman Dictionary of Phrasal Verbs* (PV), *The Oxford Dictionary of Current Idiomatic English* (OD), *The Random House Dictionary of the English Language* (RH), *Webster's New World Dictionary of the American Language* (WNW) and *The New American Bible*. Examples that are not documented are mine.

The concepts of upward movement, henceforth written as UP, for example, can be lexically realized as the adverb or preposition *up*, or as other words or affixes which imply upward movement literally or metaphorically. These words may constitute phrasal verbs or idiomatic expressions. According to Rosemary Courtney (1983 PV:0), phrasal verbs are idiomatic combinations of a verb and adverb, a verb and preposition, or a verb with both preposition and adverb. Like other compounds, phrasal verbs may have a meaning of their own which is not the sum of the meanings of their parts. Other examples include idiomatic expressions which may not be phrasal verbs. In this research expressions are taken up as data in so far as a combination of two or more words shows a unit meaning related to up-down, front-back orientational metaphors. Sometimes, however, certain affixes attached to roots which convey similar spatial concepts will be taken into consideration.

PART I. ORIENTATIONAL METAPHORS OF UP AND DOWN

1. HAPPY IS UP; SAD IS DOWN

The concept of HAPPY IS UP; SAD IS DOWN can be paraphrased as EMOTIONAL INCREASE IS UP; EMOTIONAL DECREASE IS DOWN. The notion of UP is associated with cheerfulness, liveliness, excitement or enthusiasm, whereas the notion of DOWN is associated with low spirits, sadness and depressed feelings.

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A. UP

First, UP connotes raising minds and hearts spiritually, emotionally, and mentally to something sublime:

- a. His soul *was uplifted* by the music. (H:946) (=exalted emotionally and spiritually)
- b. To you, Yahweh, I *lift up* my soul, O my God. (Psalm 25: 1-2) (=raise my heart to God)
- c. They *are high-minded*. (=have high ideals or principles)

Second, UP is associated with becoming lively, cheerful, or in good spirits:

- a. He's got every reason to *feel on top of the world*. (OD: 103) (=feel very light-hearted)
- b. She is *high-spirited*. (=lively, vivacious)
- c. When she heard that her mother was safe, she immediately *cheered up*. (OD:46) (=became cheerful)
- d. He'd got depressed about his work but he *bucked up* at the thought that he'd soon be on holiday. (OD:36) (=became more lively and cheerful)
- e. How he likes to *liven* things *up*! (OD:193) (=make things more cheerful or lively)
- f. A walk in this good mountain air will *brace* you *up*. (OD:176) (=make you more cheerful)
- g. This party is dull; what can we do to *pep* it *up*? (PV: 415) (=make it cheerful)
- h. The comedian told a few quick jokes to get his audience *warmed up*. (OD:358) (=become lively)

Third, UP conveys the meaning of vigorousness, mobility and action:

- a. More exercise and a change of diet—that's what you need to *tone* you *up*. (OD:343) (=make you more vigorous and lively)
- b. His speech needed *gingering up*, it was not very interesting. (PV:233) (=to be more effective or active)

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The expressions *cheer up*, *liven up*, *pep up*, *tone up*, *whip up* and *wound up* incorporate the meaning of MORE IS UP in addition to EMOTIONAL INCREASE IS UP.

Fourth, UP is associated with arousing someone's emotions to a high point of excitement or inciting enthusiasm:

- a. His stories began to sell, and he was *flying high*. (RH: 670) (=full of hope or elation)
- b. A party orator *whipped* the crowd *up* to a state of frenzy. (OD:361) (=made them excited by vigorous action)
- c. By this time, we had *wound* them *up* to fever pitch. (OD: 363) (=raised them to a pitch of excitement)
- d. My mother came back all *steamed up* about modern decor, and painted the doors crimson. (OD:307) (=excited)
- e. He is blamed for *stirring up* hatred between nations. (OD:310) (=instigating or inciting)

Fifth, there are some counterexamples in which the concept of UP is not associated with cheerfulness. In this case UP connotes someone's being in a state of agitation, nervousness or tension:

- a. She's *working* herself *up into* a dreadful state over nothing. (OD:366) (=raising herself to a state of agitation)
- b. Her anger *was up*. (WNW:1559) (=in an agitated state)
- c. Beware of him when his temper *is up*. (RH:1569) (=in a state of emotional agitation)
- d. I was *keyed up* about the examination. (PV:321) (=excited or nervous)
- e. They were getting a bit *fed up* with her by that time. (OD:103) (=disgusted or irritated)

In these metaphorical expressions, emotions are viewed as substance in a container in which the increase of emotion is up to the brim causing negative effects. Expressions that seem to be counterexamples for one category may in turn naturally belong to another category. In fact, it might be more appropriate to

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consider that COMPLETION IS UP overlaps with HAPPY IS UP in these cases.

Compare the following pairs:

- a. The patient is feeling $\left\{ \begin{array}{l} \textit{up} \\ \textit{down} \end{array} \right\}$ today.
- b. Recalling the incident, she became $\left\{ \begin{array}{l} \textit{high-} \\ \textit{low-} \end{array} \right\}$ spirited.
- c. She is in $\left\{ \begin{array}{l} \textit{high} \\ \textit{low} \end{array} \right\}$ spirits after hearing the news.

In these examples the word *high* connotes cheerfulness, whereas *low* connotes dismal feelings.

B. DOWN

In contrast to UP, DOWN is associated with being dismal or depressed:

- a. Don't *be downhearted*; things will work out. (=in low spirits and depressed)
- b. His father's face wore a *down* expression. (=downcast and depressed)
- c. As soon as he finds himself alone, he *gets down in the dumps*. (OD:116) (=becomes depressed and miserable)
- d. I've never seen such a *cast-down* (or *down-cast*) expression! (OD:42) (=depressed and unhappy)
- e. He was *downcast* because he lost the game. (=depressed and discouraged)
- f. The client is *feeling* very *low* after the episode. (=unhappy or depressed)
- g. Her spirits *fell* at the bad news. (H:306) (=sank)
- h. His heart *sank* at the thought of failure. (H:801) (=became depressed)
- i. John seems altogether *weighed down* by all the extra work they're pushing on him. (OD:360) (=sad and oppressed)
- j. Why do you *look so down* in the mouth? (RH:430) (=discouraged and sad)
- k. I can't *let her down* just like that, yet one day it will have to come. (P10-103-14) (=disappoint)

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Sentence (j) is said because when persons are very sad and low spirited, the corners of the mouth are drawn down. This expression is British rather than American.

In drug culture the word *uppers* refers to drugs that make addicts feel high, an extreme state of exaltation, whereas the word *downers* refers to drugs that make addicts feel low and depressed.

DOWN connotes not only lack of energy and high-spiritedness but also lack of physical or mental strength, a meaning of which will be dealt with in Section 3.

2. CONSCIOUS IS UP; UNCONSCIOUS IS DOWN

The state of being conscious or aware of something is associated with UP. Let us break down the meanings into subsets.

A. UP

First, UP is used to recall something that has been long forgotten to the conscious mind or to become conscious after sleep:

- a. The sound of seagulls *called up* happy memories of his childhood holiday. (OD:41) (=made him recall)
- b. His grandfather was a fine raconteur, *dredging up* quite effortlessly, and with a great wealth of detail, scenes and incidents from his early life. (OD:88) (=recalling something that has been long forgotten)
- c. I drowsed off and *woke up* to hear Bob talking to some fellow who was new to the place. (OD:356) (=became conscious)

Second, UP is associated with awakening to a new realization of something important and thus becoming mentally aware of something:

- a. The facts of the matter are only now beginning to *rise to the surface*; the politicians kept them successfully hidden for many years. (PV:513) (=become mentally

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conscious by a new realization)

- b. They should *wake up* and see the problems they've got on their hands. (OD:356) (=mentally awoken to something)
- c. At last the citizens *rose up* and defeated their cruel rulers. (PV:513) (=became aware of those who are in power before taking actions)

Third, UP connotes remaining awake or staying awake:

- a. She liked listening to records and *staying up* half the night. (OD:307) (=remaining awake)
- b. "I shall get back very late, so don't *sit up* for me." (OD:289) (=stay awake)

Fourth, UP can be associated with revealing something that is hidden or devising something that has not existed before or conceiving creative or original ideas:

- a. Jeffries is said to have been living in Bristol since 1965 and to have *dug up* some awful story about John being mixed up in a scandal. (=revealed)
- b. "Trust you to *dream up* a script in which the hero . . . that's me . . . gets shot in the first act." (OD:88) (=devise)
- c. How did you *think up* such a clever way out of our difficulty? (PV:668) (=invent)

B. DOWN

The notion of DOWN is frequently related to the state of being unaware of something or of being helpless:

- a. He *fell* into a reverie. (=passed into a state of being lost in dreamy thoughts)
- b. She *fell under a spell*. (=was in a state of helplessness)
- c. He's *under* hypnosis. (Lakoff 1980:15) (=was subjected to)
- d. He *sank* into a coma. (Ibid) (=entered a state)
- e. She *sank* into slumber. (RH:1331) (=entered a state)

3. HEALTH AND LIFE ARE UP; SICKNESS AND DEATH ARE DOWN

A. UP

First, UP connotes the best condition or performance:

- a. The boxer is at the *peak* of his form. (=at his best performance; he cannot be fitter.)
- b. It is the *top* of the strawberry season. (=Strawberries are most plentiful, at their best.)

Second, UP is associated with feeling better, building up strength, recovering from sickness and improving health:

- a. She will *be up and around* soon. (=out of bed and resuming her normal activities after an illness)
- b. He'll *be up and about* again in a few days. (OD:21) (=be able to get up; feel better)
- c. You must *build* yourself *up* for the winter. (OD:36) (=develop your strength or physique)
- d. His health and spirits *picked up* after a week at the seaside. (OD:220) (=recovered or improved)

B. DOWN

First, DOWN connotes losing physical strength or becoming ill or even dying:

- a. If you work too hard, your health may *collapse*. (H:161) (=lose physical strength)
- b. They're both *down* with a nasty bout of flu. (=confined to be with illness)
- c. Half of the population *was stricken down* with bubonic plague. (PV:629) (=became ill or dead)
- d. He did splendid work until his health *broke down* and he had a bad attack of enteric fever. (G04-104-13) (=collapsed)

Second, DOWN is associated with collapsing mentally or giving way completely to one's feelings and losing control:

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- a. He's suffering from a nervous *breakdown*. (H:102) (=a collapse in physical or mental health)
- b. She appeared to be pretty calm, but at times she would *break down* and start weeping. (OD:27) (=become distressed and upset; lose control)

Third, DOWN expresses the notion of becoming weaker gradually resulting in a shabby state, or being exhausted and in need of thorough rest:

- a. She is *worn down* by years of hard work. (=becoming weaker gradually)
- b. He always *looks so down at the heel*; is he hard up or just slovenly? (OD:14) (=in a shabby state)
- c. He is very much *run down* recently. (=exhausted)

4. HAVING CONTROL OR FORCE IS UP; BEING SUBJECT TO CONTROL OR FORCE IS DOWN

A. UP

First, the concept of UP indicates superiority in rank or authority over somebody or something. The preposition *over* in the following examples implies a higher level over something:

- a. He *reigns over* a great empire. (H:598) (=keeps control of)
- b. He has jurisdiction *over* three provinces (H:598) (=is in control of)

Second, UP is associated with controlling emotions or suppressing reactions:

- a. He has an absolute command *over* his passions. (=has control of)
- b. She will feel tense if she keeps on *bottling up* her emotions. (=holding in)
- c. It's very bad for you to *cork* your emotions *up* like that; you'd feel much better if you could 'let yourself go.' (OD:66) (=suppress healthy reactions)

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The expressions *bottle up* and *cork up* are identical in meaning.

B. DOWN

First, DOWN is associated with being in a subordinated position or state, and thus being subject to a certain control:

- a. He is *under orders* from the President. (=subject to control)
- b. They are *under oath*. (=subject to the truth)
- c. We should be able to *put* the opposition team *down* in the first half of the game. (PV:464) (=beat them by controlling)
- d. They *shouted down* the opposition. (RH:430) (=the opposition was controlled)
- e. The others soon *shot down* his supposedly bright ideas. (PV:565) (=his ideas were suppressed and controlled)

Second, DOWN also connotes being subjected to something:

- a. The defendant is *under scrutiny*. (=The examiner is the controller; the defendant is the one who is controlled.)
- b. Teachers' aids are *under supervision*. (=The supervisor is the controller; aids are being controlled.)
- c. The client is *under strain*. (=Strain is controlling the client; the client is being controlled.)

Third, DOWN is associated with something which is prevented, suppressed or held in check, or with someone whose freedom is controlled or limited:

- a. It's high time they *clamped down on* violence in television programmes. (OD:47) (=suppressed)
- b. The police are always being urged to *crack down on* drug addicts. (OD:67) (=suppress)
- c. He *fought down* his terror as darkness descended, and walked on through the wood. (PV:185) (=held in check)
- d. They introduced measures aimed at *putting down*, or at least restricting, organized gambling. (OD:235) (=suppressing or abolishing something)

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In (a-d), violence, drug addicts, his terror and organized gambling, respectively, are under control.

In the following example, the idiomatic expression means scolding or criticizing somebody harshly with the implication that the persons are to be controlled:

- a. The director *came down* firmly *on* the directees. (=The director was the controller; the directees were under his control.)

Fourth, with DOWN, something is held in submission or kept under control:

- a. How long can a small force of mercenaries *hold down* an entire people? (OD:157) (=An entire people was kept under control.)
- b. The fire brigade arrived within minutes of the alarm and quickly *got* the conflagration *under* control. (OD:125) (=The conflagration was controlled.)
- c. It was all I could do to *keep* my anger *down* when I heard how the visitor had been treated in my absence. (OD:170) (=Anger was controlled.)

Fifth, DOWN connotes a complete or gradual loss of control as in the case of surrender or in the form of yielding or giving in to somebody:

- a. The majority of their soldiers simply *laid down their arms*. (=gave up attempts to control; surrendered)
- b. The British Government had *knuckled under* to threats of violence, which had created insurmountable obstacles to progress. (OD:182) (=yielded)

Sixth, someone loses control as a result of certain actions:

- a. Mr. Pelican was *turned down* by a large majority vote at the board meeting. (OD:349) (=refused)
- b. Someone proposed that the proceedings of the meeting should be recorded on tape, but the suggestion was *voted down*. (OD:355) (=rejected)

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The words *subjugate* and *subservient* incorporate the meaning of someone who is brought under subjection, as part of their meaning. The word *subjugate* which is derived from *sub* (=under) + *jugum* (=yoke) implies the controller and the controlled. Similarly, *subservient* which is derived from *sub* (=under) + *servire* (=to serve) connotes an inferior giving up his or her power to the controller.

5. MORE IS UP; LESS IS DOWN

A. UP

MORE connotes a greater amount, quantity or degree. First, in the following example, UP implies a greater number, whereas DOWN connotes a smaller number:

- a. This winter the temperature is somewhat $\left\{ \begin{array}{l} \textit{above} \\ \textit{below} \end{array} \right\}$
normal. (=more than)
(=less than)

Second, MORE connotes increase in prices, expenses and the cost of living:

- a. We shall do what we can to stop prices *shooting up* still further. (OD:285) (=rising rapidly)
- b. Towards the close of business prices were *bumped up* by news of changes in the tax laws affecting private incomes. (OD:37) (=raised)
- c. The prices of shares have been falling but now they are on the *upturn*. (=rising)
- d. Every time a new tenant moves into that flat, he *puts up* the rent a bit more (or he *ups* the rent). (OD:244) (=increases)
- e. Everything seems to be *going up* these days; coal, groceries, bus fares, rents. . . . Why doesn't the Government do something about it? (OD:144) (=getting more expensive)

The opposite of *mark up* is *mark down*; their respective noun

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counterparts are *a mark up* and *a mark down*.

Third, UP is associated with increase in quantity, greater intensity, speed and operational efficiency:

- a. The salaries of teachers should be *scaled up* to correspond to those of people in comparable professions. (OD:271) (=raised)
- b. *Speak up*, we cannot hear you. (PV:593) (=Speak loudly)
- c. There is now a system designed to *speed up* the work of factory inspection departments. (OD:297) (=do speedily)
- d. The new road will ensure a *speed-up* in the movement of traffic to the docks. (OD:297) (=quicken)
- e. The order came back to *quicken up* the pace of advance. (OD:246) (=increase in speed)
- f. We hope for a sharp *step-up* in production. (OD:308) (=increase in quantity, improvement or enhancement)
- g. The Department is *gearing up* for an increased intake of students. (OD:112) (=increasing the intention of preparation)
- h. They are fighting to *beef up* their defense capability. (=increase in strength)

The noun counterparts of *speed up* and *quicken up* are *a speed-up* and *a quicken-up*, respectively.

In addition to increase in quantity, the following sentences connote the meaning of accumulation:

- a. Put aside a pound a week and you'll be surprised to find how quickly your savings *mount up*. (OD:208) (=form a bigger amount)
- b. Perishable goods are *piling up* at the docks because of the strike of tally-clerks. (OD:221) (=increasing)
- c. She's been *running up* accounts at half a dozen big stores. (OD: 270) (=accumulating)

Fourth, UP is associated with increase in force which may result in violence:

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- a. Although the wind was obviously *getting up*, and with it the sea, the foolish couple left harbour in their flimsy catamaran. (OD:125) (=increasing in force)
- b. The war will all *flare up* again and everyone says it will be much worse than before. (OD: 106) (=become more violent)

The noun counterparts for *flare up* and *pile up* are *a flare-up* and *a pile-up*, respectively.

The following sentence is an exception since *up* which is attached to *hard* conveys the meaning of being in want of something and in great need of something:

- a. He's *hard up* for ideas. (H:391) (=in need of)

B. DOWN

In contrast, DOWN connotes reducing or lowering prices, costs, expenses or consumption:

- a. It's a strange thing, but prices always seem to be going up. They never *go down*. (OD:134) (=get lower)
- b. Grocers have agreed to *bring down* the cost of several basic commodities. (OD:30) (=reduce)
- c. Prices are much more likely to go up than to *come down*. (OD:52) (=decrease)
- d. He wanted eight hundred pounds for his car, but I managed to *beat him down* to six hundred. (OD:22) (=make him reduce the price)
- e. She is never happy unless she succeeds in *knocking* the bill *down* by a few pence. (OD:179) (=beating down the price)
- f. We must *cut down* our expenses somehow. (OD:71) (=reduce)
- g. The committee have *pared* his travelling allowance *down* to the bare minimum. (OD:214) (=reduced)
- h. She *cut down* her between-meal snacks. (RH:357) (=lessened consumption)

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Second, DOWN is associated with reducing the power or importance of somebody or something, or the quality or quantity of something:

- a. It always pleases me to see some upstart 'financial genius' *cut down to size* and shown up as the charlatan he is. (OD:71) (=minimizing the power of someone)
- b. The research team has been *whittled down* considerably to staff other projects. (OD:362) (=reducing the size of the team)
- c. Looking at the audience, he *watered down* the content of his talk. (=weakened the substance and effectiveness of his talk)
- d. My hopes of a better job *damped down* after six years' waiting. (PV:123) (=lessened)
- e. The wind *died down* at last and all was quiet. (PV:132) (=subsided)
- f. In the end the choice was *narrowed down* to three people who might be suitable for the job. (PV:398) (=The number of options were reduced.)
- g. He *downplayed* any possible health risks. (=minimized)

The opposite of *to die down* is *to flare up*.

Compare the following sentences:

- a. I'll *round the cheque up* to \$10, and you can keep the change. (PV:517) (=increase)
- b. The shop is trying to encourage people to buy its goods by *rounding the price down* to the nearest pound. (PV:517) (=decreasing)

In (a) the cheque is brought to a round figure by raising the amount, whereas in (b) the price is brought to a round figure by lowering the amount. The expression *round off* is neutral between the two; one can either round a number off to the next highest or the next lowest number.

Third, DOWN may connote something becoming nearly ex-

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hausted:

- a. Our stock of coal is *running low*. (=nearly exhausted)

6. FORESEEABLE FUTURE EVENTS ARE UP (AND AHEAD)

UP is associated with something that happens or develops quickly or unexpectedly, now or in the not too distant future:

- a. I'll let you know if anything *comes up*. (PV:98) (=happens)
- b. Something's *up*. (=happening)
- c. Towards evening a cold wind will *spring up*. (=arise)
- d. Some difficulties may *crop up*, but we will not change our plans. (=occur unexpectedly)
- e. The play has been very popular; you have to *book up* well ahead. (=reserve)

7. UNKNOWN IS UP; KNOWN IS DOWN

In spite of all the negative connotations attached to DOWN, in the case of KNOWN IS DOWN, the concept DOWN is essentially positive, whereas the concept of UP has a somewhat negative connotation.

A. UP

In the previous section we have observed that future occurrences are UP. In this section we will consider that UP is associated with uncertainty and impracticality:

- a. It's *up* in the air. (=uncertain; not settled yet)
- b. His *head is (up) in the clouds*. (=He's impractical; with his thoughts far away)

Second, lack of knowledge is associated with *height*, whereas a great amount of knowledge is associated with *depth*. Compare the following sentences:

- a. The patient man shows much good sense, but the quick-tempered man displays *folly at its height*. (Proverbs 14: 29) (=a great deal of foolishness)

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- b. The *height of stupidity and absurdity* is shown in this scene of the play. (=a great amount of unreasonableness)
- c. He talked with the specialists and *deepened his knowledge* of astronomy. (=learned a great deal about astronomy)
- d. She plans to devote her summer to *profound* study of the question. (=thorough)

The words *folly, absurdity, stupidity* and *the ridiculous* collocate with UP as in *the height of folly, absurdity* and *the ridiculous*, whereas words referring to knowledge collocate with DOWN as in *to deepen knowledge, to study it in depth* and *to explore the profundity of his thoughts*.

B. DOWN

First, DOWN connotes being practical and realistic about something:

- a. He is *down to earth*. (=realistic and practical)
- b. Get your head out of the clouds and *come down* to earth. (=return to reality)
- c. When we *get down* to details, the plan seems possible. (PV:215) (When we talk about practical matters, ...)
- d. All this talk about ideas is interesting, but let's *get down to brass tacks* and see if the plan will really work. (PV: 215) (=discuss the plan in practical, businesslike terms)
- e. Let's *get down* to business straight away; we have no time to waste. (=start serious discussion in practical matters)
- f. Let's *knuckle down* to business. (WNW:666) (=apply ourselves earnestly)

Second, DOWN is associated with pursuing somebody or something until he, she or it is found or caught:

- a. The police have promised to *hunt down* those responsible for the bomb threat. (PV:295) (=pursue them until they are caught)
- b. It was almost 48 hours before the Army *tracked down* the

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facts: there had been a series of brawls, involving 30 soldiers.

(OD:344) (=pursued to find the facts)

- c. Were the doctors able to *track down* the cause of the infection? (PV:685) (=pursue the cause until it is found)

Third, since DOWN connotes practicality, it is also related to penetration into the heart of the matter. In doing so, it may clarify the issue first and then come to essentials as a result:

- a. John's very difficult to *nail down*; you can never get him to speak his mind on anything. (OD:209) (=It is difficult to get John to say what he believes or wants to do.)
- b. It was difficult to *pin down* exactly what it was in her that pleased him so much. (PV:222) (=define exactly)
- c. The whole matter *boils down* to a power struggle between the trade union and the directors. (PV:43) (=The essence of the matter is...)
- d. Let me *pin you down*; are you coming with me or not? (=wanting a definite answer)
- e. I really would like to *dig down* into the matter. (=go to the heart of the matter)
- f. When it *comes down* to sheer strength, there is no animal that can match the elephant. (OD:53) (=in the last analysis, reaches the essence)

Fourth, in the context of spirituality, prayer and knowledge, DOWN connotes depth or intensity of thoughts or feelings, or a profound realization of truth:

- a. Thus you will be able to *grasp fully*, with all the holy ones, the breadth and length and height and *depth* of Christ's love. (Ephesians 3:18) (=abyss, the unfathomable love of Christ)
- b. You cannot plumb the *depth* of the human heart or grasp the workings of the human mind; how then can you fathom God, who has made all these things, discern his mind, and understand his plan? (Judith 8:14) (=the

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profound quality)

- c. Out of the *depths* I cry to you, O Lord; Lord, hear my voice! (Psalm 130:1) (=profundity)
- d. In the *depth* of his heart, he is sure that God loves him. (=in the profundity of his knowledge)
- e. The director explored the *depth* of her feelings. (=emotional profundity, innermost feelings)

8. HIGH STATUS IS UP; LOW STATUS IS DOWN

The notion of UP is frequently realized by the words *high*, *upper* and *up*, since they denote having a great or considerable reach of extent upward. Since the upright posture of human beings is considered basic, an upward movement has been associated with positive concepts one of which deals with high status.

First, UP connotes the state of being exalted in rank, position, station and estimation as opposed to *low* as exemplified in the following:

- a. She has $\left\{ \begin{array}{l} \textit{gone up} \\ \textit{come down} \end{array} \right\}$ in the world.
(=reached a higher position in society)
(=lost prestige)
- b. He is at the $\left\{ \begin{array}{l} \textit{peak of his career.} \\ \textit{bottom of the social hierarchy.} \end{array} \right\}$
(=the highest social position)
(=the lowest social position)
- c. His reputation went $\left\{ \begin{array}{l} \textit{up.} \\ \textit{down.} \end{array} \right\}$ (=high reputation)
(=low reputation)
- d. He is a $\left\{ \begin{array}{l} \textit{high-} \\ \textit{low-} \end{array} \right\}$ ranking officer.
(=in a high position)
(=in a low position)
- e. They have a $\left\{ \begin{array}{l} \textit{high} \\ \textit{low} \end{array} \right\}$ opinion of John.
(=think highly of him)

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(=think very little of him)

f. She belongs to a $\left\{ \begin{array}{l} \textit{high} \\ \textit{low} \end{array} \right\}$ class. (=higher social scale)
(=lower social scale)

g. He is from the $\left\{ \begin{array}{l} \textit{upper} \\ \textit{lower} \end{array} \right\}$ class.

(=higher social hierarchy)

(=lower social hierarchy)

h. He married $\left\{ \begin{array}{l} \textit{above} \\ \textit{beneath} \end{array} \right\}$ himself.

(=married a girl of higher social standing)

(=married a girl of lower social standing)

i. The candidate is $\left\{ \begin{array}{l} \textit{high-born.} \\ \textit{low-born.} \end{array} \right\}$ (=of noble birth)
(=of humble birth)

j. She is a $\left\{ \begin{array}{l} \textit{highbrow.} \\ \textit{lowbrow.} \end{array} \right\}$

(=with superior tastes and interests, often used contemptuously for snobs)

(=with little interest or taste for intellectual things)

Second, UP is associated with superior quality of ideas, tastes and manners as opposed to DOWN:

a. She is *high-up* the social scale. (=a person of high rank or great importance)

b. The new director seems to have been *bumped up from* a lower position. (=newly or falsely raised in rank)

c. The period of prosperity is an *up* for the entire country. (=in a favorable position of wealth and fortune)

d. These girls are *high-toned*. (=socially or intellectually superior)

e. The new mayor is *high-minded*. (=having high ideals or principles)

f. This concerns only the ranks of major and *above*. (=higher rank or position)

Third, *high* is associated with something rich, extravagant or luxurious:

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- a. They have indulged in *high living* for years. (RH:669)
(=rich)

Fourth, UP connotes gaining or maintaining superior quality, achieving importance or at least meeting a certain standard:

- a. His behavior did not *come up* to the expected standard of his master. (=reach an acceptable level of competence)
b. If only he could *keep it up*, he would break the world record. (=maintain a high standard of achievement)
c. The boy despaired of ever *getting up to* the high standard required for entry to the university. (OD:126) (=gaining)
d. These immigrants are *up and coming*. (=gaining in importance or status)
e. He *drew himself up to his full height* and thundered at the class. (OD:88) (=struck a dignified or important attitude)
f. We consider principles *above* expediency. (=more important than)

Compare the following pairs:

- a. The company { *upgraded* } the quality of a product.
 { *downgraded* }
(=raised quality)
(=lowered quality)
b. The extension of higher education has { *levelled up* }
 { *levelled down* }
university standards. (=raised the standards)
 (=lowered the standards)
c. It was the written paper rather than the oral examination
that *pulled him* { *up.* } (=improved his position)
 { *down.* } (=fell to a lower position)

In these examples UP is associated with superior quality whereas DOWN is associated with inferior quality.

B. DOWN

First, DOWN denotes a lower status or condition:

- a. Some people were *kept down* by lack of education. (RH:

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430) (=in lower status)

- b. They have *low* tastes. (=vulgar)
- c. He lost everything; he is *down and out*. (=destitute)

Second, DOW*N* connotes a downward movement from higher to lower in descending order physically or figuratively. In the following examples, DOW*N* is used for a movement into a lower status or condition:

- a. These people were *brought low* by the dictator. (=humbled)
- b. She said, "I never *fell as low* as that." (H. 506) (=never allowed my standards of behavior to fall so low.)
- c. His *downfall* was caused by gambling and drink. (H:261) (=losing fortune or power)

The prefix *sub* meaning 'under' connotes something that belongs to a lower order or rank. Compare the following pairs:

division	editor	human
<i>sub</i> division	<i>sub</i> -editor	<i>sub</i> human

In these pairs, words with *sub* rank lower than those without the prefix; a *subdivision* is a smaller division, a *sub-editor* is a subordinate editor, and a *subhuman* condition is a condition below a human condition.

In contrast, the prefix *super* meaning 'above' or 'beyond' in its Latin origin, connotes something of an especially high degree. Compare the following pairs:

<i>super</i> abundant	<i>super</i> -critical	<i>super</i> sensitive
abundant	critical	sensitive

In these examples, words beginning with *super* rank higher than those without the prefix. Therefore, a conceptual dichotomy between UP and DOW*N* connoting higher status and lower status, respectively, also holds true for affixes.

9. GOOD IS UP; BAD IS DOWN

A. UP

The word 'good' may refer to different concepts such as

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morally good as exemplified in (10. VIRTUOUS) on the following page, emotional increase as in (1. HAPPY), honorable or worthy as in (8. HIGH STATUS) and deserving, right, fitting and proper. Since the meanings written in parentheses are treated in their respective sections, we will restrict the meaning of 'good' to 'deserving, right, fitting and proper' in this section. The only examples we came up with are the following:

- a. The day he gave up smoking, it *was up* with Dad. (=It was a good thing for Dad to do because he was no longer addicted.)
- b. Things are *looking up*. (=looking good)

B. DOWN

The word 'bad' connotes moral wickedness which is dealt with in (10. DEPRAVITY), poor quality in (5. LESS), below standard in (8. LOW STATUS), inaccurate, incorrect or faulty in (18. FAILURE) and ill health in (3. SICKNESS). Since the meanings represented in parentheses are explained in their respective sections, we will limit the meaning of 'bad' to 'bad luck' in this section:

- a. The business cycle experienced a sudden *down*. (RH:430)
(=a turn for the worse)
- b. He *is down* on his luck. (=bad luck)
- c. It's a real *come down* for him. (=having suffered misfortune)

10. VIRTUE IS UP; DEPRAVITY IS DOWN

A. UP

UP connotes virtues which refer to moral goodness, righteousness, uprightness, rectitude or admirable qualities. First, let us deal with UP as associated with righteousness, honesty and straightforwardness:

- a. She is an *upright* person. (RH:1571) (=She is righteous and honest)

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- b. He is *up front*. (WNW:1559) (=very honest or forthright; open and candid)
- c. He is *upstanding* in his business dealings. (=honorable, straightforward)
- d. This agency is *on the up and up*. (=honest and trustworthy)

Second, UP connotes supporting or sustaining someone under affliction, or enduring hardship with patience:

- a. They were unable to talk with each other, tearing down rather than *building up* the spirit of union. (=upholding)
- b. Her faith *upheld* her in that time of sadness. (RH:1570) (=supported)
- c. Alexander *backed me up* wholeheartedly as he always did. (OD:10) (=supported)
- d. The election result *bolstered up* the spirits of the newly formed party. (PV:43) (=gave strong support, upheld)
- e. More people are beginning to *stand up for* children's rights. (PV:609) (=support)
- f. Therefore, comfort and *build up* one another, as indeed you are doing. (1 Thessalonians 5:11) (=keep strengthening)

Third, UP may be used for keeping up courage and enduring hardship:

- a. "You've got nothing to worry about. You've done all the work you were asked to do. So *keep your chin up*. (OD:176) (=don't lose your courage)
- b. He had to *face up to* the depressing possibility of the creature's death. (OD:98) (=accept honestly and courageously)
- c. I can't *put up* with her another day; she never stops complaining. (PV:479) (=tolerate her)
- d. Alice *bore up* well under the burden of adjusting to the new administration. (=remained strong and brave)

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Fourth, UP connotes the hard work by which someone moves to a more responsible position:

- a. The chairman of the company claims to have *worked his way up from* delivery boy. (OD:366) (=risen to a more responsible position by one's efforts)
- b. Someone like Jim, who has *come up the hard way*, understands reality better than a person who always had money. (PV:99) (=reached his present position through hard work)

Fifth, one other virtue associated with UP is respect, praise or enhancement of reputation. However, when it is too excessive, it results in flattery:

- a. A boy needs a father he can *look up to*. (=regard with admiration and respect)
- b. The studio spent \$50,000 on the new star's *build up*. (=enhancement of her reputation)
- c. His abilities are not what they were *cracked up to be*. (PV:112) (=praised too highly)
- d. He *was just buttering up* the director to try to get a favour from him. (PV:61) (=was flattering)

B. DOWN

With regard to virtues, DOWN is associated with belittling, deprecating or disparaging someone:

- a. She's always *running her husband down* in public. I'm surprised he puts up with it. (OD:267) (=belittling)
- b. He made an unkind remark intended to *put her down*; but she refused to allow her spirits to be defeated. (PV:464) (=make her feel humble or hurt)
- c. Don't *cry down* the very real progress these people have made. (OD:70) (=belittle or give little importance to)
- d. If you marry that man, he'll *drag you down*. (=reduce you to a lower level socially or morally; ruin you.)
- e. *Down* with them! Disgrace on those who enjoy my mis-

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fortune! (Psalm 70:3) (=Let them be put to shame.)

Second, DOWN connotes having ill-feeling towards someone or something:

- a. He is *down on* dancing because he considers it immoral. (RH:430) (=hostile or averse to)
- b. The director *dressed Jim down* for being late again. (PV:151) (=scolded)
- c. They *look down on* those who failed the test. (=regard with scorn or disdain)
- d. Some of the critics *are terribly down on* him. (OD:14) (=are critical or prejudiced against)
- e. She is *down on* the new comer. (=feels ill-will towards him.)

11. RATIONAL IS UP; EMOTIONAL IS DOWN

Lakoff and Johnson have given the following example:

The discussion *fell to the emotional* level, but I *raised* it back *up to the rational* plane. We put our *feelings* aside and had a *high-level intellectual* discussion of the matter. He couldn't *rise above* his *emotion*. (Lakoff and Johnson 1980:17)

However, it was not possible to find substantial examples from the data we used.

12. WELL-INFORMED IS UP

In the following data, UP is associated with being well-informed:

- a. He is *up on* current events. (RH:781) (=to stay informed)
- b. He *kept up with* the latest developments in mathematics. (RH:1569) (=in continuing contact)
- c. Are you very *well up* in the law? (=knowledgeable about, be well versed in)
- d. He's *well up on* electronic music. (=well informed about)

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music; an expert in it)

Second, UP connotes acquiring a knowledge of or skill in something, usually without a special study or thorough reading:

- a. Branson seems to have *picked up* his philosophy of food during his career with the Indian Civil Service. (OD:220) (=acquired a knowledge of philosophy without a special study)
- b. There's no need to attend classes in theory: you can *read up* on it for yourself in the library. (OD:250) (=acquire some knowledge of a subject through reading)

13. COMPLETION IS UP; PROCESS IS DOWN

A. UP

Compare the implication of the following pair of sentences:

- a. We have used the money provided.
- b. We have *used up* the money provided.

The implications of these sentences are that in (a) some money may have been left, whereas in (b) all the money has been spent.

Thus UP connotes completeness or completion of action or state:

- a. It's *all up* with him now. (H:23) (=There is no further hope for him; the end is near.)
- b. The time is *up*. (RH:1569) (=concluded, ended, finished; terminated)
- c. If John goes on working and worrying as he has been doing, he's bound to *crack up* sooner or late. (OD:67) (=lose strength or suffer a mental collapse)

Second, UP connotes a final point or a state of being at the end or heading towards the point of completeness:

- a. The House is *up*. (=The business of the day is ended, and members of Parliament may go home.)
- b. "I want all you children to *finish up* your dinners." (PV: 189) (=finish completely)
- c. Children *ate up* the pie because it was delicious. (=finished

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eating)

- d. "Carry that box of explosives carefully or we'll *end up* dead ourselves!" (OD:94) (=the result will be)
- e. I never dreamed that I would *land up* by owning such a lot of property. (PV:332) (=reach a final point)

The expressions *end up*, *finish up* and *land up* are interchangeable.

Third, UP means to perform a certain action completely or to be totally in a certain state:

- a. They will *cut it up*. (=cut not only once but many times or completely)
- b. We'll *clean up* the room. (=to clean thoroughly)
- c. A Manchester finance house is making a bid to *buy up* the entire company. (OD:39) (=obtain complete financial control over it)
- d. The stream has *dried up*. (H:945) (=become completely dry)
- e. All organized resistance *crumpled up* when the tanks went in. (OD:70) (=collapsed completely)
- f. Within a few weeks their feet had *healed up* nicely, and we had no recurrence of the trouble. (OD:155) (=healed completely)
- g. When Inspector Smart began to question the arrested man's girl-friend about his whereabouts at eight o'clock the previous evening, she immediately *clammed up* and refused to say anything. (OD:47) (=became totally uncommunicative)
- h. The lake is *filling up* after this heavy rain. (PV:187) (=becoming completely full)
- i. The police had some difficulty in *matching up* the statements taken from the two witnesses. (OD:206) (=forming a complete whole)
- j. Several national newspapers have *folded up* in the past ten years. (OD:109) (=suffered collapse)

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- k. In most cases in which a person is *framed up* by the police, the victim is too surprised, or ignorant, to help himself. (OD:110) (=to incriminate an innocent person completely)
- l. He tried to *cover up* his guilt by lying. (=hide completely, usually by deceit)
- m. There's a bargain. Let's *snap it up*. (=buy completely)

In these examples the word *up* attached to *cut, clean, buy, dry, crumple, heal, clam, fill, match, fold, frame, cover* and *snap* connotes completion of their respective actions.

B. DOWN

Only a few examples have been found. In these examples, DOWN refers to a state or process of undergoing certain actions:

- a. The computer is *under* repair. (=being repaired)
- b. That matter is *under* consideration. (=being considered)

14. ACTION OR IN OPERATION IS UP; INACTION OR NO LONGER IN OPERATION IS DOWN

A. UP

UP connotes setting something in motion or operation:

- a. He *started up* a successful car hire firm. (OD:305) (=began)
- b. The computer is *up* now. (=working)
- c. The director will *follow up* the committee's suggestions. (PV:20) (=continue acting on)
- d. Are you *up* to it? (=ready to act)
- e. The captain wished to set sail as soon as the wind was *up*. (RH:11569) (=active)
- f. The theatre's lights are *up*. (RH:1569) (in operation)
- g. He is *up and doing*. (WNW:1559) (=busy, active)

B. DOWN

DOWN connotes less activity or a movement towards a tranquil or quieter state. First, DOWN emphasizes a gradual process of

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becoming calm and quiet:

- a. The meeting *quieted down* after repeated warnings from the chair that the hall would be cleared. (OD:246) (=calmed down)
- b. Give me a minute to *simmer down*. He's always like this when we discuss politics. (OD:287) (=calm down)
- c. He has *toned down* his demands by placing the emphasis on the need for negotiation. (=making something less intense)
- d. The crowd *sobered down* when the speaker turned to more serious matters. (PV:509) (=became less excited)

Second, DOWN restores the feelings of someone who has been upset or disturbed:

- a. The rooms allocated to the visitors were found to be already occupied, and it took the intervention of the manager to *smooth down* injured national pride. (OD:292) (=restore feelings)

Third, DOWN refers to becoming less active or ceasing production:

- a. The laughter *subsided*. (RH:1417) (=The prefix *sub* means 'under' and 'below' and it connotes becoming less active.)
- b. The wind *died down* at last and all was quiet. (PV:132) (=became less strong gradually until it ceased)
- c. The coal industry is *running down* as coal supplies are used up. (PV:523) (=slowing down or ceasing to exist)

Compare the following sentences:

- a. She *closes* the office *up* at five o'clock. (OD:50) (=closes temporarily)
- b. The factory had to *close down* through lack of orders. (OD:49) (=cease permanently)
- c. These shops will *shut up* at six o'clock. (=close temporarily)

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- d. Some business will have to *shut down* if there is a recession. (OD:286) (=cease production permanently)

In (b) and (d) above, certain operations cease to function and come to a point of inactivity. The following examples also illustrate this point:

- a. Finally, she *settled down* happily at the farm. (P29-75-5)
(=would not move for a while)
- b. The company is *winding down* its business in Hong Kong. (PV:720) (=will soon be no longer in operation)

The following seem to be counterexamples in which idiomatic expressions are used for dramatic actions rather than non-actions:

- a. The party *flung down a challenge* to its political rivals to debate the issue on television. (OD:107) (=challenged dramatically)
- b. The champion will soon have to defend his title again. A young American contender has *thrown down the gauntlet*. (OD:338) (=issue a challenge to a rival for a championship)

These examples, however, belong to some other metaphors of challenges and rivalries, but not to orientational metaphors.

15. NORTH IS UP; SOUTH IS DOWN

In Britain the word *up* is used when people travel to towns of importance especially London or towards the north, whereas *down* is used to refer to places in the south or going from London:

- a. He has *gone up* to London for the day. (H:945) (=to a capital)
- b. We *went up* to the Lake District from Leeds. (=to the north)
- c. They *came down* from Edinburgh. (=to the south)

The word *up* is also used for Oxford and Cambridge regardless of the geographical location of the speaker. It implies that someone is becoming a student or coming into residence at a university.

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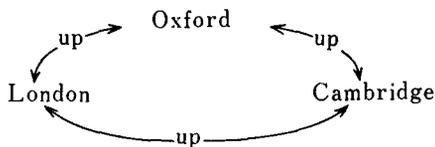
When a person is not going there as a student, the preposition *to* is used instead of *up*. However, with London, *go up to* and *go to* make no difference with regard to their implications. This is apparently true only of British English:

- a. His son will *go up to* Oxford. (=become a student there)
- b. His daughter will *go to* Oxford. (=normal travel)
- c. He will *go up to* London. (=normal travel)
- d. He will *go to* London. (=normal travel)

When the word *down* is used with Oxford or Cambridge, it means that the student has graduated or left the university after a period of study as in (e) or failed as in (f):

- e. She's *gone down* from Oxford. (=graduated or left)
- f. He was *sent down*. (=failed or disciplined)

The word *up* is used for London, Oxford and Cambridge regardless of where the speaker is, as long as he is at one of these places.



- a. We're *going up to* Oxford from London.
- b. They're *going up to* Cambridge from Oxford.

People always *go down* either from Oxford or Cambridge unless they go to London.

The train directed towards the north or for London is called 'the *up* train (or line)' (with 'the *up* platform,') in contradistinction to the train directed towards the south which is called 'the *down* train (or line)' (with 'the *down* platform').

In the U.S.A. the part of a state farther to the north or away from a large city, especially the northern part of New York is called *up-state*. The word *up* is used for the north whereas *down* is used for the south:

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- a. We drove *down* from San Francisco to Los Angeles. (RH:430) (=from the north to the south)

16. NEW IS UP

A. UP

UP is associated with something that is current, including the latest information or facts, or in accordance with the latest or newest ideas, standards, style and outlook:

- a. It's always a struggle to *keep up to date* with the news. (PV:330) (=remain level with time)
- b. It's an *up-to-date* report. (RH:1571) (=latest information)
- c. Her clothes *were bang up to date*. (OD:21) (=new fashion)
- d. His reports from Africa are really *up to the minute*. (OD:21) (=extending to the immediate present as to information)
- e. We must *keep up with the times*. (RH:1571) (=stay current)
- f. I want to spend this evening reading journals in order to *bring* my knowledge on world issues *up to date*. (=to be refreshed with the latest news)
- g. We've so much to *read up on* in the subject; it's easy to get behindhand with one's knowledge. (OD:250) (=bring one's knowledge of something up to date)
- h. What will be *the up-coming* news with Dan Rather today? (=about to take place, the latest news)

B. DOWN

The notion of out-datedness is expressed by *behind* rather than DOWN which will be dealt with in PART II, Section 3 ADVANCE IS FRONT; RETREAT OR WITHDRAWAL IS BACK.

17. BUILT IS UP; DESTROYED IS DOWN

A. UP

UP is associated with constructing or erecting something, causing to be or grow, or creating or developing something:

- a. They *built up* new houses in a fashionable style. (=constructed)
- b. These adults need to *build up* their body by physical exercise. (=increase strength)
- c. The new museum is *up* and open to the public. (RH: 1569) (=built)

B. DOWN

The notion of DOWN is etymologically incorporated into the meaning of destruction and demolition. The word *destroy*, derived from *de* (=down) + *struere* (to build) implies a tearing down or bringing something to an end by wrecking and ruining. Similarly, the word *demolish* derived from *de* (=down) + *moliri* (=to build), implies such a destructive force as to completely smash to pieces:

- a. The bombs *demolished* the factories. (WNW:383) (=destroyed by smashing to pieces)
- b. The typhoon *destroyed* the scaffold of the building. (=tore down)
- c. That barn was struck by lightning and *burned down*. (=burned to the ground)
- d. They *tore down* the building. (=wrecked)
- e. They *cut down* trees to prevent the fire from spreading. (=felled)

18. IMPROVEMENT IS UP; FAILURE IS DOWN

A. UP

The word 'improvement' implies betterment in quality, condition or state, and 'success' implies achievement or accomplish-

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ment of something which may result in fame and wealth. In this sense these two notions are closely linked to (8. HIGH STATUS) or in certain instances to (5. MORE) quantity. However, the following data are distinguished from HIGH STATUS and MORE since they stress the meaning of improvement:

- a. Housing here is *on the up and up*. (=improving, getting better and better)
- b. Business is *looking up*. (RH:845) (=improving, becoming more prosperous)
- c. He won the game with two points *up* over his opponents. (RH:1569) (=more successful, ahead of opponents)
- d. He is an *up-and-coming* young executive. (RH:1570) (=likely to succeed)

Second, UP connotes practicing a skill in order to become proficient again or refreshing one's knowledge of a subject that has been neglected for some time and thus making improvement:

- a. You'll have to *brush up* on your history of art if you want a job in the museum. (OD:36) (=practice your skill)
- b. If I'm to spend two weeks in Italy, I'd better *rub up* my knowledge of the language. (=improve)
- c. I'll have to *polish up* my Italian; it's getting a bit rusty. (OD:226) (=work at Italian to improve)
- d. The regular television play needs *freshening up* with some new faces. (PV:205) (=improving)

B. DOWN

DOWN is associated with a failure or lack of success:

- a. Don't put him in charge of planning; he's sure to *fall down* on the job. (OD:99) (=fail to make a success)
- b. The business has been *going down* all winter; perhaps trade will be better in the spring. (PV:246) (=failing to do well)
- c. The team won the pennant despite having been *down*

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three games in the final week of play. (RH:430) (unsuccessful)

To conclude PART I, we note that a conceptual system that underlies orientational metaphors has emerged from the data as a result of empirical observation and analysis, first as a tentative hypothesis, finally as a verifiable conceptual system.

The classification employed in this paper is done primarily to aid clear presentation of the conceptual system involved in the creation of orientational metaphors. In some cases categories can be collapsed into a single semantic factor of which others are its subsets. For example, in the categories of HAPPY IS UP, HEALTH AND LIFE ARE UP, VIRTUE IS UP and GOOD IS UP, the basic semantic factor seems to be GOOD IS UP as illustrated in Figure 1:

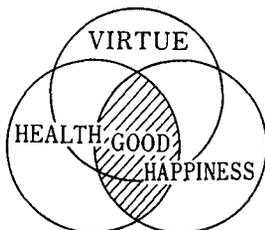


Figure 1

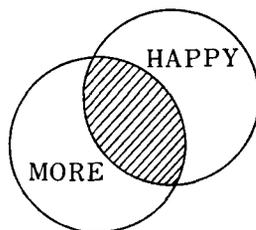


Figure 2

According to Leech (1981:92) the relationship of hyponymy exists between two meanings if one componential formula contains all of the features present in the other formula. With regard to the relationship between the basic category of GOOD and other categories mentioned above, the basic semantic factor GOOD is, to a great extent but not completely, hyponymous to other meanings since it is included in the meanings of HAPPY IS UP, HEALTH AND LIFE ARE UP and VIRTUE IS UP which are socially and culturally determined. On the vertical axis, GOOD is a basic mode of well-being from which one dimension

goes up positively, while the other dimension goes down negatively. For example, the increase of GOOD on the axis of emotion becomes HAPPY IS UP, whereas the emotional decrease of GOOD becomes SAD IS DOWN. Similarly, HEALTH IS UP becomes SICKNESS IS DOWN, and VIRTUE IS UP becomes DEPRAVITY IS DOWN as they slide down the vertical axis.

Figure 2 illustrates the relationship between MORE and HAPPY for phrasal verbs such as *cheer up*, *liven up*, *pep up*, *whip up* and *wound up* in which HAPPY IS UP includes the notion of MORE IS UP.

In PART I the vertical axis of UP and DOWN has been dealt with and in PART II the horizontal axis of FRONT and BACK will be examined.

PART II. ORIENTATIONAL METAPHORS OF FRONT AND BACK

PART II deals with orientational metaphors regarding forward and backward movements. A forward movement is directed toward a place, point or time in the future, moving onward and ahead. On the other hand, a backward movement is directed toward the rear, the past or a worse state, or is done in a manner or order that reverses the customary. We will discuss what kind of conceptual meanings is implied in these orientational metaphors. The concept of forward movement (henceforth FRONT) is lexically realized by *forward*, *in front of*, *ahead of* and *before*. In contrast, the concept of backward movement (henceforth BACK) is lexically realized by *backward*, *behind*, *back* and *after*.

The following meanings which constitute a conceptual system have been found from the data with regard to forward and backward spatialization metaphors:

2.1. IMPORTANT IS FRONT; LESS IMPORTANT IS BACK

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- 2.2. MAKING PROGRESS (SUCCESSFUL) IS FRONT; NOT MAKING PROGRESS IS BACK
- 2.3. ADVANCE IS FRONT; RETREAT OR WITHDRAWAL IS BACK
- 2.4. FUTURE (ANTICIPATION) IS FRONT; PAST (RECOLLECTION) IS BACK
- 2.5. ACTION IS FRONT; INACTION IS BACK
- 2.6. RETURNING IS BACK

IMPORTANT IS FRONT and ADVANCE IS FRONT with their respective counterparts have a physical basis because a human figure from the front is more typical than his or her back, and an advance move is more natural than a backward move. MAKING PROGRESS (SUCCESSFUL) IS FRONT and ACTION IS FRONT, with their respective counterparts, are based on social and cultural bases since progress and activity are perceived more positively than retrogression and inactivity. FUTURE (ANTICIPATION) IS FRONT with its counterpart has a chronological basis in which future time is associated with anticipation, past time with recollection.

We will deal with how phrasal verbs and idiomatic expressions imply these metaphorical concepts.

2.1. IMPORTANT IS FRONT; LESS IMPORTANT IS BACK

A. FRONT

FRONT connotes what is most important or leading as in the following:

- a. Racial discrimination is the *front burner* issue for today's discussion (=the most important issue that has the first priority)
- b. He is *in the forefront*. (=leading)
- c. Please *bring* the matter *forward* at the next meeting. (=call attention to the matter)
- d. The summit meeting made *the front page*. (=important)

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enough to appear on the first page)

- e. The Conservative Party is sitting *on the front benches*. (=Party in power sits on the front benches.)
- f. The priest shall then receive the basket from you and shall set it *in front of* the altar of the Lord, your God. (Deuteronomy 26:4) (=before the altar, an important place)
- g. "Be on guard against the scribes, who like to parade around in their robes and accept marks of respect in public, *front seats* in the synagogues, and places of honor at banquets. (Mark 13:38-39) (=important and conspicuous seats)

B. BACK

BACK connotes what is less important:

- a. This topic can wait; it is on the *back burner*. (=the least important)
- b. She turned her *back* on him. (WNW:102) (=She showed her anger and contempt by turning away from him; she considered him less important than he really is.)
- c. More attention has to be paid to the *back country*. (=a remote corner of the country)
- d. Let's take a *back seat* so that we won't be conspicuous. (=an inconspicuous seat)

2.2. MAKING PROGRESS (SUCCESSFUL) IS FRONT; NOT MAKING PROGRESS (UNSUCCESSFUL) IS BACK

A. FRONT

First, FRONT is associated with progress or success in competitions, or surpassing others:

- a. He is a *front runner* in the election. (=likely to win; in a leading position)
- b. This advertising campaign ought to put our business '*way out front*'. (RH:570) (=ahead of competitors)

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- c. Liverpool has *pulled ahead* of Arsenal in the race for the league leadership. (H:230) (=progressed beyond the other)
- d. America *is way ahead* in most important aspects of space technology. (OD:11) (=has progressed beyond anyone else)
- e. With the strike settled, work on the new bridge *went ahead* like wildfire. (OD:132) (=made progress)
- f. She is well *forward* with her work. (H:340) (=making progress or advanced)
- g. In the period 1983–1986, Britain had three runners *in the front rank*. (=highly successful, well known)
- h. Jane used to be slow in class, but now she is *getting ahead*. (PV:210) (=progress, advance in a competition)
- i. Our scientists are trying to *get ahead* of those working in enemy countries. (OD:211) (=surpass)

Second, FRONT connotes ability or prominence:

- a. I expect him to *go ahead*. (=to do well)
- b. He first *came to the fore* in a rather lean time for British politics. (OD:58) (=became prominent)

The phrasal verbs *go ahead*, *get ahead*, *pull ahead*, *rush forward* and *go forward* imply making progress.

Compare the following sentences:

- a. John is *ahead* of Tom. (=more successful)
- b. Tom is *behind* his classmates in performance. (=less successful)

B. BACK

First, BACK connotes a failure to keep level with someone and therefore lack of success:

- a. In steel production, we *lay behind* the rest of Europe. (OD:183) (=failed to keep up with the rest)
- b. Owing to his illness, Peter couldn't keep up with the rest of the class and *got* badly *behind*. (OD:115) (=did not make progress at the necessary rate)
- c. We can't afford to *fall behind* our competitors. (RH:135)

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(=fail to keep level with)

- d. They *were* well *behind* their rivals in the production of fissile material. (OD:13) (=losing to)
- e. The company *dropped behind* IBM as a producer of office computers. (=fell behind)
- f. The developing countries are *behind* the U.S.A. in technology. (=inferior to; less advanced than)

Second, BACK is associated with checking, restraining and preventing somebody from advancing:

- a. John felt that he was *held back* from further promotion because of his working-class background. (OD:157) (=prevented)
- b. Difficulties in raising money have *set back* our building programme. (OD:279) (=hindered the progress)
- c. You show promise as a musician but your lack of practice is *holding you back*. (or *keeping you back*.) (PV:289) (=preventing you from being successful)
- d. I don't see any serious *drawbacks* in the plan as you've outlined it. (OD:86) (=disadvantage or hindrance)

The phrasal verbs *hold back*, *draw back* and *keep back* connote hindering the progress or achievement, retreating disadvantageously, or refraining from advancing. The noun counterparts of the first two are *a holdback* and *a drawback*, respectively.

Third, BACK is associated with retrogression, a lower standard, being behind in things such as learning, development, time and payment:

- a. The work of this class has been *falling behind* recently. (PV:173) (=of a lower standard)
- b. This class takes care of *backward* learners. (=slow)
- c. He *was behind* in his payments. (=had not made payments when they were due.)
- d. We're *running* about fifteen minutes *behind* as it is. (OD:267) (=not keeping pace with our time)

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Fourth, the notion of out-datedness or disadvantageousness is expressed by *behind* as in the following:

- a. People in this village are glad to be *behind the times*. (=old fashioned, antiquated)
- b. She was never *behindhand* in following artistic fads. (=behind in progress)
- c. He didn't study all term and now that it's time for the final exam he's *behind the eightball*. (RH:456) (=being in a disadvantageous or uncomfortable situation)

2.3. ADVANCE IS FRONT; RETREAT OR WITHDRAWAL IS BACK

A. FRONT

FRONT implies a physical move and emergence:

- a. Just then, the crowd divided and three men *stepped forward* to hand the citizens' request to the king. (PV: 617) (=moved forward)
- b. I had very great hopes for Jenken's speech last night, but nothing very new *came forth*. (OD:53) (=emerged)
- c. The police want any witnesses of the incident to *come forward* and help them with their inquiries. (OD:53) (=present themselves)
- d. A few carefully chosen men *went ahead* while the main body remained concealed in the valley. (OD:132) (=in advance of others)

Second, FRONT implies advancement in spite of difficulties, or not losing one's position in front of others, or having advanced opinions:

- a. Whatever happens, we must *push ahead* with our plans to increase production. (PV:457) (=advance in spite of difficulties)
- b. If you want to *keep ahead* of your rivals, you'll have to work very hard. (OD:169) (=not lose one's position)

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c. They have *forward* opinions. (=advanced)

B. BACK

First, BACK implies retreat or withdrawal from somebody or something:

- a. These were vital discussions from which he couldn't afford to *stand back*. (OD:302) (=withdraw or retreat)
- b. Always he *shrank back from* actual commitment; he would rather be uninvolved. (OD:286) (=retreated out of fear)
- c. I *take back* my unkind remarks; I see that they were not justified. (PV:645) (=retract them by admitting that they were wrong)
- d. After being confronted with our evidence, the other side had to *back down*. (OD:9) (=withdraw charges or accusation)
- e. He was *backing out of* the situation. (=retreating or drawing away)
- f. They are *backing away* from the business. (=withdrawing)
- g. They finally *backed down* from attempting to intimidate the poor. (=withdrew)

Second, BACK refers to slowness regarding time as opposed to FRONT in the following pair of sentences:

- a. We're more than 20 minutes *behind*. (RH:135) (=slower than the schedule)
- b. We're *ahead* of schedule. (=in advance of)

2.4. FUTURE (ANTICIPATION) IS FRONT; PAST (RECOLLECTION) IS BACK

A. FRONT

First, FRONT is associated with future happenings:

- a. We must have *forward planning* depending on the need of our customers. (=future planning)
- b. Difficult times *lie ahead*. (PV:356) (=occur in the future)
- c. *Before* him *lay* the prospect of continuing hardship. (OD:

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190) (=awaited)

- d. They set *forward* prices for goods to be delivered later. (=set prices ahead for future products)
- e. From this time *forward*, we will not make the same mistake. (=onwards in time)
- f. The golden age in space technology is *before* us. (=awaiting, ahead of)
- g. If you *plan ahead* far enough, you can save a lot of money on your plane tickets. (PV:426) (=plan in advance)

Second, FRONT connotes anticipation:

- a. She had been *looking forward* to leaving the hospital wards for a holiday in the Orkneys. (OD:195) (=anticipating with pleasure)

B. BACK

BACK is associated with recalling past events or returning in thoughts:

- a. The tradition is not entirely dead. It is *harked back to*, leaned upon as a fixed and still largely trustworthy field of reference. (OD:150) (=to recall past events)
- b. It's easy to make judgments *looking back* at the past. (PV:368) (=thinking about the past)
- c. He *looked backward* over his earlier mistakes. (RH:107) (=reviewed)
- d. History as well narrated as this can *roll back* the intervening centuries and set the period vividly in focus. (OD:263) (=return to a time in the past)
- e. The incident *brought back* memories of Lebanon's recent civil war. (=made us recall)
- f. Their worries are *behind* them. (=in a time that has passed)

The following sentences give contrasts between certain times in the past and in the future:

- a. I should like to *run back* over the past term, singling out

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events of particular importance. (OD:267) (=review)

- b. *Behind lay* a terrible winter; *ahead* was promised spring.
(PV:356) (=time in the past) (=time in the future)

BACK also connotes returning to a place, position, work or a point of reference:

- a. The student was glad to *get back* to his books after a vacation that had seemed too long. (OD:115) (=resume work)
- b. After several reverses, they *fought their way back* to their old seats on the Board. (OD:104) (=returned by struggling hard to get the position previously held)
- c. The main action of the film portrayed the hero's adult life; scenes from his boyhood were shown in *flashbacks*. (=a return during a film)

2.5. ACTION IS FRONT; INACTION IS BACK

A. FRONT

- a. She came *forward* to help refugees. (=ready and willing)
- b. We are *ahead* in production. (=increase in the act of producing)

B. BACK

BACK connotes inaction or unwillingness to act, or prevention of somebody or something from being active:

- a. When we needed your help, all you did was to *sit back* and twiddle your thumbs. (OD:288) (=do nothing when action is needed)
- b. Jane is afraid of people, she always *hangs back* when we take her to a party. (PV:274) (=is slow and unwilling to act)
- c. The fighter accepted money to *keep him back* from winning the fight. (PV:313) (=prevent himself from being active)
- d. The patient is *flat on his back*. (=incapacitated, helpless)

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and bed ridden)

Second, BACK connotes failing to fulfill a promise, a solemn undertaking, a pledge, a previous choice or an agreement:

- a. I was depending on him but he *went back on* me. (PV: 243) (=broke a promise)
- b. Promises are made to be kept, and not lightly to be gone *back on*. (OD:133) (=fail to fulfill)
- c. The representative took a positive stand for the cause, but she soon succumbed to the opposition and *backed off*. (=abandoned a former stand)

These examples indirectly suggest that keeping a promise is perceived as something more normal than not keeping it.

Consider the following apparent counterexamples in which a great deal of action is associated with BACK instead of inaction:

- a. They *fall over backwards* to lay on gracious service on a few favoured express trains. (OD:101) (=They labor so hard that they metaphorically lose balance.)
- b. He is *putting his back into* learning how to work with computers. (=make maximum efforts)

In these examples, however, the words *backwards* and *back* are used for their literal sense and therefore do not constitute orientational metaphors.

Similarly, the following apparent counterexamples refer to providing support, assistance and encouragement in (a-b), and to being trapped in (c):

- a. The speaker is *backing up* an argument with facts and data taken from his research. (=supporting)
- b. All these voters are solidly *behind* the candidate. (=supporting)
- c. She *has her back to the wall*. (=trapped with no choices)

However, they denotationally refer to the back of a human body and therefore do not constitute orientational metaphors.

2.6. RETURNING IS BACK

Compare the following pair of sentences:

- a. "Go to sleep." So Samuel went to sleep.
- b. "*Go back* to sleep." So Samuel went *back* to sleep. (1 Samuel 3:5) (=returned to sleep)

Sentence (b) has the implication that Samuel had been sleeping before he was told to do so and that he resumed his sleep, whereas sentence (a) does not have such an implication.

Similarly, the following sentences imply a return to an original state or action:

- a. *Give me back* the joy of your salvation, and a willing spirit sustain in me. (Psalm 51:14) (=I had the joy before but not now.)
- b. Although they go forth weeping, carrying the seed to be sown, they shall *come back* rejoicing, carrying their sheaves. (Psalm 126:6) (=They start from a place and will return to their place.)
- c. Jesus said, "Now that I *go back* to him (the Father) who sent me, not one of you asks me, "Where are you going?" (John 16:5) (=He was with the Father before.)
- d. His fellow servant dropped to his knees and began to plead with him, "Just give me time and I will *pay you back* in full." (Matthew 18:29)(=You had the money before you lent it to me.)

In the case of both up-down and front-back orientational metaphors, we have noted a correlation between their conceptual system and usages such that UP and FRONT are associated, in general but not always, with aspects which are perceived positively or favorably, whereas DOWN and BACK are associated, in general but not always, with aspects which are perceived negatively or unfavorably. Furthermore, what is positive is semantically more potent than what is negative. Potency is defined as the ability of

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a referent to characterize a fundamental way a human being looks at himself and his environment.

In PART III we will investigate whether certain correlations can be found between frozen conjuncts and orientational metaphors with regard to semantic principles and a conceptual system.

PART III. CORRELATIONS BETWEEN FROZEN CONJUNCTS AND ORIENTATIONAL METAPHORS

Analysis of the data in Parts I and II suggests a correlation between orientational metaphors and Cooper and Ross's notion of frozen conjuncts. In the celebrated paper entitled "World Order," now already a classic, Cooper and Ross (1975:63-111) discussed why the ordering of certain conjoined elements which they call "freezes" or "frozen conjuncts" is fixed. They discovered that the usage of the freezing phenomenon extends to a variety of both linguistic and psychological issues and also to a variety of mental factors with which human beings perceive reality.

In PARTS I and II general principles that seem to be at work in determining the choice of lexical elements as to UP and DOWN, FRONT and BACK have been dealt with. PART III explores whether the semantic principles discovered by Cooper and Ross have any relevance or similarity with regard to the conceptual system which has been elaborated in PARTS I and II.

Cooper and Ross (1975:65-66) found the following semantic principles that govern frozen conjuncts:

- 3.1. HERE FIRST PRINCIPLE (e.g. *here and there*)
- 3.2. NOW FIRST PRINCIPLE (e.g. *now and then*)
- 3.3. PRESENT GENERATION FIRST PRINCIPLE (e.g. *father and grandfather*)
- 3.4. ADULT FIRST PRINCIPLE (e.g. *father and son*)
- 3.5. MALE FIRST PRINCIPLE (e.g. *man and woman*)
- 3.6. POSITIVE FIRST PRINCIPLE (e.g. *positive or negative*)
- 3.7. SINGULAR FIRST PRINCIPLE (e.g. *singular and plural*)

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- 3.8. PATRIOTIC FIRST PRINCIPLE (e.g. *United States and Canada*)
- 3.9. ANIMATE FIRST PRINCIPLE (e.g. *people and things*)
- 3.10. FRIENDLY FIRST PRINCIPLE (e.g. *friend or foe*)
- 3.11. SOLID FIRST PRINCIPLE (e.g. *land and sea*)
- 3.12. FRONT FIRST PRINCIPLE (e.g. *front and back*)
- 3.13. AGENTIVE FIRST PRINCIPLE (e.g. *agent and patient*)
- 3.14. POWER SOURCE PRINCIPLE (e.g. *sun and moon*)
- 3.15. LIVING SOURCE FIRST PRINCIPLE (e.g. *living or dead*)
- 3.16. AT HOME FIRST PRINCIPLE (e.g. *at home and abroad*)
- 3.17. GENERAL FIRST PRINCIPLE (e.g. *form and substance*)
- 3.18. NOMINAL FIRST PRINCIPLE (e.g. *nouns and verbs*)
- 3.19. COUNT FIRST PRINCIPLE (e.g. *count and mass nouns*)

Let us take two principles that are relevant for our discussion, namely, POSITIVE FIRST PRINCIPLE and FRONT FIRST PRINCIPLE. First, consider the following frozen conjuncts:

positive or negative	plus or minus
all or none	now or never
more or less	happy or unhappy
like or dislike	participant or non-participant
many or few	assert or deny
win or lose	(Cooper and Ross 1975:65)

In these frozen conjuncts the positive element precedes the negative element such that this order is fixed and not easily reversible.

Similarly, FRONT FIRST PRINCIPLE governs frozen conjuncts which refer to a horizontal space-axis:

front and back	front and rear
fore and aft	bow and stern

In these examples, the front element precedes the back element. In these two cases "positive" and "front" are linguistically "unmarked" in the sense that they are more natural and easily processable as opposed to their respective second elements. The way we use language, and the order we construct in frozen conjuncts and orientational metaphors are instances of approximating to a profile of how the speakers of English perceive reality.

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Consider the order of the following spatial frozen conjuncts:

up and down	peak and valley
rise and fall	over and under
unstairs and downstairs	hill and dale
high and low	above and below
raise or lower	top and bottom
ascending and descending	upper and lower

(Cooper and Ross 1975:82)

Their evidence indicates that in a vertical space-axis, the general preference is UP over DOWN. This is supported by the preference of expressions such as "How *tall* is she?" over "How *short* is she?", and "How *big* is it?" over "How *small* is it?" and "How *high* is the mountain?" over "How *low* is the mountain?".

Furthermore, the primacy of UP extends to the referents for body parts:

head and shoulders	hands and feet
arms and legs	heads or tails
head to toe	(Cooper and Ross 1975:83)

In these frozen conjuncts the first element refers to a part of the body that is higher than the second element.

With frozen conjuncts, a fairly strict order relation has been observed within the vertical dimension in that the item referring to UP precedes the one referring to DOWN. On the other hand, within the horizontal dimension, no highly systematic ordering relation between the basic referents has been found:

left-right motion / ?right-left motion
right or left hand/ left or right hand

(Cooper and Ross 1975:85)

However, there is a preponderance in favor of *right* over *left* since *right* occurs more frequently than *left* in compounds as exemplified in the following:

right-hand man	left field
right about face (Military)	left wing

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right field (Baseball)

right wing

right shoulder arms

Now we turn to the question of priority between vertical axis conjuncts and horizontal axis conjuncts. In Cooper and Ross's data the vertical dimension is favored over the horizontal dimension:

top right corner

*right top corner

height and width

*width and height

downright

*rightdown

Cooper and Ross (1975:86)

In these conjuncts the first item specifies location along the vertical dimension, whereas the second item specifies location along the horizontal axis. When the order is reversed, the degree of acceptability sharply changes to unacceptability.

The primacy of the vertical dimension over the horizontal axis provides further support for the distribution of orientational metaphors in that vertical spatial metaphors are proven to be more frequent and diversified in the data than horizontal spatial metaphors.

Similarly, the ordering relation is observed for the geographical frozen conjuncts and orientational metaphors based on a geographical basis. In the geographical frozen conjuncts, North precedes South, East precedes West as in:

North and South

East and West

*South and North

*West and East

In orientational metaphors we have observed that North is referred to as UP, while South is referred to as DOWN, and this precedence of UP over DOWN is also reflected in the way conjuncts are ordered.

In conclusion, correlations between the semantic principles of frozen conjuncts and the conceptual system of orientational metaphors indicate that they are determining factors in the creation of frozen conjuncts and orientational metaphors. The semantic prin-

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ciples are in fact a mirror of the conceptual system by which the speakers of English process information and reality. In this speech community, the human conceptual system is such that UP is preferred over DOWN, POSITIVE is favored over NEGATIVE, and FRONT is looked forward to rather than BACK.

REFERENCES

- Bennett, David C. 1975. *Spatial and Temporal Uses of English Preposition: An Essay in Stratificational Semantics*. London: Longman Group Limited.
- Cooper, William E., and John Robert Ross. 1975. "World Order." *Papers from the Parasession on Functionalism*. Ed. by Robin E. Grossman, L. James San and Timothy J. Vance. Chicago: Chicago University Press.
- Courtney, Rosemary. 1983. *The Longman Dictionary of Phrasal Verbs*. Essex: Longman Group Limited.
- Cowie, A. P., and R. Mackin. 1975. *The Oxford Dictionary of Current Idiomatic English*. London: Oxford University Press.
- Guralnik, David B., et al. (eds.) 1986. *Webster's New World Dictionary of the American Language*. New York: Simon and Schuster.
- Hartdegen, Stephen, O. F. M. (eds.) 1977. *Nelson's Complete Concordance of the New American Bible*. New York: Thomas Nelson Inc.
- Horiguchi, Ikiko. 1984. "A Computer-Assisted Instruction of Frozen Conjunctions." *Seishin Studies*. Vol. 63. Tokyo: University of the Sacred Heart.
- Johansson, Stig, Geoffrey N. Leech and Helen Goodluck. 1978. *Manual of Information to Accompany THE LANCASTER-OSLO/BERGEN CORPUS OF BRITISH ENGLISH, FOR USE WITH DIGITAL COMPUTERS*. Oslo: University of Oslo.
- Jones, Alexander. (eds.) 1968. *The Jerusalem Bible*. London. Darton, Longman & Todd.
- Lakoff, George, and Mark Johnson. 1980. *Metaphors We Live By*. Chicago: The University of Chicago Press.
- Leech, Geoffrey, 1981. *Semantics: The Study of Meaning*. Second Edition. Harmondsworth: Penguin Books.
- Long, Hill Thomas, et al. (eds.) 1979. *The Longman Dictionary of English Idioms*. London: Longman Group Limited.
- Members of the Catholic Biblical Association of America. 1971. *The*

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- New American Bible*. New Jersey: Thomas Nelson Inc.
- Mish, Frederick C., et al. (eds.) 1983. *Webster's Ninth New Collegiate Dictionary*. Springfield, Mass.: Merriam-Webster Inc.
- Morris, William. (ed.) 1971. *The American Heritage Dictionary of the English Language*. New York: American Heritage Publishing Co. and Houghton Mifflin Co.
- Ortony, Andrew. (ed.) 1979. *Metaphor and Thought*. Cambridge: Cambridge University Press.
- Sacks, Sheldon. (ed.) 1979. *On Metaphor*. Chicago: The University of Chicago Press.
- Stein, Jess, and Laurence Urdang. (eds.) 1983. *The Random House Dictionary of the English Language*. The Unabridged Edition. New York: Random House.