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Our belief that translation is possible, or, for that matter, that human beings can communicate at all, is based upon two presuppositions: 1) that human beings everywhere live in approximately the same world of experience, and 2) that all human beings have approximately the same mental and physiological apparatus.

But we must at the same time recognize that all human beings must abstract to a high degree from the complex environment around them which constantly bombards them with great amounts of sense stimuli. We are required to impose order on, or find order in (depending upon your point of view), the world which we perceive through these sense stimuli. It is also clear that people of different cultures, of for that matter individuals within the same culture, abstract in noticeably different ways. Take for example the way in which people around the world vary in terms of their degree of differentiation of "things" like color, snow, horses, plants, etc. Notice also the different patternings that people perceive in the same perceptions, as for instance in the well-known Rorschach tests. There is also some evidence that languages differ in the predications which can be made on the same observable events. For example, the verb root in Copala Trique which is used to describe the same observable phenomenon which is described in English by the word "cover" as in "The woman covered the baby with the blanket", actually predicates a different abstracted event than does the English root. In Trique, the corresponding sentence, in glosses, reads "The woman covered the blanket to the baby." That is, whereas in English the event of something being done to the baby, with the blanket as instrument, is predicated, in Trique an event of something happening to the blanket (i.e. being moved to the top of the baby)

with baby serving as the new location of the blanket, is predicated. From this we must conclude that we cannot know what the "world of experience" really is, especially if we hope to go about our search merely by asking individuals what it is that they perceive. But, in linguistics we do not claim to be dealing with the "real world" but only with the meaning areas and patterns which people abstract from the world of experience and with the manner in which they convert these meaning patterns into a linear, phonetic output. And, as a matter of fact, we claim that, although it is not possible to get inside of a man's mind to see what processes go on there, we can get some idea of what the bits of meaning and relations are which people actually do seem to employ and which are encodable into sound. We do this by the scientific process of building explanatory models, drawing upon the resources of introspection and observation in others of language behavior. These models posit what we understand to be the raw (semantic) material behind the phonetic output we can most directly observe and what processes are employed to convert that raw material into the observed output. These models can be compared according to the criteria described by Charles Hockett (1954).

Of particular interest to us, along these lines, is the model proposed by Wallace Chafe (1970). In this book he proposes that, in summary, language can be described as a system connecting meaning to sound through a sequence like the following: an unordered semantic structure is converted by means of linearization rules and other transformational rules into a surface structure of ordered semantic units (formatives), which then are spelled out, by what we call "spelling rules" into underlying phonological (morphophonemic) forms, to which phonological processes are applied to yield a phonetic output. The precise rules which come into play, as well as the possible

combinations of semantic bits, are naturally language-specific. The model

in general, as well, presumably, as the types of combinations of semantic

bits and of spellings and of rules from which we select in describing a

particular language, can be described in terms of more universal application.

Both Chafe (1970) and Charles Fillmore (1968), limiting their discus-
sions primarily to the formation of propositions (i.e. clauses), suggest
that all such simple propositions can be said to be formed of a verbal ele-
ment and a number of nominal elements, each of which is related to the
verbal element as playing a particular role in the event which that verbal
element predicates. These roles are called case-relations, and the elements
tied to the verbal element by them can be referred to as case-elements. The
verbal element plus the case-elements form the proposition. It is under-
stood that no proposition contains more than one element tied to the verbal
element by the same case-relation. There may be, on the other hand,
complex case-elements which are related as units to the verbal element.
(The notion of case, as used here, is distinct from the "surface structure"
notions of case, i.e. subject, object, nominative, genitive, etc.)

Both Fillmore and Chafe, as well as a number of others, have defined sets of roles or case-relations. They have also subcategorized verbal ideas for convenience in describing the semantic structures of different propositions in English. Presumably, case-relations as well as verbal categories can be used to describe verbal ideas apart from the ways in which these will be manifested in teh grammatical structures of any particular language. (The verbal element, for various reasons, is understood, as it is in tagmemics, to be central to any proposition, and that which, more than anything else, defines the form of the proposition.) I have attempted to work further in this same direction (see the attached Categories of Verbal Ideas), positing many more case-relations and sub-categorizing verbal ideas in what is hoped to be a comprehensive manner and in a way entirely free from syntactical consideration. That is, I claim that there exists a set of categories such that any one meaning of any verb root from any language must belong to one category or another of it, and that the proposed set is fairly close to such a set. I also propose that for each category of

verbal ideas, we can know what case-elements can participate in propositions based upon expressions of that category, and that the rows on this chart serve to list fairly closely what those case-elements can be. The columns represent an attempt to group roles from different categories into more inclusive, but specifically definable role-types, i.e. case-relations similar to those proposed by Fillmore and Chafe.

Fillmore has demonstrated in his article "The Case for Case" how handily this system may be used for describing the way in which these semantic propositions (verbal elements plus case-elements) may be encoded into (English) surface structure. There is good reason to believe that it will be similarly useful in the description of any human language. The list of categories is also envisioned to tie in well with the use of paradigms (Pike - 1963, Thomas - 1973) for grammatical description, with the study of role in discourse (Pike - 1964, Wise - 1968) and with the question-technique of elicitation outlined by John Beekman (1968). In particular, the approach of making a case-frame to correspond to every use of every known verb root has already been a help in the analysis of Copala Trique. (For background regarding case-frames as a convention in description, see Fillmore (1968).) Surface structure can be described for Trique either by describing the syntagmemes on the clause-level which manifest particular case-frames (as some of the Philippine grammars do), or by describing linearization rules for arranging clause-level manifestation of case-elements into a surface-structure (as do Chafe and Fillmore).

It should be understood that these are categories of verbal ideas, not necessarily of verb roots. Some particular meanings of particular verb roots may contain elements from more than one category. On the other hand, there may be no verb roots manifesting some areas of meaning in a particular

language. But, we may presuppose that all these areas of meaning are expressible in some way in any language, whether by verbs, abstract nouns, adjectives, or whatever. If there should be an area which is not specifically expressible in a given language, then there must be forms from another area of verbal ideas which can focus in on the same event of the perceived world from another aspect, in order to abstract another abstracted event upon which to base a pertinent predication. This explains, for example, the different abstracted events behind English 'cover' and Copala Trique 'cover'.

A few additional comments on the Categories of Verbal Ideas are in order. 1) Not included on the chart are peripheral categories of time and peripheral locative. I view these as pertinent to modification of the occurrence of the event as a whole. E.g. in the sentence John threw the ball in the ditch downtown yesterday, one semantic interpretation would be that in the ditch serves to indicate the later-location of ball. The words downtown and yesterday, respectively, serve to describe the space-location and the time-location of the event as a whole, not of any particular participating element. Generally speaking, these two case-elements are understood to be able to co-occur with any proposition of any category. 2) The notion of benefactive has no equivalent on the chart. The benefactive seems to be able to have so many differing meanings that no common denominator has yet been discovered by me, and I have not yet seen fit to handle this notion as a case-relation. It is a problem yet before us. 3) Comparatives, e.g. John walks like a duck, are being treated as relations between two propositions, part of one being deleted.

The following are some of the guidelines which could be recommended for use of the attached Categories of Verbal Ideas: 1) The analyst should familiarize himself with the categories and the range of meaning of each in

order both to be able to categorize verb roots (or whatever) in the language under study and to be able to look for ways in the language to express notions which are guessed to belong to a particular category. 2) Once a meaning of a verb root is recognized as belonging to a specific category, the analyst should attempt to validate, through elicitation or through recorded data, the various combinations of case-elements (i.e. the surface manifestations of same) which could be conceived of as occurring with that verb root. Attention should be given to a) what case-elements can occur, b) which are optional and which obligatory, and c) which are related in reference to their cooccurrence, and in what way. 3) Metaphorical usages should probably be generally handled in terms of the actual meanings they convey, not that literally conveyed by the verb root involved. (E.g. "spill the beans" should be handled as a unit meaning "reveal inappropriately".) I at present am following Chafe's view that metaphorical uses of verbs are actually the result of post semantic processes having been applied to other basic meanings (e.g. semantic units such as "reveal inappropriately", above). Much more work needs yet to be done in this area. 4) Correspondences may then be studied and described between the semantic structures described by the case-frames and the surface-structures actually observed underlying the phonetic output. (Further elaboration here would only be repetition of the work already published by Fillmore and Chafe.)

The following is given as an example of the kind of process that one goes through in classifying and analyzing verbal meanings: In Copala Trique there is a verb root, one meaning of which (probably the most basic meaning) seems very much like the meaning of the English root 'hit', in that, for example, it is used of the observed event where someone applies with some force a stick to the rear end of a donkey. This root

occurs in CTr in the following surface constructions, represented here only by the appropriate English glosses:

1. hit man stick

2. hit man (on) donkey

3. hit man stick (on) donkey

All of these sentences would be appropriate to the observed event described above. A good beginning guess regarding the category to which the root 'hit' belongs in CTr would be the category of Surface Contact, which is certainly the category to which the English root 'hit' primarily belongs. Since we know that the above sentences are acceptable and that *hit man by itself is not, we may posit the following as the corresponding case-frame, understanding that man is playing the role of agentive, donkey the role of objective, and stick the role of instrumental, according to our definitions of the same and of their specific roles in relation to a verb of Surface Contact: $[\_\_A\ (O)(I)]$. (This case-frame indicates that the A must always occur and that at least O or I, and possibly but not necessarily both, must always occur with this root when it has this meaning.) The analysis to this point is above reproach, but it seems to lead to some anomalous problems when we compare the ways in which verbs like this are rendered, with their case-elements, in surface structure, and the way in which all of the other verbs of the language (literally) with these elements in their case-frames are rendered in surface-structure. In particular, we never find in the rest of the language that an instrumental is represented in the surface-structure before (i.e. to the left of) an objective, as for example stick precedes (on) donkey in ex. 3. Indeed, from my awareness of the way the rest of the language seems to operate, I would expect something like the following to be the surface structure of the case-frame I

have posited for this meaning of 'hit':'

*5.   hit man donkey with stick

But, it turns out that this construction is absolutely unacceptable in CTr.
Furthermore, phrases manifesting objectives never include the morpheme
(glossed here as) on, and instrumentals always are manifested by phrases
including a morpheme with, lacking in our data with 'hit', in all the rest
of the language:

6.   cut man foot with machete

Clearly, the proposed analysis in inadequate. We take our clue from the
rest of the data of the language, that on functions to mark the manifesta-
tion of a locative or later-locative case-element. So then, if we posit
this use of 'hit' to be a root of the Location category, we can devise
another case-frame, which hopefully will explain the usage in our data
more adequately: [___A (O(L-Loc)], where A still is the hitter, O is the
thing moved to another location (i.e. the stick), and the donkey is that
later-location of the stick. (The cooccurrence restrictions between O and
L-Loc are naturally the same as those between I and O in the first case-
frame posited in this search for a solution.) And, in fact, according
to my understanding of the way the rest of the language operates, this
case-frame does correspond to the surface-structure which I do find in my
data relevant to the verb root 'hit'.

It should be pointed out at this point that the example I have chosen,
as well as the rather odd example (or apparently so) mentioned in the
second paragraph of this paper, are both examples of the most extreme
divergences in the semantic structure of CTr and English which the analyst
understands to exist. Note that the difference can succinctly be defined
as a difference in the type of event abstracted from the perceived world

by the speakers of the two languages. That is, the speaker of English
abstracts, in the above example, an event of something being done to the
donkey, in which the stick serves merely as instrument. The speaker of
CTr, on the other hand, abstracts an event of something being done to the
stick, namely, being moved to the donkey, the location where it will come
to rest. (In this sense, the CTr event is more similar to that represented
in English by The man applied the stick to the donkey.) In both examples,
a notion of location is abstracted by the speaker of CTr, whereas the
English speaker would more likely abstract, in the one example, an idea
of Surface Contact (i.e. 'hit'), and in the other an idea, probably, of
Attribution. In such perceived-world events, where an English speaker
would abstract an event of Surface Contact, speakers of CTr abstract an
event of Location. The speaker of CTr sees the same thing with his eyes
but describes it from a slightly different point of view, casting the
various "players" in different roles.

The above blow-by-blow description of the progress of a particular
analysis is not intended to be a discovery procedure; I do not believe
there to be any automatic, foolproof discovery procedure. It is, on the
other hand, intended to illustrate the sorts of considerations which come
into play in deciding what the case-frame for a particular meaning of a
verb root is. It demonstrates in particular how a particular route which
may seem intuitively correct may in fact turn into a dead-end. The part
of the process which we rather skipped over is that of determining what
the correspondences are between the case-frames and the surface-structures
which will manifest them. There is not necessarily any discovery procedure
here, either. But I claim that the best solution will be the simplest
solution, i.e. that in which the simplest clause-level syntagmemes are

posited to correspond to case-frames, or in which the simplest set of rules is posited to derive surface ordering from the possible combinations of case-elements found in the various case-frames. Since Fillmore's defined case-elements are different from those we are defining in connection with the attached Categories of Verbal Ideas, we will not likely come up with the same set of ordered rules for linearizing the case-elements into their positions in surface-structure that Fillmore posits. (Hopefully, for the ground covered by Fillmore in his rules, ours will turn out to be even simpler.) But I claim that for any language the set of rules for linearizing case-elements will be a simple set and will apply to all the case-frames with all of their case-elements of the whole language. I have yet to substantiate this claim for any particular language; but I envision that substantiation is not a long way off.

Note, in particular, that one of the critical factors indicating that the first case-frame for the morpheme 'hit' (above) was that the rules for linearizing the case-frames of the rest of the language as then ana-lyzed would not in fact derive the surface-structure in the data from the first-proposed case-frame. In my drive for the most general, and therefore the simplest, solution (as well as for other considerations), I endeavored to reform my case-frame, and with it my semantic understanding of the utterances, in order that the list of rules posited from less-problematic data might also apply to the new case-frame in order to derive the correct surface-structure. So then, we find ourselves constantly looking back and forth between the meanings which we can conceive of as being behind the utterances of the language as a whole and the ways in which these meanings, whatever they may be, are manifested in the hard facts of surface-structure (which, itself, is something of an abstraction, of course, from the actual

continuum of constantly changing sound through which this surface-structure is communicated from one person to another) looking for the simplest means of describing the apparent or posited correspondences between them. The question might be raised at this point, "Is it legitimate to place such importance upon simplicity as a criterion for determining that a given solution to the problem is better than some other?" This question is beyond the present discussion. Suffice it to say here that if such a criterion be rejected we may be at a loss for a reason for doing anything else at all in "analysis" other than describing the phonetic data as it impinges upon our ears or some machine. It would be uninviting to attempt to posit correspondences between meanings and sound, since anybody's suggestion would be as valid as his neighbor's. In short, the model proposed here presupposes that the human mind tends to utilize the shortest path possible in the encoding of meaning into sound.

CATEGORIES OF VERBAL IDEAS

WITH POSSIBLE COOCCURRING CASE-ELEMENTS

	Objective	Agentive	Limit	Verbal Adjunct	Instrumental	ETC.	Accompanitive
Existence	thing existing O-S	causer of O-S doer of O-S maker of O	concerned person	existence	thing used to affect existence	material end-product	|———|
Identification	thing named O-S	namer	thing named after	Id F-Id L-Id name	X	X	|———|
Classification	thing classified, O-S	classifier	concerned person	Cl F-Cl L-Cl classification	X	X	|———|
Equivalence	thing equated O-S	equator	X	Eq F-Eq L-Eq Eq-S equal	X	X	|———|
Possession	thing possessed O-S	giver-taker-keeper	thing for which exchanged L-S	possession	X	P F-P L-P possessor	|———|
Attribution	thing to which adheres	attributor	thing compared with	Att F-Att L-Att Att-S Attribution	thing used to modify	X	|———|
Orientation	thing oriented	orienter	X	Ori F-Ori L-Ori Ori_R orientation	thing used to orient	X	|———|
Location	thing located	mover-locater	X	Tar Loc F-Loc Dis. Anti-tar L-Loc Loc_R location Path.	thing used to hold or move	X	|———|

	Objective	Agentive	Limit	Verbal Adjunct	Instrumental	ETC.	Accompanitive
Motion	thing moved	mover	✕	motion	thing used to move	✕	⊢——⊣
Surface Contact	thing contacted	contacter	✕	contact	thing used to contact	✕	⊢——⊣
Sensing	thing which senses	focuser of sensing	thing sensed L-S	sensation	thing used to sense	✕	⊢——⊣
Emitting	thing which emits	stimulator of emitting	✕	emission	thing used to emit	✕	⊢——⊣
Affection	one affected	stimulator of affection	thing about which felt L-S	Aff F-Aff L-Aff affection	affected part	✕	⊢——⊣
Emoting	thing emoted O-S	emoter	thing about which emoted L-S	emotion	thing used to emote	addressee	⊢——⊣
Meteorological	✕	✕	✕	meteorological phenomenon	✕	✕	✕
Potentiality	O-S event to occur	✕	✕	potentiality	✕	✕	✕
Phase	O-S event occurring	✕	✕	phase	✕	✕	✕
Use	thing used	user	L-S event for which used	use	✕	✕	⊢——⊣

DEFINITIONS OF CASE-RELATIONS

Nuclear

Objective (undergoer, object, dative, experiencer, patient, goal)

--that with which a given state is associated by the verbal idea or
which undergoes some change or is affected as the result of the
action denoted by the verbal idea.

Agentive (agent, actor, instigator)

--that which initiates, causes, or brings to pass the action or state
denoted by the verbal idea.

Limit (referential)

--that which is the limit, extent, or domain of the action or state
denoted by the verbal idea, itself never being associated thereby with
any state or change.

Verbal Adjunct

--that which completes or further specifies the meaning of the verbal
idea.

Instrumental

--that which is involved causally in the state or action denoted by
the verbal idea, but which is not initiator of that state or action.

Accompanitive

--that which participates with the agentive or the objective in the
state or action denoted by the verbal idea.

Material

--that out of which a thing is made.

End-product

--that into which a thing is made

Possessor

--that which stands in a relation of association, domination, control,

or kinship to the objective of the predication.

Addressee

--that toward which a statement is directed.

Verbal Adjuncts

Name (Identity)

--an arbitrary symbolization associated with a thing.

Classification

--the name associated with a semantic class of things, by which a

member-thing (i.e. the objective of the predication) can be referred to.

Equivalent

--the thing with which the objective of the predication is associated

as being "identical" or "the same".

Attribute

--the attribute (physical or evaluative, permanent or temporary,

including states) which is associated with the objective of the

predication.

Orientation

--the modification of the objective of the predication with respect to

its orientation in reference to its principal dimensions and some

external referent.

Location (Nuclear)

--the modification of the objective of the predication with respect

to its location in space or time.

Target

--that towards which the objective moves

Anti-target

--that away from which the objective moves.

Affection

--the emotion or feeling or mental state associated with the objective

of the predication.

Peripheral

Locative (Peripheral)

--the setting of the event denoted by the predication in terms of a

limited area or volume of space. (It is distinct from Nuclear

Location, which represents the location of the objective in particular.)

Time

--the setting of the event denoted by the predication in terms of a

beginning point, an end point, or a period of duration in time.

Distinguishing Characteristics of Categories of Verbal Ideas

EXISTENCE: --static and dynamic ideas of being or existing, in reference

        to objects or events

John made the chair out of old orange crates with a few tools.
A   O   material   I

He brought the chair into existence.
A   O   VA

We will become dust.
O   end-product

He caused me to hit the dog.
A   O-S

For him, no problem exists.
   L   O

IDENTIFICATION: --static and dynamic ideas of association between objects

        and arbitrary symbolizations by means of which they can be

referred to

They called him John after his father.
A   O   L-Id   L

Exploring caves is called spelunking.
    O-S   Id

Jesus un-named him Simon.
A   O   F-Id

CLASSIFICATION: --static and dynamic ideas, with reference to objects,

of belonging to a known class of objects having a known

label, by means of which a member-object can be referred to

The Nards ranked the Yorts as mere peasants.
    A   O   L-Cl

Jogging soon became a fashionable exercise.
 O-S   L-Cl

They were reclassified from the lower income bracket to the upper
 O   F-Cl

    income bracket.
       L-Cl

The Yorts were mere peasants to the Nards.
   O   Id   L

EQUIVALENCE: --static and dynamic ideas, with reference to objects,

of being the same or of equivalent value; with reference to

points or extensions in time or space, of being the same

John made Mary his wife.
A   O   L-Eq

John un-made Mary his wife.
A   O   F-Eq

Jogging is only running slowly.
 O-S   Eq-S

POSSESSION: --static and dynamic ideas of possession, i.e. association

of objects with others, or of domain (right of control or

determination) of objects over others

John took possession of the jalopy from Bill for fifteen dollars.
A_{L-P} VA   0   F-P   L

He gave up smoking for chewing gum.
A_{F-P} 0-S   L-S

ATTRIBUTION: --static and dynamic ideas of attribution in reference to

objects; including assignment of physical attributes (color,

size, shape, etc.) and subjective evaluations; also including

both attribures which define an object in such a way as to

distinguish it at any time from another, and states in which

an object may find itself for a time only

John painted the wall red with a brush and paint.
A   0   L-Att   I

Doing work you are hands your. (Copala Trique)
      Att-S   0

John is taller than Bill.
0   Att   L

ORIENTATION: --static and dynamic ideas of the orientation of objects

according to their principal dimension(s) in relation to the

center of the earth, the horizon, or some other point, line,

or solid; also a part of an object to the whole

He raised her with his hand from a sitting (position) to a standing
A   0   I   F-Ori   L-Ori

position.

The ceiling is perpendicular to the wall.
0   VA Ori_R

LOCATION: --static and dynamic ideas of proximity or limitations of objects

in reference to points or areas in space or to other objects; by

extension, proximity of events to points or periods of time are

also included

Tom moved his family from Boston to New York with a rented truck.
A   O   F-Loc   L-Loc   I

The Indians encircled the fort.
A_O Loc_R

They moved toward it.
A_O Target

The birds flew away from it.
A_O Anti-target

The contingent moved three miles through the bush.
A_O Dis   Path

MOTION: --ideas of unitized complex actions (i.e. actions involving various

sequences of motions); focus is off of changes in attribution,

orientation, or location of involved objects; some can be sub-

categorized as social functions, bodily functions, or manner-

focus movements (i.e. ideas of motion in which focus is on the

manner in which the motion takes place.)

John sneezed.
A

John made a sneezing motion.
O   VA

John spun the top with a string.
A   O   I

SURFACE CONTACT: --ideas of the application of force or contact to an

object, focus being entirely off of any possible result

of the event

I wouldn't touch that stuff with a ten-foot pole.
A   O   I

SENSING: --Ideas of sensate activity with reference to animate objects

He stared at her with both of his eyes.
A_0 I

He noticed her staring back.
O   L-S

EMITTING: --ideas of producing those phenomena which stimulate sense

impressions

He rang the bell with a hammer.
A   O   I

It rang several loud clangs.
O   VA

AFFECTION: --ideas of activities or states of the human or animal mind,

mental and emotional, which are not necessarily registered

outwardly

He afflicted her with a great sadness in her heart of hearts.
A   O   L-Aff   I

She was miserable at having laid eyes on him.
O   Aff   L-S

EMOTING: --ideas of the voluntary functions of the animate mind which

are active and typically registered outwardly

He gave an oration to the assemblage with his mouth about nuclear physics.
A   O   addressee   I   L

He made expression of his feelings.
A   VA   L

He said, "Nuclear physics is great."
A   O-S

METEOROLOGICAL: --ideas concerning general   conditions of the external

environment

Hot very-much. (Copala Trique)

It's raining a storm.
            VA

POTENTIALITY:* --ideas concerning a condition or modification associated

with the potential realization of a predication, which is

represented by O-S

He may <u>buy a hat</u>.
       O-S

He must <u>do his homework</u>.
            O-S

He could <u>come any day</u>.
              O-S

PHASE:* --ideas which refer to the state of progress of an event being

realized, which event is represented by O-S

He started <u>to climb the mountain</u>.
                   O-S

He began <u>to get dizzy</u>.
             O-S

He continued <u>to climb</u>.
                  O-S

USE: --ideas which serve to associate an agentive with an instrumental

He made <u>use</u> of <u>the knife</u> to <u>cut the bread</u>.
A   VA   O   L-S

*These categories both represent auxiliaries, and as such may not belong

to this classification at all. If we consider all possible language

predicates to be categorized as "verbal predicates" (such as this paper

deals with), "relational predicates" (those that join propositions or groups

of propositions in discourse), and "higher predicates" (those which take

only a single proposition as argument), then most of these auxiliaries

fit most naturally in the latter category. Others of these auxiliaries

may then need reclassification into the earlier categories. (E.g. <u>must</u>

implies the present of an "obliger" and therefore probably would serve

as a verb of EMOTING.) Besides auxiliaries, higher predicates would
include modal predicates, adverbial predicates (including peripheral loca-
tive, time or tense, and manner), and degree predicates (which dominate
only predicates of manner or ATTRIBUTION).

Examples of English Verbs and Verbal Adjuncts Categorized

Existence

happen
help (?)
make
exist

Identification

name
call

Classification

elect
employ

Equivalence

be
be worth

Possession

give   own
have   receive
keep

Attribution

big   kill
break   mark
cook   murder
cover   open
fill   sick

Orientation

aim   lay
tilt   stand
lie

Location

avoid   imprison
come   lower
drain   pass
elapse   smear
go

Motion

eat
run
sneeze
jump

Surface Contact

grasp
hit
touch
hold
slap

Sensing

hear   look
ignore   see
listen

Emitting

appear
ring
buzz
blink

Affection

amuse   assume
angry   believe
annoy   careful
anticipate certain
anxious   doubt
appreciate forget
aware   learn

Emoting

accuse   command
acknowledge consider
advocate   insult
admit   intend
announce   order
answer   try
ask

Meteorological

rain

Potentiality

can
must
may

Phase

begin
finish
continue

Use

use

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