Prolegomena to a Theory of Lexical and Syntactic Knowledge*

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1. Introduction

The basic tenet of a lexicalist semantic theory that I here submit is that the semantic theory is defined as a system of principles of the sort that subsume restricted sets of parameters: (i) Structure Preservation and (ii) Underspecification. The former strictly defines possible processes of formation (i.e., *Merge*) of conceptual structures (i.e., semantic representations), while the latter puts a ceiling on contents of information encoded in the lexicon. The principle of Structure Preservation stipulates that any lexical derivation of conceptual structures may not create lexically non-distinct (i.e., novel) configuration of conceptual structures. The principle of Underspecification eliminates pieces of information that are predictable by the system of rules and principles of conceptual structure formation, as outlined by Jackendoff (1997, 2002). As readers may notice, the whole framework is reminiscent of Lexical Phonology as is laid out by Kiparsky's and Mohanan's work. Thus I assume that conceptual structures include timing elements, which describe relationships among Thematic and Action Tiers, in the sense of Jackendoff (1987). Our identification of homology between semantics and phonology may ultimately contribute to an overall minimization of a theoretical framework of linguistics.

The problem that I would like to squarely tackle here is where to posit the boundary condition delimiting linguistic semantics and quasi-semantics. Chomsky (1998:139) openly draws up the boundaries of the two areas of research:

> ... the study of meaning and reference and of the use of language should be excluded from the field of linguistics [i.e., linguistic semantics—YT].

Chomsky refers to the existence of certain analytic connections among linguistic expressions, and he recognizes that certain properties of truth hold solely by virtue of linguistic facts; e.g., the truth of *he intends to leave* can straightforwardly be inferred from that of *John persuaded him to leave*. These properties of semantics, Chomsky acknowledges to be "strictly part of 'grammar.'" Jackendoff (1976) is one of the systematic elaborations of this thesis in which we

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witness a system of rules of logical and entailed inference.

I would like to add to Jackendoff's inference rule system two sets of inference rules to describe linguistic phenomena that seem to hold solely by virtue of properties of lexical items and (allegedly non-lexical) linguistic constructions: (i) the set of factive predicates (Kiparsky and Kiparsky (1970)), (ii) narrative *when* clauses, and (iii) resultative *so that* constructions and to-infinitives.

In the context in which sentences with factive predicates are uttered, the speaker presupposes that the sentential complements of the predicates are true: thus the truthfulness of the sentence *I regretted that I had not told the truth* implies that the sentence *I had not told the truth* is also true. As for the uses of narrative *when* clauses, the adverbial clause functions to convey a propositional content that is judged to be true: *Mary was doing the dishes when a dog came in*, to which we cannot suffix any sentence that confirms that the dog did not appear at all. We may observe the propositional truthfulness in resultative *so that* constructions as in (iv) *Havelock grew weaker gradually so that he could talk over old issues without rancour* and in resultative *to*-infinitives as in (v) *He rose to his feet, only to fall as before.*

It is significant here to quote Habermas's (1984:129) remark on truth: "Warheit ist ein Geltungsanspruch, den wir mit Aussagen verbinden, indem wir sie behaupten." We may ask what is intended by the term *behaupten* in German and how it differs from the English verb *presuppose*. We may observe that uses of the German verb *behaupten* have the effect of presupposing that the contents of the verbal complements are true (i.e., *wahr*).[1] As is correctly noted by Vendler (1967:159), "Results are facts...." If facts imply truthfulness of the propositions, then results may imply truthfulness. If it is reasonable to assume that facts are those aspects of the outside world that should be recognized and identified by humans we may proceed to understand what is denoted by the two verbs, *behaupten* and *presuppose* (which I cannot articulate, though).

Do we have a priori strategies to decide whether a given proposition is true or false with respect to the outside world? If the answer is "yes," we may argue that we do not have to depend on any prescriptive instruction to the effect that in some humanly detectable contexts the sentence-final *when* clauses have narrative functions of some sort. Thus it is natural to assume that the resultativeness and narrativeness of the subordinate clauses are lexically unspecified and that these two types of construal are derived from the truthfulness and figure *vs*. ground alignment of clauses (cf. Talmy (1978)), the full details of which I cannot account for here due to the length of this passage.

The outline of a theoretical framework that I present here crucially refers to the traditionally elusive concept of *proposition*. If we intend to adopt Jackendoff's (2002) *Tripartite Parallel Architecture* and the system of correspondence rules we should inquire into attributes of language that correspond to propositions and *vice versa*. In order to intentionally avoid *daunting linguistic obstacles* (Hill (1991:6)), I presuppose that propositions correspond to those conceptual structures that are assigned their respective truth-value which itself is controversial. To cite attempts at capturing the elusive concept, Saeed's (1997:15) introductory observation

[1] As for Habermas's theory of truth and discourse, readers are referred to Higurashi (2003).

reads: "..., which are descriptions of states of affairs and which some writers see as a basic element of sentence meaning." Kearns (2000:25) goes a step further to allude to assertive illocutionary forces and rather explicitly defines it as "The meaning of a declarative sentence —the kind that can be used to make a statement and can be true or false ...". Despite Chomsky's (1998:139) remarkable declaration, Jackendoff (2002:329) travels along the conceptualist track and proceeds to shift "the focus of semantics from the question 'What makes sentences true' to what I [Jackendoff—YT] take to be the more ecologically sound question, 'How do we humans understand language?' ... in the sense that it permits us to integrate semantics with the other human sciences," which sounds perfectly natural if we may direct our attention to the fact that Jackendoff (2002:21) interprets the term "mind" (or, "f-mind") to be "the functional organization and functional activity of the brain, some small part of which emerges in consciousness and most of which does not."

Problems in linguistic semantics concerning the nature of proposition would include (i) the rule of construal for Noun Phrases as we find in *John expressed his disappointment* (the VP complement), (ii) the rule of construal for Subject Noun Phrases as in *The news disappointed me*, and (iii) cases of concessive (subordinate) clauses as in *Mary walks when she might ride* and those as in *Admitting what you say, I still think you are mistaken*, to raise but a few. Turning to the case of *ham sandwich*, I would like to operate in favor of Jackendoff (1991),[2] although I will not dwell on the problem of the truth-value of a pseudo-proposition "there is/was an individual contextually associated with a ham sandwich."

Our belief is that "chaos would result" if we do not resort to any scientifically motivated formalism. I am for the position that freedom, or our consciousness of freedom, is governed by those rules that are encoded f-mentally, and for the moderately well understood distinction between problems and mysteries as evaluated by Chomsky (1975:137ff).

Our resolute and ideological stance on the constitutive principle of a scientific theory of language is that any hypothesis postulated in scientific research should be refutable, in the sense articulated as follows:[3]

> It is worth emphasizing that there are two aspects to the demarcation criterion: one of attitude and one of pure logic. Firstly, the scientist must try to find falsifying instances to his theories. This is a matter of the correct attitude; the critical attitude. Secondly, the scientist must have at his disposal refutable theories. The possibility then arises of a scientist earnestly following the first injunction without realizing that the theory he is dealing with is empirically irrefutable.

The problem that we will tackle will be to what extent such a general scheme will be valid for making demarcations between science and quasi-science. In a crucial sense of the word, our inquiry into some feasible demarcations will face problems of the sort that are of interdisciplinary concern: (i) pragmatic aspects of language use and (ii) evaluation of truth-values of

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[2] The process of linking of conceptual structures and argument structures in sentential subject positions has been examined in detail by Carrier and Randall (1993), which somehow depends on the traditional notion of cyclicity.

[3] The passage is cited from the Web page: http://www.eeng.dcu.ie/~tkpw/intro_popper/intro_popper.html

propositions.

The present paper will roll out the whole architecture of a lexicalist semantic theory and will go on to analyze linguistic phenomena that call for processes of propositional Merge. Section 2 will rather informally relate a story of the structured module of semantics and the related linguistic phenomena. Section 3 will illustrate the process of the verification of conceptual structures.

2. Layers of Modules of Grammar and Propositional Truths

The guiding principle of the lexicalist semantic theory that I will try to elucidate is that the grammar of a language consists of layers of modules that are governed by their intrinsic principles that refer to "propositional truths."[4] The layers of modules will include those that are listed in (1):

(1) Semantic Modules of grammar
  a. Lexical conceptual structures
  b. Phrasal and sentential conceptual structures
  c. Contextually and socially implied inferences

My wording in the title, "lexical," may seem somewhat removed from what has originally been intended in the work on Lexical Phonology done by Kiparsky and Mohanan. However, we are convinced that severe restrictions on the inventory of specifications or configurations of features within a specified domain, which we have called a module, would contribute to an ultimate minimization of derivational and representational attributes of the domain, or the module. The central computational unit for conceptual derivation is assumed here to be gathered and bundled into a generalized operation *Merge*, as I have generally outlined in my paper (Takahashi (2003a)).

The three modules crucially refer to distinct properties externalized by adjacent or neighboring words. As for the lexical conceptual structures, they are those conceptual structures that are encoded in the lexical entries. Thus pieces of lexically redundant information are not included in the lexicon, because they are predictable by grammatical rules. For instance in those sentences in (2), (2b) is inferred from (2a):

(2) a. John persuaded him to leave.
  b. He intends to leave. Cf. Chomsky (1998:139)
(3) a. I regretted that I had not told the truth.
  b. I had not told the truth. Cf. Kiparsky and Kiparsky (1970)

Likewise, as for the factive predicates as are exemplified in (3), (3a) entails (3b). The truths

[4] See Takahashi (2003b) for the problems and mysteries in the identification of truth within the context of the philosophy of language, analytic philosophy and hermeneutics.

of propositional contents of verbal complements in (2a) and (3a) are attributes of linguistic structure, which means that our evaluation of the truths of the verbal complements does not depend on our reference to the outside world.

Incidentally, I would like to note that the property of accomplishment verbs as observed by Vendler (1967) is a separate notion from the propositional truth-value. As noted by Wechsler (1989) and Wunderlich (2001:503), English prefix *re-* can only be attached to "result" verbs, as is observed in (4):

(4) a. She reclimbed the hill.
b. *She reclimbed on the hill.

Acceptability of the sentences in (4) depends on the semantic restriction on *re-* attachment, although we observe that (4a) is true if and only if *she* or someone had climbed the hill. As for accessibility to *re-* prefixation, we have to examine Keyser and Roeper's (1992) syntactic analysis.

The level of (1b), which for this occasion I call "Phrasal and sentential conceptual structures," crucially depends on our reference to the outside world. Let us turn to (5) and (6). Concerning the sentence in (5),

(5) I bought bones to give to the dog.

Higginbotham (2000:71) notes as follows:

(6) ... acceptability of a purpose clause requires ... that the fulfillment of the purpose in question be consequent on some state that is in turn consequent on the truth of the main clause.

To add an example of result reading, the approval of the result reading in (7), I would like to argue, is contingent upon the truth-value of the propositional content of the *to*-infinitival phrase:

(7) He rose to his feet, only to fall as before.

If the propositional content of the main clause of the sentence in (7) is true with respect to the outside world "as conceptualized by the language user" (as suggested by Jackendoff (2002:324)), that of the *to*-infinitive is also true. Thus the level noted in (1b) is crucially contingent upon the evaluation of the truth-values of the sentences in question.

As for the level in (1c), I have much less to say, but I would like to allude to Habermas's view on truth and ter Meulen's research into formalization of aspectual properties of utterance:[5]

[5] The definition of the term "utterance" should be made more explicit in order to appropriately specify the domain of our inquiry. What is intended in the present paper is neither identical with

(8) Wahrheit ist ein Geltungsanspruch, den wir mit Aussagen verbinden, indem wir sie behaupten. Habermas (1984:129)

(8) reads in English: The truth is a claim to normative rightness which we combine with linguistic expressions through the medium of which we assert ourselves.

The theory of Dynamic Aspectual Trees (hereafter, DAT), elaborated by ter Meulen (1995, 2000) and Seligman and ter Meulen (1995), focuses its attention on linguistic interdependence among sentences in an utterance.[6] Ter Meulen (1995:154) observes that texts, including what I call utterances, furnish the following three sorts of semantic information:

(9) The three modes of semantic information
  a. The descriptive content
  b. The aspectual content
  c. The perspectival content

The aspects of linguistic meaning in DAT that we categorize as truth-conditional meaning are confined to the descriptive contents of DAT which are formally captured by "labels" and "nodes" in ter Meulen's technical sense of the terms: The nodes represent the situations to which the text refers, and the labels are assigned pieces of descriptive information on eventualities. Procedures of DAT construction interact with each other to crucially create temporal reasoning implied by the utterances that are processed:[7]

(10) a. Jane was patrolling the neighborhood. She noticed a car parked in an alley.
  b. Jane turned the corner. She noticed a car parked in an alley.

We may reverse the order of sentences in (10) a and b to give (11):

(11) a. Jane noticed a car parked in an alley. She was patrolling the neighborhood.
  b. Jane noticed a car parked in an alley. She turned the corner.

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that assumed in Noe (1987:28-31) nor with that in Habermas (1998). We may find a simplified definition within the former tradition in Saeed's (1997:13) wordings: "... an utterance is created by speaking (or writing) a piece of language. If I say *Ontogeny recapitulates phylogeny*, this is one utterance. If another person in the same room also says *Ontogeny recapitulates phylogeny*, then we would be dealing with two utterances." For Habermas, interpretation of utterances is based on knowing assertibility conditions: an utterance may be understood when we recognize those conditions that make the utterance acceptable. *Pace* the two significant strands of inquiries into pragmatics of communication, I will adopt Nespor and Vogel's (1986) rather informal assumption within the theoretical framework of phonology: Utterance is the largest unit in prosodic hierarchy that governs a sentence or a sequence of sentences that are in a logical relationship. For instance, the sequence of sentences *Put on your coat*/It's cold out forms an utterance, while the sequence of sentences *Put on your coat*/However, it isn't cold out does not form one utterance. In the latter case, the sentence *Put on your coat* may be interpreted to be an utterance that stands independently of the following utterance *However, it isn't cold out.*

[6] Ter Meulen (1995) often uses the term *discourse* instead of *utterance*, which however is not crucially relevant to our present argumentation.

[7] The data in (10) and (11) come from ter Meulen (2000:156-57).

The truth-conditional value of the utterance in (10a) is not crucially different from that in (11a): these utterances describe roughly the same course of events. Contrastively, as for the b utterances in (10) and (11), the reversal of the order would incur a radical alteration of the courses of events that are narrated.

3. A Truth-Driven Semantic Theory

In the foregoing section I have argued that some portions of linguistic semantics have crucial access to truth-values of propositions implied in clauses or in some forms of linguistic units though I have not attempted to integrate what I believe to be well-articulated linguistic descriptions into a unified architecture of semantic theory. I would like to introduce a sub module for formation of conceptual structures which I will dub "Truth-Driven Verification" (hereafter, TDV). In this section, I would like to elaborate on the framework of semantic theory that I have outlined in Takahashi (2003a), whose basic toolkit we find in Jackendoff's work on Conceptual Semantics.

One of the fundamental diverging point of TDV from the generative sub component of Conceptual Semantics, that is, Conceptual Structure Formation Rules, is that conceptual structures are processed by a general grammatical operation *Merge* that crucially refers to truth values of propositional linguistic elements. This implies that we do not utilize such system of conceptual structure formation rules as rewrite rules as are laid out by Jackendoff (1990). The course of argument is quite reminiscent of that which we have witnessed in the main strands of generative researches into syntax. Thus, our re-interpretation of Jackendoff's system of rules of conceptual structure formation into a unified operation *Merge* is in its crucial sense of the word an inevitable consequence of the theoretical structure of the scientific inquiry into language.

We discard the notion of "rules of conceptual structure formation" and adopt an assumption that conceptual structures are assigned at the lexical and post-lexical (that is, syntactic) levels in the manner that I will illustrate below. The whole process is governed by the TDV that serves to verify the grammaticality of the combination, or amalgamation, of the truth values of propositional contents, which is tentatively formulated as follows:

(12) Truth-Driven Verification on Combination of Propositions
At the post-lexical level, the alignment of combined propositions is verified according to (i) lexical conceptual structures and (ii) figure vs. ground dichotomy.

The sub-principles in (12) include references to parameters internalized in individual languages. The element (12i) refers to semantic information encoded in lexical entries; for example, the verb *know* takes a sentential complement that is interpreted to be true with respect to the speaker's understanding of the situation. The dichotomy of figure *vs.* ground (12ii) comes from Talmy (1978), which involves specifications of truth-values of propositional contents of major and subordinate clauses in individual languages. For the moment I cannot go into detailed examination of the formalism of the process of verification and the objects to

be verified.

Two comments are in order before I go on to present some elucidation of the working of the system that I have submitted. Firstly, the term *proposition* is a cover term, which I interpret to be the elements in conceptual structures that minimally include conceptual functions, GO ([...], [...]), BE ([...], [...]), and STAY ([...], [...]), where the phrase "minimally include" stands for cases in which a conceptual function does not contain any conceptual function. Thus complex sentences in traditional terms do include more than one conceptual function, so that they correspond to more than one propositional unit.[8]

Secondly, conceptual constituents (that is, Thing, Path, Place and Event) and functional heads (for example, GO, BE, and STAY) are semantic primitives of Conceptual Semantics. It should be remembered that they are distinguished from such English words as *thing, path, place, event, go, be* and *stay*. The semantic primitives are elements in the universal inventory of theoretical constructs which do not reside in language-specific periphery of individual grammars.[9]

In the following sub-sections, I will take up typical cases for conceptual processes of *Merge* governed by the TDV: (i) factive predicates as are instantiated by *regret*, (ii) resultative *to*-infinitival phrases, (iii) transitive and intransitive resultatives and (iv) utterances including clauses of accomplishments and those of activities.

3.1. Factive Predicates and *Merge*

In the lexical entries of factive predicates, for example, *regret* and *know*, are encoded (i) syntactic information on a strict subcategorization feature that states that these lexical items take sentential complements and (ii) conceptual information on the truth values of the complements:

(13) Portions of the lexical entry of *regret*

The propositional content of the verbal complement *that* S should be true with respect to what the referent of the matrix subject has in his or her mind.

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[8] The wording *correspond* should be understood in the light of the notion of *correspondence rules* of the sort that are components of the theoretical framework of the Tripartite Parallel Architecture.

[9] I would like to cordially thank Kazuo Katoh, who raised an example *John was suddenly in the room* on the occasion of my presentation at the Thirteenth Conference of The Society of Language and Culture (Gengo Jinbun Gakkai). The English verb *be* there would be given a reading of achievement in the sense of Vendler (1967). If my understanding of the data and of Jackendoff's Conceptual Semantics is correct, the English verb *be* does not always correspond to the conceptual function BE ([...], [...]). Thus, I believe that some adequate theoretical interpretation would be possible, even if I adhere to assumptions in the Tripartite Parallel Architecture. However, I do not submit any analysis of the data that would sound adequate. I know that this is a problem of refutability of a scientific hypothesis. My response to Prof Katoh's query in the present note might incur an unrefutable scientific theory of language, but I would insist rather strenuously that the English verb *be* in *John was suddenly in the room* differs from *be* in *John was in the room* and that they form separate lexical entries in the English language. The two uses of *be* are homophonous by some systematic reasons buried somehow in English grammar. This paper is not concerned with these reasons for the moment.

In (14), the referent of the matrix subject *he* in the sentence-initial position believes that the propositional contents of the two sentential complements of *regret* are true.

(14) He regretted that diplomatic efforts to convince the Taliban leadership to respond to the international demand did not succeed and military action had started against the Taliban regime. (http://www.dawn.com/2001/10/08/top8.htm)

This is what I intended to mean by the term *verification*. It should be borne in mind that it does not directly affect the acceptability of (14) whether or not the propositional contents of the two clausal complements are true *with respect to the real world*. We can felicitously suffix a sentence that virtually negates the truth-value of the sentential complement of *regret*:[10]

(15) He regretted that diplomatic efforts did not succeed. However, in actuality, they succeeded and no military action started against the Taliban regime.

The adverbial phrase *in actuality* functions to disclose reality. Thus, we may agree with Kiparsky and Kiparsky (1970), and we may suppose that factive predicates like English *regret* take a sentential complement that is assumed to be true with respect to what the referent of the matrix subject has in his mind.

The process of TDV interacts with Underspecification and Structure Preservation to give a sequence of derived conceptual structures:[11]

(16) Factive predicate *regret* and TDV
a. The lexical entry of *regret* is unspecified with respect to its truth-value in the sentential complement that it takes: [+___[$_{S\text{-bar}}$ ØTRUE]]
b. A subset of English verbs may be marked [+___[$_{S\text{-bar}}$ −TRUE]]

In (16), I tentatively assumed that the verb *regret* is included in a subset of English verbs that take a sentential complement that is true with respect to what is the mind of the referent of the matrix subject. Thus the truth-value of the verbal complement can be predicted by some grammatical rules, the details of which I have to leave open for future research: the feature specification "[+___[$_{S\text{-bar}}$ −TRUE]]" is filled in by some complement rules of English. By the principle of Structure Preservation, the process of filling-in of the feature value will not be prohibited: "[−TRUE]" is not distinct from "[ØTRUE]." At the post-lexical (syntactic and discourse) level, the truth-value of the verbal complement can be re-labeled and be assigned a feature [+FALSE] to derive a proposition that is [−TRUE, +FALSE].

I have introduced a dichotomized view on linguistic truth which calls for independent scrutiny:[12]

[10] Another version of the passage was provided by a native speaker of English, where past perfect forms of verbs are used.

[11] The subscript "S-bar" stands for the projection of S in the technical sense of X-bar Theory (see Jackendoff (1977)).

[12] Takahashi (2003b) discusses possible boundary conditions for theories of truth and linguistic

(17) Dichotomy of Linguistic Truth
  a. Directly Accessible Truth: [+TRUE]
  b. Presupposed Truth: [−TRUE]

Caveat is, [−TRUE] is formally different from [+FALSE]:

(18) Dichotomy of Linguistic Falsity
  a. Incongruity with the Real World: [+FALSE]
  b. Presupposed Falsity: [−FALSE]

The feature complex [+TRUE, +FALSE] is formally preempted. For now I will not delve into the conceptual possibilities of default rules for feature complexes: (i) [+TRUE]→[−FALSE] and (ii) [+FALSE]→[−TRUE].

Our examination of the figure *vs.* ground configuration in the sentences in (15) is in order: At the post-lexical level, the alignment of combined propositions is verified according to figure *vs.* ground dichotomy. In this respect there is nothing significant to say about the sentences in question.

3.2. Resultative *to*-Infinitival Phrases

This section deals with those cases that include clausal complements specified as [+TRUE]. Crucial cases come from English *to*-infinitival phrases:

(19) Resultative *to*-Infinitival Phrases
  a. He tried it again only to fail.
  b. He grew up to be a fine gentleman.

Yasui (1996:217)

Yasui (1996:217) points out the fact that (19b) implies (20):

(20) He grew up and became a fine gentleman.

We cannot suffix any sentences that negate the propositional truths of the *to*-infinitival complements in sentences in (19):[13]

(21) a. #He tried it again only to fail, but he didn't fail at all.
  b. #He grew up to be a fine gentleman, but he is not a gentleman at all.

Thus the complements in (19) are assigned [+TRUE]. The propositional contents of the

meaning. [−TRUTH] differs from [+FALSE], the latter of which refers to the situation in which a propositional content is explicitly negated with reference to the real world.

[13] The symbol "#" stands for the incongruity in the utterance that cause absurdity.

main clauses in (19) cannot be negated either:

(22) a. #He tried it again only to fail, but he didn't try anything.
b. #He grew up to be a fine gentleman, but he is only a child.

In this respect, resultative *to*-infinitival phrases are different from purposive *to*-infinitival phrases as quoted in (5):

(5) I bought bones to give to the dog.

The *to*-infinitival phrase in (5) may either be negated or be confirmed:

(23) a. I bought bones to give to the dog, but I didn't have time to give them to it.
b. I bought bones to give to the dog, and it has devoured them already.

Thus we may assume that the alignment of propositional truths in the sentences with sentence-final purposive *to*-infinitival phrases and that in the sentences with sentence-final resultative *to*-infinitival phrases are rather informally represented as follows:

(24) Alignment of Propositional Truths in Two Types of *to*-Inifinitival Expressions
a. Purposive
$[_{\text{Matrix}} + \text{TRUE}]\text{-}[_{\text{Complement}}\ \emptyset\text{TRUE}]$
b. Resultative
$[_{\text{Matrix}} + \text{TRUE}]\text{-}[_{\text{Complement}} + \text{TRUE}]$

If the condition on the alignment is not met, the operation *Merge* will no be applied to combine the matrix clause with its corresponding *to*-infinitival phrase.[14]

My speculation concerning the alignment in (24b) is as follows. Some inherent property of a figure may be recognized within the resultative *to*-infinitival phrases, which interacts with their attributes of logical relatedness with events described in the matrix clause to give and strengthen the truthfulness of the infinitival phrases. This speculation may be formalized as a default:

(25) Figure $_{\text{logically bound to the matrix clause}} \rightarrow [+\text{TRUE}]$

By Kiparsky's (1982) Elsewhere Condition, the default (25) applies at the utterance level in the technical sense of the term that I assume.

[14] From a purely derivationalist viewpoint, the TDV can be interpreted to be a filter that functions to prohibit the ungrammatical combination of propositional truths in a linguistic construction of a given type. I know of no valid argument that supports either of the assumptions, and I will leave it open for future research.

3.3. *Merge* and Sequences of Accomplishments cum Activities

This section deals with those cases in which reversal of the order of sentences may not incur any change of propositional content of the utterance. Ter Meulen (2000) raises such an example:

(26) a. Jane noticed a car parked in an alley. She was patrolling the neighborhood.
b. Jane was patrolling the neighborhood. She noticed a car parked in an alley.

The truth-conditional content of (26a) is virtually the same with that of (26b).

Notably, simple subordination of the second sentence brings about some minute but identifiable changes in the truth-conditional contents:

(27) a. Jane noticed a car parked in an alley when she was patrolling the neighborhood.
b. Jane was patrolling the neighborhood when she noticed a car parked in an alley.

The sentence in (27b) may be categorized as Narrative *When* Clauses,[15] whose judging standards are (i) several types of main (subordinate) clause phenomena and (ii) paraphrasability of *when* clauses:[16]

(28) Right Dislocation
a. Jane was patrolling the neighborhood when she noticed it, the car parked in an alley.
b. *She noticed a car parked in an alley when she was patrolling there, the neighborhood.

(29) Preposing of Object NPs
a. Jane was patrolling the neighborhood when a car parked in an alley she noticed.[17]
b. *She noticed a parked in an alley when the neighborhood she was patrolling.

(30) Cleft
a. *It is when she noticed a car parked in an alley that she was patrolling.
b. It is when Jane was patrolling the neighborhood that she noticed a car parked in an alley.

(31) Paraphrasability
a. Jane was patrolling the neighborhood, and then she noticed a car parked in an alley.
b. *Jane noticed a car parked in an alley, and then Jane was patrolling the neighborhood.

Thus we may identify certain dissimilarity between (i) simple arrangements of sentences in

[15] Readers are referred to Declerck (1997:212-229) for detailed descriptions of the usage of Narrative *when* Clauses. Akatsuka and Tsubomoto (1998:138) cite cases in which we find some inverted structures.
[16] We find a fuller list of main clause phenomena in Green (1976).
[17] A native speaker judges the sentence in (29a) "a little archaic."

(26a, b) on the one hand and (ii) sequences of clauses embodying propositional subordination in (27a, b) on the other. It is arguable whether or not we recognize total equivalence in the truth-conditional contents in (26). We may rely on the Figure *vs*. Ground Dichotomy to isolate some distinction of (26a) and (26b).

4. Concluding Remarks

The present paper has submitted for inspection what I dub a Lexicalist Semantic Theory. At the outset of the paper I have described (i) the theoretical framework that I adopt, (ii) the possible boundary condition of semantics, and (iii) the notion of refutability of scientific theories. I have invoked the unified grammatical operation *Merge* which has severely restricted access to truth-values of propositions implied in sentences and passages. Only for expository purposes I have put forth a tentative analyses of several constructions of English.

The present paper has posed a significant linguistic problem to be scrutinized: the identification of truth and linguistic meaning. The first part of the present paper has taken only a brief birds-eye view of the problem.

One of the theoretically significant tasks that this paper has been concerned with is to construct a viable alternative to Optimality Theory (OT) as a forcible current paradigm of science. I have converged various stages of conceptual structure formation into a unified operation *Merge*. This is a step toward making explicit the generative computational system; In OT this is called GEN, the internal structure about which OT does not intend to have reservations.

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