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Grammatical Effects of Affect

A contrastive corpus analysis of the use and meaning of *infant* and *baby*

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Title: *Grammatical Effects of Affect: A contrastive corpus analysis of the use and meaning of infant and baby*

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Abstract: This thesis aims at (1) outlining a basic understanding of how *affective*, or *expressive*, meaning can be understood relative to linguistic meaning and language at large, and (2) analysing how affective meaning may relate to *epistemological status* and *reference type* in actual language use. The thesis' theoretical framework is largely situated within the paradigm of cognitive linguistics, and in particular drawing from the work of Langacker (2008). The analysis combines basic qualitative and quantitative methods in deconstructing clausal instantiations from transcripts of spoken English from the COCA corpus. The clausal instantiations are analysed according to three parameters: Semantic prosody (positive – inconspicuous – negative); Epistemological status (extensional – intensional); and Reference type (specific – non-specific). The results can be said to point to indications of correlative patterns between affective meaning and epistemological status, whilst finding close to no indications of such patterns between affective meaning and reference type. The results also point to the necessity of not only considering *written* text, but also other non-lexical means of communication (such as tone of voice and gestures), in order to successfully study affective meaning relative to language and linguistic processing.

Keywords: Affective meaning, expressive meaning, semantics, Cognitive grammar, Langacker, encyclopaedic semantics.

Table of Contents

1. Introduction

The aim of this short Master Thesis is to look at how *affective meaning* could potentially impact *grammar*. Affective meaning is to be understood as meaning conveying *emotional* and/or *attitudinal* content, determining whether a semantic unit is seen as affectively *positive* or *negative*. Grammar could be said to be given a broad (and perhaps somewhat unconventional) definition, corresponding to the view presented by (e.g.) Langacker (2008); that *grammar is meaningful*. From a *cognitive* perspective, such as Langacker's, the meaningfulness of grammar is simply a consequence of an understanding of *language* as "an integral facet of cognition" (Langacker 2008: 8), reflecting the human perceptual apparatus, or mind. Hence, from such a holistic perspective, affect should reasonably have an impact on language, and grammar.

By means of *corpus analysis*, analysing transcripts of real world conversations provided in the *Corpus of Contemporary American English* (COCA), information on *how* affect may impact grammar is taken to be obtained. The study itself consists of analysing the *use* and *meaning* of the synonymous lexical pair *infant* and *baby*, taken to differ principally in terms of affective meaning. The analysis can be said to be twofold, in that it examines both how *infant* and *baby* compare (i.e., *what* their difference consists of), and how affective meaning impacts their *use* and *meaning* both individually and generally.

The method used in analysing this lexical pair rests on the understanding of the *clause* as fundamental to human linguistic production. Clausal instantiations of both lexical items are deconstructed into *predicative structures* and analysed according to three principal parameters: (1) *semantic prosody* (inferred from lexical meaning); (2) *epistemological status*; (3) *reference type*. Predicative structures can be said to correspond to simplified first order predicate logic structures, in that they identify *dependent* (corresponding to *predicates*) and *autonomous* (*arguments* of predicates) elements and their clausally internal structuring. Semantic prosody is essentially equated to affective meaning, and is defined as being either *positive*, *negative*, or *inconspicuous*. Epistemological status and reference type are both given a binary classification, as being *extensional* or *intensional*, and *specific* or *non-specific*, respectively.

2. Theoretical preliminaries

This section outlines the basic theoretical notions which underpin both the rationale for, as well as, the method applied in, this thesis' *object of study*; the (potential) grammatical effects by affect. Section 2.1. provides a succinct description of the theoretical fundamentals concerning the

relationship between *language*, *cognition*, and *affect*. In section 2.2., a brief outline of the premises on which this thesis' understanding of *meaning* rests are presented, and in section 2.3. details regarding the role of *affect* in relation to *language* and *meaning* are elaborated. Lastly, in section 2.4., a concise description of the *object of analysis*, i.e., the use and meaning of the synonymous pair *infant – baby*, and how it relates to the *object of study*, is given.

2.1. Language, cognition, and the role of affect

The perhaps most elemental theoretical premise of this thesis is the understanding of *language* as a reflection of the human cognitive apparatus. More specifically, linguistic activity is not only critically dependent on, but also an integral facet of, cognition (Langacker 2008: 8). *Cognition* is, in turn, fundamentally dependent on *affect*, which allows perceptual input to be cognitively processed and made sense of relative to one-self (Duncan & Feldman Barrett 2007: 1196). There is, simply put, no clear boundary between language and other psychological, or cognitive, phenomena, which language often gives expression to.

Cognition is seen as being physiologically grounded in *perception*, or what Barsalou (1999) calls *perceptual symbol systems*. This means that cognition is grounded in *analogical* and *multimodal* symbol systems. They are multimodal because they originate in *all* modes of experience, including both the, so to speak, *traditional* senses, such as, *vision*, *olfaction*, *gustation*, etc., as well as, for example, *proprioception*, and *introspection* (585). For this reason, they are also analogical, since the representation of a symbol (at least to some degree) intrinsically corresponds to the perceptual state which gave rise to it (578).

The role of affect is taken to be foundational for cognition, not only being intrinsic, but in fact constitutive, to cognitive processing. “[A]ffect is an intrinsic property in all psychological phenomena that result from so-called ‘cognitive’ processes (such as consciousness, language, and memory)” (Duncan & Feldman Barrett 2007: 1201). Among other things, this means that the distinction often made between *thinking* and *feeling* is *phenomenological*, and not ontological. That is, the perceived difference between that which is understood as *factual*, as opposed to *emotional*, experience is in fact a phenomenological difference physiologically contingent on the role affect has on the processing of that experience. Studying the relation between affect and cognition, Duncan & Feldman Barrett furthermore suggest that affect is what “provides individuals with the subjective sense of certainty [sic] comes with consciously seeing an object” (1197). In other words, affect is what allows sensory, or perceptual, input to be consciously grounded in a person, establishing the *subjective*, personally relevant, relation between the person perceiving and the thing (entity)

perceived.

As for language, "[i]n humans, linguistic symbols develop together with their associated perceptual symbols" (Barsalou 1999: 592), meaning that, for example, a word in itself could be said to *become* the very concept it labels. "Through language, humans became able to control [conceptualisations] in the minds of others, including [conceptualisations] of mental states" (607). In other words, (the *meaning* of) a linguistic expression is *physiologically experienced*, i.e. materialised, in the sensory regions linked to its conceptualisation. In this way, linguistic expressions could be seen as the *objectification* of the *subjective* structuring of experience, providing a socially accessible *external* dimension of tangibility to the human (physiologically *internal*) cognitive system.

2.2. A concise outline of *meaning*

This section aims at providing a concise description of three basic premises concerning *meaning* which underlie both section 2.3. on *affective meaning*, and section 3. describing the *method* applied in studying potential grammatical effects of affect: (1) the meaning of a *meaningful unit* corresponds to the abstracted sum of the meaningful unit's expressionally combinatory totality (potential); (2) *grammar is meaningful* (Langacker 2008: 3), or more precisely, grammar corresponds to *meaning-creative structuring* of meaningful units; (3) the *clause* is the *basic meaning-creative structure* (and/or unit).

Understanding meaning as a not exclusively lexical matter is today perhaps commonplace, much owing to Sinclair's work in corpus linguistics pointing to meaning as typically being realised in *units of meaning*, as *lexical items* (e.g., Sinclair 2004a; 2004b). That is, although (*senses* of) words possess discrete meanings in themselves, syntagmatic *co-ordination* of words (i.e., *grammar*) plays an absolutely crucial role in the creation of meaning; "meaning arises from words in particular combinations" (2004b: 148). Similarly, Stubbs (2001: 120) claims that "[s]emantic units stretch well beyond words and short phrases", arguing that meaning creation is greatly determined by syntagmatic organisation, and fundamentally rejecting the notion of meaning as independent from syntax (119). In essence, meaning would, hence, be the product of syntactic configuration of the semantic discreteness of words, a semantic discreteness (i.e., *meaning*) which exists *in and through* lexical patterns, or conventionalised expressions. The perceived discrete meaning of a word could thus largely be thought of as an abstracted coherent sum of its expressionally combinatory totality, or rather, *potential*, completely contingent on the expressions in which it conventionally is instantiated.

Grammar could thus be thought of as the means by which linguistic units are combined and made *meaningful* (i.e., *useful*). In other words, grammar can be said to be *meaning-creative*, providing the principles for *how* to structure and use linguistic expressions. In fact, grammar could, in a manner of speaking, be said to be *zoomed out* (lexical) meaning. Grammar and lexicon (the set of conventionalised expressions in a language[1]) form a *continuum* of (assemblies of) symbolic structures, a continuum in which grammar corresponds to the *semantically schematic* range, and lexicon to the *semantically specific* one (Langacker 2008: 20; 161). By and large, grammar could, hence, be thought of as the *blueprint* for linguistic materialisation of *knowledge*, or as the "conventionally established **patterns** for putting together symbolic assemblies [i.e., meaningful units]" (168).

Linguistically, meaning-creative processes can archetypically be said to structurally correspond to *clauses*. In fact, the clause could effectively be thought of as **the** structural means of translating *knowledge* into *discrete* linguistic (i.e. meaningful) units, making clauses "our basic vehicle for talking about the world and relating occurrences to our own circumstances" (Langacker 2008: 354). That is, through clausal structuring we are able to express how entities in the world around us relate to one another. Clauses allow for the symbolic representations of such entities (i.e., words, phrases, and the like) to relate to one another in such ways that propositions are formed, typically predicating *something* of *someone*. By means of *predication* properties are attributed to entities, consequently resulting in a reciprocal (property - entity) meaning-creative process[2]. The *clause*, hence, assumes a pivotal function not only with respect to communication per se (translating knowledge into linguistic content), but in *creating* meaning, providing its constructional premise.

2.3. A basic outline of affective meaning

Expressive, or *affective*, meaning is typically understood as dealing with those aspects of meaning which convey *emotional*, or *attitudinal*, content (Cruse 1986: 274; Leech 1981: 15; Lyons 1995: 44). As such, it is contrasted to what is variably referred to as *descriptive*, *conceptual*, or (perhaps most commonly) *propositional* meaning. Whereas propositional meaning is taken to reflect *facts* of the *objective* world (existing independently of our human selves), expressive meaning instead

1 This set, thus, comprises *all* expressions which can be said to be *fixed*, or *conventionalised* (Langacker 2008: 16), corresponding to a (relative to a more traditional characterisation of *lexicon* as the set of *words* in a language) multitude of different types of expressions, such as *words*, *phrases*, *clauses*, and *full-fledged clichés*, *idioms*, and *proverbs*.

2 Very briefly, by predicating *P* of *a* **both** *P* and *a* can be thought of as undergoing a *meaning-creative* process, since perceptual symbols (and their associated linguistic symbols) are *dynamic* and *componential*, **not** *discrete*, *rigid*, nor *holistic* (Barsalou 1999: 584). Hence, the *intension* and *extension* of an expression are not only *interdefinable* (Dowty, Wall & Peters 1981: 149), but also reciprocally influential.

reflects an *opinion*, or *stance*, of an individual (or group of individuals) towards some property of the (objective) world.

Throughout this thesis, expressive meaning is interchangeably referred to as affective meaning. The two terms taken to be synonymous, *affective* is preferred due to its, relative to *expressive*, unequivocal semantic character. Affect is to be understood principally as a conceptually superordinate category, encompassing those conceptual properties which cognitively ground complex conceptual constructs such as *emotion*, *attitude*, and *evaluation*. In *Langackeresque* terminology, affect could thus be considered a *basic cognitive domain*, or *realm of experience*, comparable in its conceptual irreducibility to, e.g., *time*, *space*, or any of the senses, such as *olfaction* (Langacker 2008: 44-45). *Emotion* (or feelings), *attitude*, and *evaluation* would, hence, be considered *non-basic cognitive domains*, meaning that they are conceptually complex, or elaborate, involving additional conceptual (perceptual) information. Duncan & Feldman Barrett (2007), studying the relation which holds between affect and cognition, liken affect (or *core* affect) to "a neurophysiologic barometer of [an] individual's relationship to an environment at a given point in time"; a *barometer* measuring two psychological properties: *hedonic valence* (in terms of *pleasure – displeasure*) and *arousal* (*activation – sleepy*) (1185-1186)[3]. In this way, (self-reported) *feelings* could be thought of as conceptually contextualised barometer readings (1186), and (core) affect as the neuro-physiological essence which constitutes the nucleus of conceptually elaborate feelings, such as anger, sadness, joy, etc. (Russell & Feldman Barrett 1999: 806). Similarly, attitude and evaluation, being more cognitively (or conceptually[4]) saturated still, could simplistically be thought of as a person's feelings *directed* towards an entity, the difference between the two residing in their respective focus, or lack thereof, on time; attitude being equated to evaluation extended over time (815).

In spoken discourse, expressive meaning is perhaps most typically associated with non-lexical marking, such as *tone of voice*, or *facial gestures*[5]. Yet, even without (such) non-lexical marking (as in written discourse) many (most, or even all) lexical items seem to convey some aspect of expressive meaning, even if only connotatively (Cruse 1986; Leech 1981; Lyons 1995). Given a view on (lexical) meaning as *encyclopaedic* (see, e.g., Langacker 2008: 39), i.e., as being

3 In his paper "The expressive dimension" (2007), Potts makes use of the same two-dimensional notion of *affect* in devising what he refers to as *expressive indices.* In Potts' model, an *expressive index* fundamentally corresponds to an interval; [-1, 1], in which the narrowness of the interval represents the level of *arousal*, and the the interval's polarity (i.e., negative or positive) the orientation of its *hedonic valence* (177-78).

4 Throughout this thesis, *concept* can be said to correspond to a *static* representation of a *cognitive process*, yet "since all conceptions are dynamic (residing in processing activity), there is no sharp boundary between [concepts and cognitive abilities]" (Langacker 2008: 34).

5 Note, for example, how also the usage of *tone of voice* seems to be conventionalised, and how changes to such conventionalised uses may produce changes in meaning, such as *ironic* effects, as when uttering *Wow*(*!*) in a disengaged, non-emphatic manner.

emphatically relational[6], from which a lexical item's meaning corresponds to a *polysemy network* (37-38) in which different, but related, senses (i.e., uses) of a lexical item are derived from the lexical item's expressional totality, the idea that all lexical items are inherently expressive would seem to follow quite logically. That is, non-expressive and expressive senses would effectively be connected to one another, since all senses of a lexical item can be thought of as constituting a *network* of senses. Therefore, even though words such as the expletive *damn* and the seemingly neutral *chair* seem to be, so to speak, worlds apart, with regard to their respective expressive content (or rather, the *centrality* of that content), the exemplified contrast would seem to be most appropriately understood as that between two opposing ends in an expressive – non-expressive *continuum* inherent to all (senses of) lexical items (475), rather than that of a dichotomy between propositional and expressive lexical meaning. In other words, although expressive and propositional meaning (phenomenologically) differ from one another, the two are intrinsically intertwined.

Analogous to how affect in section 2.1. is described as intrinsic and constitutive to cognition, evaluation (i.e., conceptually contextualised affect *directed* at an entity) would seem discursively ubiquitous and symbolically constructive; “It can reasonably be argued that every text and every utterance is evaluative, so that the phenomenon itself disappears, to be replaced simply by 'language'” (Hunston 2011: 19). That is, the discursive pervasiveness of evaluation would seem not only inherent to linguistic production as such, but fundamentally formative of symbolic entities and their meaning. Hunston (1993; 1994; 2000; 2011), approaching evaluation from a *text-analytic* perspective, analysing a variety of genres, both quantitatively and qualitatively, describes it as ultimately being a means to *present* (the conceptual *existence* of) an entity and ascribe a *quality* to (i.e., conceptual contextualisation of) that entity (2000: 202).

Basically, Hunston's account of evaluation can be seen as quantification of conceptual domains central to the ideological structuring of a social (cultural) unit, as the act of evaluating an entity corresponds to judging it to several *parameters*. A parameter could, hence, be said to correspond to the structuring of a conventionalised understanding of some aspect of the world posited (imposed) by a social unit. Although the evaluative act comprises several parameters, two are of particular importance: [*Epistemic*] *status*, corresponding to a parameter of *certainty*, judging a discursive entity as being, for example, *true*, *false*, *a belief*, or *mythical*; and *value* [*of desirability*], along a scale of *good – bad*, determining how an entity relates to the *goals* (i.e., what is deemed *desirable*) of the value system of the social construction in which the evaluation occurs. Assigning an entity a certain epistemic status could be said to be equivalent to discursively *reifying* it,

6 In brief, an *encyclopaedic* understanding of lexical meaning posits that “a lexical meaning [i.e., sense] resides in a particular way of **accessing** an open ended body of knowledge pertaining to a certain type of entity” (Langacker 2008: 39).

bestowing it a discursive status of *being*, for example, *a truth* (i.e., existing), or *a misconception* and/or *lie* (i.e., **not** existing). As is fairly obvious when semantically considering many epistemic statuses, such as, for example, the evaluation of an entity as being *true*, epistemic status and value along a scale of good – bad would seem inextricably linked (1994: 197). That is, that which is *true* is typically (in many social settings) also considered inherently *good*, whereas that which is *false* is not rarely seen as *bad*. The evaluation of an entity along different parameters and the subsequent interconnection of those parametrical values could, ultimately, be considered the process which confers meaning to an entity; i.e., *presenting* its existence and ascribing a *quality* to it, possibly making evaluation the meaning-creative process par excellence.

According to Thompson & Hunston, "[...] the most basic parameter, the one to which the others can be seen to relate, is the good—bad parameter" (2000: 25). Understanding evaluation as equivalent to meaning creation, Osgood et al. can be said to have made very much the same claim in their ambitious study **"**The Measurement of Meaning", already in 1957. Similar to how Hunston defines evaluation as *multi-parametrical*, Osgood et al. characterised meaning, or the *semantic space* (as they called it), as being *multidimensional* (1957: 71). However, among the different *dimensions* (i.e., parameters) identified by Osgood et al., the one referred to as being *attitudinal*[7] demonstrated such a preponderance of dimensional correlations (i.e., general semantic ubiquity) that Osgood et al. likened it to "a sort of sheath with leaves unfolding toward various other directions of the total space" (70). The (essence of the) definition provided by Osgood et al. of this *attitudinal dimension* is, in fact, what is being echoed in the description of affect by Duncan & Feldman Barrett (above); "attitudes are implicit processes [of internal mediational activity] having reciprocally antagonistic properties and varying in intensity" (Osgood et al. 1957: 190). Just like Duncan & Feldman Barrett, Osgood et al. did not only deem the attitudinal, or affective, dimension as being *intrinsic* to all meaning, or concepts (190-91), but effectively *principal* to cognition as a whole; "the *attitudinal* variable in human thinking, based as it is on the bedrock of rewards and punishments both achieved and anticipated, appears to be primary" (72).

Under the heading of "Towards a Modal Grammar of English", Stubbs (1996) provides a *functionalist* approach to meaning (or grammar; the meaning-creative structuring of meaningful units), in many ways very similar to Hunston's description of evaluation (understood as meaning creation). Fundamentally, *meaning* could simplistically be summarised as an intricate composite

7 The *attitudinal dimension* is more commonly referred to as the *evaluative dimension* in Osgood et al.'s study, but the two are actually taken to be synonymous; "It seems reasonable to to identify attitude, as it is ordinarily conceived in both lay and scientific language, with the evaluative dimension of the total semantic space" (1957: 190). In their study, the evaluative dimension encompassed multiple (attitudinal) conceptual scales, such as, *good-bad*, *beautiful-ugly*, and *pleasant-unpleasant* (36).

comprising semantic content **and** a stance towards that content (215)[8]. Such a *stance*, or *perspective*, which could be equated to Hunston's notion of parametrical evaluation, linguistically corresponds to Stubbs' generalised definition of *modality*[9];

> "the ways in which language is used to encode meanings such as degree of certainty and commitment, or alternatively vagueness and lack of commitment, personal beliefs versus generally accepted or taken for granted knowledge[, which all together function] to express group membership, as speakers adopt positions, express agreement and disagreement with others, make personal and social allegiances and contracts" (202).

According to Stubbs, "the encoding of [modality] is a central organizing principle in language" (197), manifest in three kinds of *linguistic* (i.e., *meaningful*) *units*, namely lexical items, propositions, and illocutionary forces (203). Modality, thus, serves to present a certain *construal* of a semantic content relative social, or ideological, conventions, and can basically be understood in terms of *commitment* and *detachment* (211). That is, the denotative applicability of a certain linguistic unit, such as propositions like *it is P*, or *it could be P*, is ultimately determined by the (social) context in which the unit occurs, and markers of commitment and detachment (along various types of modality, or parameters) function (simplistically) as mediational devices between the (central) semantic content of such linguistic units and the denotational conventions of the social context in which the units occur[10].

Lyons (1995: 330) can be seen as adding yet another dimension to the notion of modality by distinguishing between *subjective* and *objective* modality, the difference between the two roughly corresponding to the difference between *I think that P* and *Given knowledge K, P.* Given an understanding of the difference between *factuality* and *emotionality* (or *thinking* and *feeling*) as physiologically contingent on affect (i.e., as being *phenomenological*, as mentioned in section 2.1.), it would seem appropriate to reinterpret subjective and objective modality along the lines of *explicit* and *implicit* (or perhaps *direct* and *indirect*) *subjective modality*, i.e., emphasising the importance of understanding *all* types of construal as being inherently subjective. In this way, by stressing its intrinsically and fundamentally subjective nature, understanding modality in terms of commitment –

8 Cf. the notion of meaning as *encyclopaedic* (above); "[a certain *sense*] resides in a particular way of **accessing** an open-ended body of knowledge pertaining to a certain type of entity" (Langacker 2008: 39).

9 Cf. Palmer's (1986: 16) general definition of *modality*; "the grammaticalization of speakers' (subjective) attitudes and opinions".

10 Obviously, this is a grossly simplified account of how meaning relates to social context, not least since meaning, or semantic content (i.e., a certain construal of an interconnection of conceptual content), is **in itself** fundamentally determined by the social context, or *body*, in which it is conceptualised and resides (see, e.g., Taylor 2003: 86). Nevertheless, this description chiefly serves to highlight the relation that holds between a (Stubbs') generalised kind of modality (as an, as it were, *external* form of construal) and the semantic content of linguistic units. Perhaps Stubbs' account of modality can be thought of as a sort of socially grounded meta-semantic construal; a social construal of *objective* meaning.

detachment can be thought of as a type of (metaphorical) *deixis*. That is, modality, or commitment – detachment, is fundamentally a kind of contextually dependent *gestural*[11] *reference* (Lyons 1995: 303), which serves to indicate the relative (metaphorical) *distance*, or *proximity*, of an entity to the producer of an expression referring to that entity, along parameters, or conceptual domains, such as the ones described above. Langacker's notion of *grounding* (2008), based in the inherent *subjectivity of reference*, could be thought of as a generalised form of deixis subsuming not only the archetypically deictic spatial, temporal, and personal dimensions, but also the *social*, or *socio-expressive*[12], such as the good-bad parameter. Grounding, then, is the manner in which *a basic connection* is established between *the ground* (roughly composed of the *interlocutors* and the *context* in which their *interaction* occurs)[13] and the conceptual content evoked by an expression (259)[14]. The *basic-ness* of such a connection could simplistically be said to refer to elemental types of *minimal opposition*, or *contrast*, such as marking of tense; *present* (*Ø*, *-s*) vs. *past* (*-ed*), spatial demonstratives; *this* vs. *that*, and socio-expressive value; *good* vs. *bad*, which all together can be said to provide basic means of *discursively referential orientation* (263).

Through the (emphatically subjective) notion of grounding, i.e., the generalisation of referential relations (whether they be labelled, for example, modal, or deictic), the symbolically foundational function of affect may become somewhat more easily comprehended. That is, by appreciating that *all* types of symbolic reference are based in subjectivity, i.e., that they only come into existence and become meaningful *through* the cognitive lens which is oneself, the role of affect, as the principal constituent of subjectivity, becomes paramount. In addition, if one takes the socio-expressive category of *good-bad* as a metaphysical extension of the physiological category of *pain-pleasure* (or *pleasure-displeasure*), then the subjectivity provided by affect could be thought of as the provision of physical *concreteness*, or *tangibility*, both to cognition at large, as well as to language (or its various forms of linguistic meaning) in particular. All types of meaning, regardless the symbolic dimensions in which they are based, or the conceptual domains to which they connect, whether they be spatial, temporal, epistemological, socio-expressive, etc., would, thus, fundamentally be contingent on physiologically embedded affective notions, such as pain-pleasure, in order to be made sense of, i.e., understood relative to oneself. Then, conceiving of the attitudinal, or good-bad, dimension as primary to meaning creation would make perfect sense, since affect (or its metaphysical extensions; socio-expressive attitude, or evaluation), in fact, in this way could be

11 Given a *metonymic* interpretation of *gestural* as 'physically, or physiologically, indicative'.
12 The term taken from Lyons (1995).
13 The more common term is probably *deictic context*; the *here and now* of an utterance. See, e.g., Lyons (1995: 304-5).
14 Langacker (2008) actually has two parallel definitions of *grounding*; a *broad* and a *narrow* one (see 2008: 262-4). In this thesis, however, no distinction is made between the two.

considered symbolically constitutive; a *sheath*, or the *glue* that allows for all conceptual constructs to cohere. In fact, through evaluation (i.e., the multi-parametrical contextualisation of conceptual entities) affect would seemingly function as that which connects the *symbolic* with the *social*, constituting the fundamental category of the *socio-symbolic*, or language.

2.4. The object of analysis: The use and meaning of *infant* and *baby*

As already mentioned in the introduction, this thesis' object of study are the (potential) grammatical effects of affect. As a means of accessing this object of study, a synonymous pair of lexical items, namely *infant* and *baby*, constituting this thesis' object of analysis, is contrastively studied along a number of grammatical parameters.

The *Oxford English Dictionary* (OED) defines the *central* sense of *infant* as "[a] child during the earliest period of life (or still unborn); now most usually applied to a child in arms, a babe", and that of *baby* as "[a] very young child, *esp.* one not yet able to walk and dependent on the care of others; an infant. Also applied to an unborn child" (OED on *infant* and *baby*, respectively, [online]). As is obvious, the meanings of *infant* and *baby* overlap considerably, and together with *babe*, defined by the OED as "[a] very young child; a baby" (OED on *babe*, [online]), their definitions are, in fact, explicitly circular. Yet, although there is substantial semantic overlap between *infant* and *baby*, there does, nonetheless, seem to exist a difference in affective meaning between them. Cruse (1986: 275-276) argues that *baby* has an inherent *expressive potential* which *infant* lacks. That is, *baby* is used in expressions in which it functions to *overtly* convey its user's affectively positive stance towards its referent, whereas no such overtly evaluative usage seem to exist for *infant*. Substituting *baby* for *infant* in an expression such as *Oh, look – a baby! Isn't he adorable?* (275) would seem intuitively (i.e., conventionally) odd, and perhaps even more so when suprasegmentally, and/or extra-linguistically (e.g., by means of facial gestures), indicating such an evaluative usage. In their presentation of how to measure and rate affective meanings: "Affective Norms for English Words", Bradley & Lang (1999) provide figures corroborating the notion of a difference in affective meaning between *infant* and *baby*. Using a scale of 1 to 9 to measure *affective valence* (*displeasure – pleasure*), *baby* received a mean value of 8.22, and *infant* one of 6.95[15]. In the test designed by Bradley & Lang, a rating below 5 corresponded to a value of

15 Interestingly, Bradley & Lang's results demonstrate clearly distinguishable differences between the sexes in the affective values given to *infant* and *baby*. Not only did men, on average, rate both words as less affectively positive than women: 6.05 vs. 7.71 (men), and 7.95 vs. 8.65 (women), for *infant* and *baby*, respectively, but the ratio, or proportional difference, between them also differed substantially between men and women. For men, *baby* could thus be seen as being 158% more affectively positive than *infant*, whereas for women, that difference was only 24%. It should be noted, however, that just as much as these numbers seem to indicate a noticeable difference between the

displeasure (1 being the most displeasing), one above 5 to a value of *pleasure*, and one of exactly 5 to affective neutrality, being neither significantly pleasing, nor displeasing. Thus, *baby* can loosely be said to have been rated 65% more affectively positive, or *pleasurable*, than *infant*, receiving a 3.22 on the, as it were, 4 point *positive side* of the scale (i.e., ranging from 5.01 to 9), compared to the 1.95 received by *infant*.

According to the OED, *baby* is etymologically derived from the affixation of the *-y* / *-ie* suffix to *babe* (OED on *baby*, [online]). This suffix is "[u]sed to form pet names and familiar diminutives" (OED on *-y | -ie suffix*, [online]), and can, according to Stubbs (1996), be considered a case of morphologically marked (i.e., forming part of *lexical*) *modality* (see previous section), "encod[ing] meanings such as informality, intimacy, childishness and femininity" (206). At present, however, *baby* would not seem to constitute a less formal, or more intimate, form of *babe*, but rather simply the most common alternative for expressing the *central* sense (i.e., 'a very young child') of both words (OED on *babe*, [online]). *Baby* and *babe* could in this ways be said to form an etymologically related pair, and part of the semantic contrast between this pair and *infant* could then be understood as an instance of the genre-bound lexico-semantic variation rooted in the introduction of Latin (or French) terminology within certain social institutions, principally from the 11th century onwards (Stubbs 2001: 38)[16]. The introduction of Latinised vocabulary within certain prestigious genres, such as medicine and law, consequently resulted in the creation of numerous synonymous, although often clearly genre-bound, lexical pairs, such as *infant* and *baby*[17]. In this way, *infant* could, very simplistically, be thought of as a (potentially) more *formal* way of saying *baby*, and, reversely, *baby* a (potentially) more *intimate* way of referring to an individual as *a very young child*.

Given such genre-based semantic differences, it would seem reasonable to assume corresponding grammatical differences between *infant* and *baby*. That is, given that linguistic expressions fundamentally reflect conceptualisations, and conceptual domains (i.e., knowledge) reside in social practices[18], then differences between such practices (i.e., genres) would reasonably be manifest in the structuring, or grammar, of their respective linguistic expression. In other words, if the semantic content of *infant* and *baby* exists *in and through* their respective expressional totality

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sexes, it should probably also be seen as an indication of the relative inappropriateness of ascribing too much importance to these ratios, at least until further research on this topic can be provided.

16 According to the OED, *infant* found its way into English from Latin via the Old French forms *enfant*, *-aunt* (OED on *infant*, [online]).

17 According to the OED, *infant* still retains its legal sense of '[a] person under (legal) age; a minor. In common law, one who has not completed his or her twenty-first year; in the case of a ruler, one who has not reached the age at which he becomes constitutionally capable of exercising sovereignty' (online), whereas no equivalent exist for *baby*, nor *babe*, even though historically both of them have had the meaning of 'a child (of any age); a minor' (OED on *infant*, *baby*, and *babe*, respectively, [online]).

18 See, e.g., Taylor (2003: 86).

(see section 2.2.), then difference in meaning between them should be mirrored in the expressions they form part of. These (potential) differences could then be taken as examples of how affective meaning (subsuming, at least, *intimacy* under a superordinate category of affect(-ive meaning)) may impact grammar, or the *meaning-creative structuring of meaningful units*.

3. Method: Predicative Structure Analysis (PSA)

The purpose of this thesis is to examine potential grammatical effects of affective meaning. By comparing how 100 expressions, or instantiations, of each of the two lexical items *infant* and *baby* differ from one another, clues to understanding such grammatical effects are taken to be obtained. Given the understanding of the *clause* as the basic meaningful structure (see section 2.2.), analytical focus quite naturally falls on the *grounded*, or finite, clause, being understood as the *basic unit of* (predicative) *meaning* in which the two lexical *types* (i.e., *infant* and *baby*) are instantiated. Therefore, every (grounded) clause, in which a *token* (*instantiation*) of *infant* or *baby* occurs, is considered an instantiation of the two types' *semantic potential*, and functions as such as the demarcation of analytical focus.

The analysis of clausal instantiations aims at obtaining data on the predicative structures which the two types form part of. Two principal structural aspects are of relevance for the analysis: Which (lexical) entities that predicatively co-occur, and the semantic nature of those predicative co-occurrences. Basically, this corresponds to analysing clausal constructions on two levels: *predicative structuring* of lexical co-occurrence in clauses, and *referential grounding* of tokens and the predicative structures they form part of, both levels of analysis respectively explained in more detail in sections 3.1. and 3.2.. In section 3.3., the material from which the object of analysis (the instantiations of two lexical items *infant* and *baby*) is obtained, as well as, the rationale for its selection, and the object of analysis' general instantiation in this material, is briefly described.

3.1. Deconstruction of clausal instantiations into predicative structures

The deconstruction the two types' clausal instantiations into *predicative structures* (PS[19]) is intended as a means to allow for a practicable analysis and comparison of the semantic potential of the two types (*infant* and *baby*). That is, by breaking down clausal instantiations into their predicative components, a more detailed analysis of the two types' semantic content becomes possible,

19 Nb. *PS* is throughout this thesis used to denote *both* the singular; *predicative structure*, **as well as** the plural *predicative structure**s***.

expectedly providing a fuller and more complex picture of the object of study; the potential grammatical effects of affect.

Understanding *predication* as the attribution of a property to an entity (i.e., token) and/or the description of a relation between entities (see, for example, Gamut 1991a: 65-69), the analytic focus is just as much on the relationships that the tokens of two types form part of, as it is on which properties that are ascribed to them. Deconstructing clausal instantiation, both kinds of predication (i.e., attribution of a property to an entity and description of a relation between entities) are subsumed under the general notion of *relationship*, which instead distinguishes between *processual* (which typically develop or change over time) and *non-processual* (backgrounding temporally based mutability; being understood atemporally) predications, or relationships (Langacker: 99-100). That is, instead of a classification of PS based on *valency* (i.e., the number of arguments of a predicate), focusing on a predicate's relation to time (i.e., as being, roughly, either temporally *static* or *dynamic*) basically allows for a classification of PS according to whether a token serves as an argument of an *adjective construction* or a *verb construction*[20], respectively corresponding to a non-processual and a processual relationship.

Regardless the *type* of PS, i.e., whether it is processual or non-processual, all PS are made up of two kinds of elements: *autonomous* (i.e., arguments) and *dependent* (i.e., predicates) ones. In brief (and simplistically), autonomous elements are capable of conceptually, so to speak, *standing alone*, whereas dependent elements require some other element(s) in order to be conceptualised (Langacker 2008: 199). Archetypically, nominal lexical items, such as, e.g., *infant* and *baby*, are thus considered autonomous, and adjectival and verbal lexical items, such as, e.g., *small* and *cry*, dependent.

Simplistically, the two types' clausal instantiations are thus deconstructed into PS corresponding to the clauses' verb and adjective constructions, respectively corresponding to processual and non-processual PS. Serving as an example containing both types of relationships (i.e., processual and non-processual) is the clause *The new baby might inherit the condition*. The clause as a whole exemplifies a prototypical processual PS in which *The new baby* and *the condition* both serve as arguments (being autonomous elements) to the predicate (being a dependent element) corresponding to the lexical verb of the clause's finite verb construction; *inherit* (the modal *might* being disregarded at this level of analysis[21]). The complex nominal; *The new baby*, in turn, illustrates a typical non-processual PS in which *new* functions as a non-processual predicate (being

20 The full picture is obviously somewhat more complex, including, e.g., also prepositional phrase and adverbial constructions. Nonetheless, as is demonstrated in the actual analysis, the bulk of the derived PS is made up of adjective and verb constructions.

21 The analysis of semantic content such as, for example, modal verbs and other non-lexical referential meanings are explained in section 3.2.; Analysis of *referential grounding* of predicative structures and tokens.

a dependent element), and *baby* as its (autonomous) argument (disregarding the definite article at this level of analysis[22]). The deconstruction of the clause's two relationships corresponds to the following two PS (in which **(A)** and **(D)** stand for autonomous and dependent (element), respectively):

1) **(A)** new baby + **(D)** inherit + **(A)** condition

2) **(A)** baby + **(D)** new

The predicative components (i.e., the autonomous and dependent elements) derived from the deconstruction are all rendered in the lexematic form of the of the expressions which they correspond to. That is, all morpho-syntactic markings serving as means of *referential grounding*, such as, for example, definite and plural markings for nominals, and person, tense, and modal markings for verb constructions, are disregarded with respect to the formal representation of the predicative components (referential grounding being dealt with in section 3.2.).

For the sake of analytical simplicity, all clausal instantiations of the two types, whether they be *declarative*, *interrogative*, *imperative*, or *exclamative*, are deconstructed as were they conventionally structured declaratives in the active voice (i.e., SVO's). This means, among other things, that participles are analysed in accordance with the processual relationships they imply, or indirectly evoke. In a similarly simplifying fashion, all adjective constructions are also deconstructed alike, meaning that the attributive *the small baby* and the predicative *the baby is small* are both rendered **(A)** baby + **(D)** small.

All PS are then classified according to their structural type (PS type). The principal distinction, already explained, is that between processual and non-processual PS. Both processual and non-processual type PS are then divided into subcategories distinguishing between a total of four different grammatical (in the sense of *both* form and meaning) structures. Processual type PS are separated into *subject* and *object position* type PS, depending on whether a token serves as a *subject* (roughly, the principal participant of a *process*), or an *object*, of a process. Non-processual type PS are divided into *adjective* and *prepositional phrase* type PS, respectively denoted as (A) + (D) and (A) + (D) + (A) type PS. In addition to the these four PS types, a fifth type corresponding to *predicate nominatives*, and rendered (A) + (A), is also given, but considered to fall outside the processual – non-processual PS type distinction.

22 The analysis of non-lexical referential meanings is explained in section 3.2..

3.2. Analysis of *referential grounding* of predicative structures and tokens

The analysis of the *referential grounding* of PS and tokens aims at elucidating possible relations between three seemingly related aspects of referential grounding (as explained in section 2.3.): *epistemological status*, *reference type* (as defined below), and *semantic prosody*. By analysing how the first two of these means, or *parameters*, of *grounding* relate to semantic prosody, and how these relations may vary between the two types (*infant* and *baby*), information pertaining to the role, or *potential effects*, of affect(-ive meaning) is taken to be obtained. That is, by letting semantic prosody function as a reference point, the potential relations between affect(-ive meaning) and epistemological status and reference type becomes possible to analyse.

All three of these features of referential grounding (or simply *grounding*) are arguably intimately linked to affect in either a general or direct manner. In the case of semantic prosody, the connection is obvious, as it could effectively be equated to affective meaning (as defined in section 2.3.). With regard to epistemological status and reference type, the relation could be said to be of a more general kind, as both features correspond to principal facets of grounding, and, as such, are inherently subjective (and therefore pertinent to a study of the grammatical effects of affect). In addition to such a *general* connection, however, both epistemological status and reference type would intuitively also seem to be closely connected to the notion of *concreteness* (and, consequently, intimately connected to affect). That is, in addition to supposedly being relevant as objects of analysis because of being (subjectively) *referential*, both epistemological status and reference type (as defined below) would seem to centrally encompass key notions of concreteness, namely the *real* vs. the *hypothetical*, and the *actual*, or *specific*, vs. the *abstract*, or *generically non-specific*.

3.2.1. Analysis of *semantic prosody* of predicative structures

As already explained in section 2.3., the *socio-expressive*, or *good – bad*, parameter is taken to constitute a fundamental facet of referential grounding, or means of *discursive orientation*, which in its structural *basic-ness* is not unlike, for example, *spatial*, or *temporal grounding.* Hence, socio-expressive meaning is taken to fill a referential function similar to that of, for example, epistemological status and reference type (explained below), and thus considered a form and a means of grounding. A value along a parameter of good – bad ascribed to an entity is referred to as a value of that entity's *semantic prosody* (i.e., its *prosodic* value), and can basically be equated to

that entity's affective meaning[23]. Most fundamentally, "[s]emantic prosody is an expression of the innate human need and desire to evaluate entities in the world they inhabit as essentially *good* or *bad*" (Morley & Partington 2009: 141).

All PS derived from the deconstruction of the two types' clausal instantiations are judged as being prosodically either *positive*, *negative*, or *inconspicuous*. The prosodic value of a PS is determined by a general assessment of the conventional socio-expressive meaning of the clausal instantiation's *sense* (i.e., simplistically the sense of its predicate) to which the PS corresponds. The sense of a PS is inferred from analysing the particular meaning of the clausal instantiation (to which it corresponds) relative to the transcribed sentence in which it occurs. In this way, every PS in which a token occurs is qualitatively judged as expressing either a positive, negative, or inconspicuous semantic prosody. For many PS, determining the prosodic value can be thought of as fairly straightforward, as the interpretation of the conventional socio-expressive meaning of many (of the clausal instantiations corresponding to the) PS can be said to be unequivocally positive or negative, as with, for example, (A) [FEMALE] + (D) love + (A) baby, and (A) defendant + (D) molest + (A) infant. For most PS, however, the semantic prosody is much more difficult to ascertain, and, consequently, these PS are deemed prosodically inconspicuous (cf., for example, (A) infant + (D) four weeks old, and (A) baby + (D) another).

PS deemed to unequivocally express a certain prosodic value, such as, for example, the two PS mentioned above having love and molest as their respective predicates (i.e., dependent elements), are categorised as *core* instantiations of that prosodic value. A PS considered to manifest a core instantiation of a prosodic value therefore corresponds to a definite, and without any doubt, prototypical instantiation of that prosodic value. Reversely, a PS deemed to *potentially* express a certain prosodic value is classified as a *peripheral* instantiation of that prosodic value[24]. For example, the various clausal instantiations corresponding to the (partial) PS (D) have [give birth to] + (A) baby are all classified as being peripheral (i.e., potential) expressions of a positive semantic prosody. The conventional socio-expressive meaning of a typical clausal instantiation corresponding to this PS is taken to *often*, but **not necessarily** (nor always), express a positive affective meaning. Because of this, these PS are classified as corresponding to peripheral, or potential, instantiations of a positive semantic prosody.

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23 Whereas affect(-ive meaning) is understood two-dimensionally (along two parameters: *hedonic valence*, and *arousal*), semantic prosody could be said to principally concern only one parameter, namely *good – bad* (i.e., socio-expressive meaning; roughly the *symbolisation* of *affect*).

24 The *core – peripheral* distinction corresponds to the idea of varying degrees of centrality for different semantic content relative the meaning (or rather, sense) of a lexical item (see, e.g., Langacker's brief description of *encyclopaedic semantics* (2008: 38-39)).

3.2.2. Analysis of *epistemological grounding* of predicative structures

As described in section 2.3., epistemological status would seem to be both intricately and intrinsically connected to both affective meaning and meaning at large. In fact, meaning (at large) would reasonably seem to be, in and of itself, fundamentally related to, or even dependent on, epistemological status. Due to these reasons and the ones given above (section 3.2.), all predicative structures derived from the deconstruction of the clausal instantiations of the two types are analysed along a parameter of epistemological status and deemed either *intensional* or *extensional* (marked **IN** and **EX**, respectively).

Most simplistically, "[t]he intension of an expression is something like its conceptual content, while its extension comprises all that [in practice] exemplifies that conceptual content" (Gamut 1991b:14). This means that the extension of an expression can be said to be either true or false, whereas the intension of an expression does not concern the expression's truth or falsity (directly). The perhaps most easily comprehensible example of this difference is that between expressions involving entities whose epistemological status is conventionally taken to be *mythical* (or even *false*), as in expressions such as *Look! A unicorn!* and *Bob claims he's seen a unicorn*. In the first one, the person uttering the expression is implicitly asserting the actual existence of *a unicorn*, i.e., making an assertion whose truth or falsity, or denotative applicability, can be either affirmed (as being *true*), or questioned and dismissed (as being *false*). In the latter expression, the person uttering the expression is merely asserting that *Bob claims* [*that ...*], and the actual existence of *a unicorn* is something which, at least with respect to the expression itself, is left undecided. In other words, the existence, or epistemological status, of *a unicorn* is deemed extensional in the first expression, and intensional in the second[25].

If a PS is deemed extensional, its *factual existence* is judged as being *entailed* by the expression(s) which it forms part of. That is, an extensional PS is one which is given a *matter-of-fact* status, i.e., presented as being an *actual fact*. An intensional PS, on the other hand, is one whose existence (i.e., epistemological status) is deemed *hypothetical*, or merely *possible*. Given its expressional co-text, its factual existence is **not** entailed, and an intensional PS is, hence, judged as not (directly) concerning the *real*, and/or *factual* world, but merely a *possible* one.

Using so-called *modal verbs* and *adverbs*, such as *could*, *would*, and *perhaps*, could be thought of the archetypical manner in which the intensional epistemological status of a PS is marked[26]. In clauses such as *X* [transitive verb; *eat* / *cook* / etc.] *Y*, insertion of a modal verb and/or

25 See, for example, Dowty, Wall and Peters (1981: 141-154) for a basic introduction to the *extensional – intensional* distinction.

26 See, e.g., Gamut (1991b: 45-46) for a brief description of *intensional constructions* and/or *contexts*, or von Fintel & Heim (2011, chapter 3) for a basic introduction to the semantics of *modality.*

adverb modifying the predicate (i.e., main verb) would thus render the epistemological status of the corresponding PS *hypothetical*, or *possible*. That is, the PS of *X / eat / cook / … Y* would not be presented as a *fact*, but merely as a *possibility*, just as the PS (A) baby + (D) inherit + (A) condition is considered intensional in the expression *The new baby might inherit the condition*. By the same token, PS derived from expressions of temporally future-oriented descriptions, such as (*She is staying with* [*X*]) *after her baby is born*, and *My baby will be safe with them*, are also deemed intensional[27]. Similarly, complement clauses to so-called *intensional verbs*, such as *believe*, *think*, and *want*, also have an intensional epistemological status, as in *We believe the infant was kicked*, where the PS (A) [X] + (D) kick + (A) infant is **not** deemed factual, but merely *hypothetical*, being an *object of belief*[28]. Expressions which could be said to have the illocutionary force of *orders*, *advice*, and/or representing *deontic* modality, are also judged as being intensional, as, for example, *Look at that perfect baby*[*!*], since the PS derived from the occurrence is merely one *preferred* by the producer of the expression (cf. *I want you to look at …*).

The epistemological status of expressions deemed as *questions* is determined as were the expressions *declarative* (see previous section; 3.1.). Hence, a question such as *Would you* [*girls*] *abort the baby or keep the baby?*, whose PS are rendered as (A) [girl] + (D) abort + (A) baby and (A) [girl] + (D) keep + (A) baby, is effectively equated to a declarative like *Girls would abort or keep the baby*, and therefore deemed intensional. Conversely, a question such as *Where was the baby?* is deemed extensional, since it is equated to a declarative expression like *The baby was here* / *there* / [*at location X*].

As made obvious in, for example, the expression *A couple tried to sell an infant*, different PS from the same occurrence may differ in epistemological status:

1) **EX:** (A) couple + (D) try + (A) to sell infant

2) **IN:** (A) [couple] + (D) sell + (A) infant

Since PS1 is derived from an expression given a *matter-of-fact* status it is deemed extensional. Conversely, PS2, being derived from the complement clause of *A couple tried …* , is deemed intensional, since it corresponds to that which was, as it were, *tried* (*to do*), and not what was

27 Nb. PS referring, so to speak, *back in time*, being marked in the past tense are **not** considered *intensional*, but *extensional* in the PSA. See, e.g., von Fintel & Heim (2011, chapter 6) for a basic introduction to the semantics of *tense*.

28 See, e.g., von Fintel & Heim (2011, chapter 2), for a basic introduction to *propositional attitudes*.

actually done.

3.2.3. Analysis of *reference type* of tokens

In the initial qualitative analyses of the material, one of the first things noticed was what seemed to be a pervasive difference in how *infant* and *baby* were being used to refer. That is, there seemed to exist something potentially close to a general difference in what could be called *reference type*, or the kind of conceptual entity (or *category of entities*) being referred to. The analysis of reference type is therefore intended to disclose *how* the instantiated occurrences (i.e., the *tokens*) of *infant* and *baby* are used referentially. All tokens are classified as being instances of one of two reference types, referring either to an *identifiable*, and *specific*, individual (i.e., entity), or a *non-specific* (and exclusively discursive) representation (i.e., instantiation) of a category of individuals. As already mentioned above (section 3.2.), this referential dimension would, just like epistemological status, also seem to be intrinsically connected with affect in more than just a general manner, strongly connoting to core aspects of *concreteness* and *tangibility*.

By means of qualitative readings of each instantiated occurrence's co-text[29], all tokens are judged as being either referentially *specific* or *non-specific* (marked **SP** and **NS**, respectively). That is, the *referential type* of each token is determined based on *how* the token is being used referentially in its co-text: Is it referring to an *identifiable*, and *specific*, individual, or an ***un****identifiable*, *non-specific*, and merely *imagined* instantiation of a set of individuals pertaining *exclusively* to the (conceptual) realm of discourse[30]. Simply put, tokens deemed referentially specific identify (point to and characterise) a *particular individual* (or *set of individuals*[31]), as in, for example, *She assumed she was saying goodbye to her two-pound infant*, whereas tokens judged non-specific identify a conjured up referent which *only* exists discursively, as in, for example, *Come on, how many stories have we covered where Mom fell asleep and the baby wandered off into a pond, into traffic, into a forest?*. Although this referential distinction seems both intuitively and empirically (see section 4) closely related to epistemological status, the two are not the same and their overlap is incomplete (and, furthermore, a token's epistemological status is not necessarily the same as its predicative structure's epistemological status). That is, even though referentially specific tokens for the most part are inherently extensional (and also tend to form part of extensional, more often than intensional, PS), as in *The infant was found by a rural fisherman in this area*, a

29 The COCA provides roughly 150-170 words of co-text for all tokens.
30 See, for example, Langacker (2008: 270-71).
31 Nb. The type referential distinction made between *specific* and *non-specific* reference has **nothing** to do with *singular* vs. *plural*.

referentially specific token **can**, just as well, be intensional, as in [...] *the angel came in a dream to* [*Joseph*] *and told him the pregnancy was an act of God, and the baby* [i.e., *Jesus Christ*] *would save the people from their sins*[32]. Tokens deemed non-specific, however, are **always** inherently intensional (although they can and do form part of extensional PS), as they do not identify any *particular* real, **or** fictive, world individual, but merely a *virtual*, or *imagined*, representation of a category of individuals. In other words, referentially non-specific tokens always refer to abstractions, and can be divided into two principal subtypes, having either *generic* or *virtually instantiative* referents. Tokens which refer to a generic entity thus denote an entire class, or category, of individuals, as in, for example, *All the constituents of human milk are just perfect for the human infant*. A token referring to a virtually instantiative referent, however, instead denotes an *imaginary representation*, or *instantiation*, of such a class, or category, of individuals without actually identifying any one particular individual, as in, for example, *There's a medical doctor, a sailor, a homosexual, an infant, an old woman and so on. So who should be thrown overboard?* (forming part of a moral puzzle).

Since reference type concerns *tokens* and not PS (of tokens), the reference type of an instantiated occurrence of a *type* (i.e., a lexical, and/or clausal, instantiation of *infant* or *baby*) is always constant. That is, although the epistemological status of different PS derived from the same occurrence (i.e., expression) may differ (as described in the previous section; 3.2.2.), an occurrence's reference type is always the same, regardless the epistemological status of the PS which a token forms part of. Returning to the clausal instantiation *A couple tried to sell an infant*, this means that the token's reference type remains the same, even though the epistemological status of the two PS that the token is part of differs:

1) **EX/NS:** (A) couple + (D) try + (A) to sell infant

2) **IN/NS:** (A) [couple] + (D) sell + (A) infant

In other words, the reference type of a token from whose clausal instantiation different predications (PS) may be derived is **not** affected by variance in epistemological status of such predications.

32 Nb. This is by no means intended as a claim on the *actual* epistemological status of Jesus Christ, merely reflecting the conventional (popular) secularly atheist stance in early 21st century Christian Sweden on this matter.

3.3. Material: Rationale for selection and brief description

In order for this thesis' object of study; the (potential) grammatical effects of affect, (and, in particular, its results and conclusions) to be as *generally valid* as possible, the analysed material would have to be as *representative* as possible of linguistic expressions *in general*. Since a linguistic expression's (or composition of expressions', i.e., text's) ontology (including grammar) can be thought of as greatly determined by its *genre*, influencing, among other things, its structure, content, and register (e.g., Langacker 2008: 478), selection of a material for analysis would therefore have to be governed by the degree of *general linguistic representativeness* of the material's genre. Given an understanding of (spoken) *conversation* as being "canonical, providing a basic model that other uses of language mimic and adapt as needed" (Langacker 2008: 459)[33], a material consisting of conversational data would then reasonably be the most suited to meet such a requirement of general linguistic representativeness.

The *Corpus of Contemporary American English* (COCA) provides a 109 million word corpus of *spoken* English, made up of roughly 4 million words from each year between 1990 and 2015, and would, as such, more than likely constitute the world's largest corpus of spoken, conversational, English (COCA, [online]). The COCA's *spoken* corpus is composed of "[t]ranscripts of unscripted conversation from more than 150 different TV and radio programs", such as, for example, *The Today Show* (NBC), *60 Minutes* (CBS), and *The Jerry Springer Show* (syndicated) (COCA, [online])[34]. Although this undoubtedly means that the bulk of the material most probably corresponds to what perhaps could be referred to as *conscious media talk* (including, for example, "relatively little profanity and perhaps avoiding highly stigmatized words and phrases like 'ain't got none'" (COCA on spoken corpus, [online])), the (chief) creator of the COCA still maintains that the spoken material, on a larger scale, "do[es] represent well non-media English" (Davies 2009: 162). That is, even though equating media texts, such as, *news reports* and *talk shows*, with *casual conversation* in terms of genre[35] quite simply is erroneous, it would nonetheless seem reasonable to assume, as Davies claims, that there is a substantial overlap, not least with regard to lexico-grammatical content, between the two types of text. In short, one could at least speculate that the principal difference between the two would have to do with *productive deliberation* and *standardisation*, or lack thereof; casually conversational texts supposedly manifesting higher degrees of general idiosyncrasy, for example with respect to topical scripts, lexico-grammar,

33 Cf., for example, "Since language evolved as speech, in the life of the human species, all writing systems are in origin parasitic on spoken language" (Halliday & Matthiessen 2004: 7).

34 See, for example, Davies (2009) and (2010) for more detailed description of the COCA.

35 *Genre* being understood fundamentally as *a way of using language*, or a *type of* (typically *interactive*) *linguistic activity* (e.g., Langacker 2008: 477-478).

purpose, and so on.

With regard to this thesis' object of analysis; the synonymous pair *infant* and *baby*, no considerable, or only very limited, differences in genre were identified in the COCA's spoken material. In fact, only the *total* material (i.e., the material from which the data analysed in the PSA was obtained) demonstrated tendencies of such differences, whereas none (or no considerable ones) were discerned in the material analysed in the PSA. That is, although it should be pointed out that no *thorough* genre analysis was undertaken, the only *obvious* difference in genre between *infant* and *baby* seemed to be a topical one, exclusively distinguished in the total material, concerning topics which perhaps could be labelled as being *medicine-*, or *health-related*, archetypically involving constructions such as *sudden infant death syndrome* and *infant mortality rate*. This relative sameness of genre can also be seen as reflected in the frequency distribution of the two lexical types' (i.e., *infant* and *baby*) *senses* and *constructions* most commonly discerned. As shown in figures 1 and 2 (below), random samples of 100 instantiated occurrences of *infant* and *baby* manifest striking similarities, not least with regard to the frequency distribution of constructions denoting their *central sense*; 'a very young child' (see section 2.4.). That is, even though the use of *baby* differs from that of *infant* in that *baby* is used, as it were, *polysemously*, as an address of endearment, both *infant* and *baby* are mainly used in constructions in which their instantiations correspond to semantic variations closely connected to the *central sense* of 'a very young [and/or small] child'.

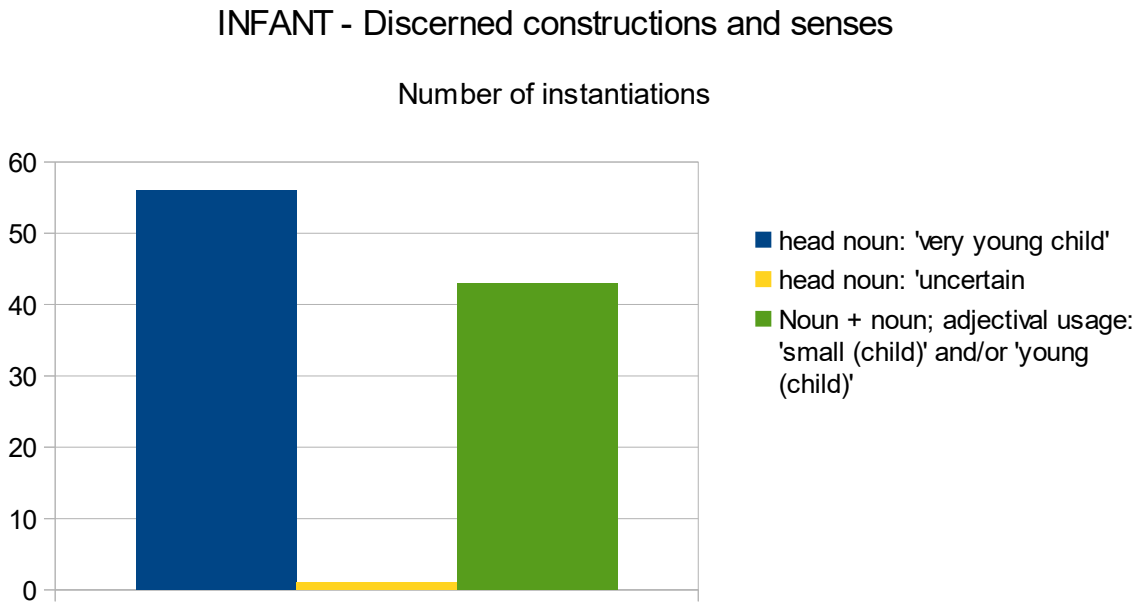

Figure 1 – Random sample of 100 instantiated occurrences of *infant* in the COCA's *spoken* corpus

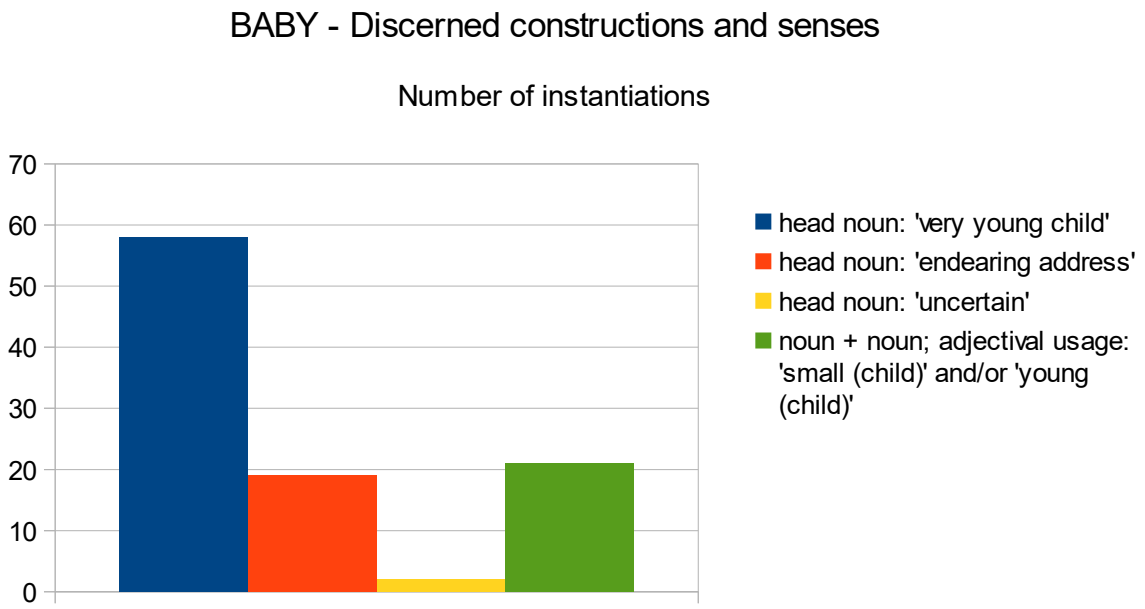

Figure 2 – Random sample of 100 instantiated occurrences of *baby* in the COCA's *spoken* corpus

For example, also constructions categorised as *noun + noun constructions*, in which a token fills an adjectival, or attributive, function (i.e., modifying the *head* noun) demonstrate these semantic similarities, as exemplified in constructions such as *baby pictures*, *infant son / daughter*, and *baby* [*name*] (e.g., *baby Ryan*). In fact, the most salient difference in the COCA's spoken material between *infant* and *baby* instead seems to have to do with the two types' respective total number of instantiated occurrences, there being 17,331 occurrences of *baby*, compared to only 910 for *infant*, corresponding to a *baby*:*infant* ratio of more than 19:1.

Since the semantic overlap (i.e., synonymous relation) between *infant* and *baby* principally, however, concern those constructions in which a token serves as a head noun denoting the central sense of 'a very young child', only tokens which are deemed to be instantiations of this kind are included in the PSA. That is, although the semantic overlap between the two lexical types is substantial (for several of their construction types), it is not that uncommon to come across constructions in which the meaning of a token is difficult to determine with certainty (or easily misjudge), not least due to only *partial* grammatico-semantic overlap (i.e., inconsistent *usage*, or meaning, of one of the two lexical types' constructions), as with, for example, *infant brother* and *baby brother*[36]. Therefore, the 100 instantiated occurrences of *infant* and *baby* (i.e., 100 of *each*

36 Whereas *infant brother* would seem to be exclusively used to denote something like 'a brother '[t]hat is an infant, or like an infant", *baby* in *baby brother* would instead seem to be variously used to "designat[e] a younger sibling" as well as "a very young or newborn child" (OED on *infant*, and *baby*, respectively, [online]).

lexical type) obtained from the COCA's spoken material for the purpose of being analysed in the PSA are exclusively composed of tokens corresponding to head nouns whose meaning has been ascertained to denote the two types' central sense of 'a very young child'. All data analysed in the PSA have, hence, been subject to qualitative readings focused on identifying and ascertaining, not only the sense, but also the textual status, of each instantiated occurrence; only including *spontaneous*, *non-scripted*, text (i.e., discarding all *quotes*, *voice-overs*, etc.)[37]. In addition, no more than 2 occurrences from the same source on the same date have been included in the material analysed in the PSA, in order to limit the risk of a particular topic of a particular text (or rather, source on a given date) excessively influencing the results of the analysis.

4. Results

The Results section provides data on the distribution of the three means, or forms (i.e., *parameters*), of *referential grounding* described in section 3.2. (and its subsections) for both *infant* and *baby*. The data can be seen as being of two kinds: (1) describing the *general* distribution of each form of referential grounding for *infant* and *baby*, respectively and comparatively; and (2) describing the *relative* distribution of *epistemological status* and *reference type* to the distribution of *semantic prosody* for *infant* and *baby*, respectively and comparatively. In other words, the distributions of epistemological status and reference type are relativised to the distribution of semantic prosody, in order to see how the first two may correlate with the third. The results, hence, provide data on both the individual and comparative referentially parametrical distribution of *infant* and *baby*, as well as, on how the distribution of semantic prosody, or the *good – bad* parameter, relate to that of both epistemological status and reference type.

Throughout this and the following two sections (i.e., sections 5. and 6.), epistemological status and reference type are collectively referred to as ***modal*** *parameters*, and separated from semantic prosody (even though semantic prosody is obviously also considered a kind of *modality*, or referential grounding, as described in section 2.3.). The distinction is, thus, merely a formal one, intended only to simplify the relativisation of epistemological status and reference type to semantic prosody. The values of each modal parameter are, in turn, collectively referred to as *modal values*. Hence, the referential grounding of each PS is given relative to two modal parameters: epistemological status and reference type, each with two possible modal values: *extensional* or *intensional* for epistemological status, and *specific* or *non-specific* for reference type. Strictly

37 For every token, the COCA's *spoken* material provides an *expanded context* consisting of between roughly 150 to 170 words.

speaking, however, only epistemological status concerns the modality of PS, since reference type relates to the *referential usage*, or modality, of *tokens*. Together, the two modal values describing the referential grounding of each PS are referred to as a *modal construction type*. Hence, modal construction types are the different value combinations of epistemological status and reference type (i.e., modal values) which all PS manifest. Essentially, there are four possible combinations of modal values; *extensional-specific*, *extensional-non-specific*, *intensional-specific*, and *intensional-non-specific*, although, variations, or deviations, due to the *uncertainty* of a particular modal value, do occur.

4.1. Distribution of modal values and modal construction types for *infant* and *baby*

The total number of PS analysed in the PSA are essentially the same for *infant* and *baby*, with totals of 166 and 161 PS, respectively. With the exception of the (A) + (A) PS type, also across the different PS types analysed, the number of PS only differs at most around 20% between *infant* and *baby* (or 27% more for *infant* than for *baby*, for *non-processual* (A) + (D) + (A) type PS). The total number of PS analysed in the PSA for *infant* and *baby* are given in table 1 according to PS types.

Table 1: Number of PS per PS type

	infant	***baby***
(A) + (A)	29	12
Non Processual		
(A) + (D)	47	54
(A) + (D) + (A)	23	18
Processual		
object position	52	59
subject position	15	18
Total	**166**	**161**

Adding epistemological status to the equation, an indication of two seemingly opposing distributive tendencies of epistemological status for *infant* and *baby* emerges. As shown in table 2, there would seem to exist a tendency for *baby* to occur more often in extensional than in intensional PS, with a factor of exactly 1.5. Although the epistemological preferences of *processual* and *non-processual* type PS differ (as categories of PS), the two most extensive PS types for *baby*; non-processual (A) + (D) type PS (corresponding to 34% of all its PS), and processual object position type PS (corresponding to 37% of all its PS), both manifest a distributive preference for extensionality (albeit only slightly for the latter) and have together a distribution of epistemological status corresponding to 61% extensional PS and 39% intensional PS (i.e., mirroring the numbers for *baby* as a whole).

Table 2: Number of PS per PS type and epistemological status

	infant	***baby***
	EX / IN (%)	**EX / IN (%)**
(A) + (A)	21 / 8 (72% / 28%)	6 / 6 (50% / 50%)
Non Processual		
(A) + (D)	22 / 23 (49% / 51%)*	38 / 16 (70% / 30%)
(A) + (D) + (A)	8 / 15 (35% / 65%)	14 / 4 (78% / 22%)
Total	**30 / 38 (44% / 56%)**	**52 / 20 (72% / 28%)**
Processual		
object position	21 / 30 (41% / 59%)**	31 / 28 (53% / 47%)
subject position	7 / 8 (47% / 53%)	7 / 11 (39% / 61%)
Total	**28 / 38 (42% / 58%)**	**38 / 39 (49% / 51%)**
ALL PS	**79 / 84 (49% / 51%)**	**96 / 65 (60% / 40%)**

*Non-processual (A) + (D) for *infant*: For 2 PS epistemological status is deemed uncertain.

**Processual object position for *infant*: For 1 PS epistemological status is deemed uncertain.

Conversely, *infant* would instead seem to favour epistemologically intensional PS, even though considering *all* of its PS gives an entirely even distribution of epistemologically intensional and extensional PS (fundamentally because the strong preference among (A) + (A) type PS for extensional epistemological status). That is, if one only considers processual and non-processual type PS (together corresponding to 82% of all PS for *infant*), the *extensional*:*intensional* ratio for *infant* would instead be 58:76, or 43% extensional PS compared to 57% intensional PS, resulting in an epistemological preference for *infant* completely opposite to that of *baby*.

Also the frequency distribution of reference type demonstrates completely opposite preferences for *infant* and *baby*, as shown in figure 1. Since reference type is *token specific* (see section 3.2.3.), its distribution exactly corresponds to that of the 100 instantiations (each) of *infant* and *baby*, and is independent from the distribution of PS. As made obvious in figure 1, *infant* is mainly (by a ratio of nearly 3:1) used non-specifically, whereas the near opposite holds for *baby*, manifesting a distributive preference for referentially specific usage by a factor of almost 2.

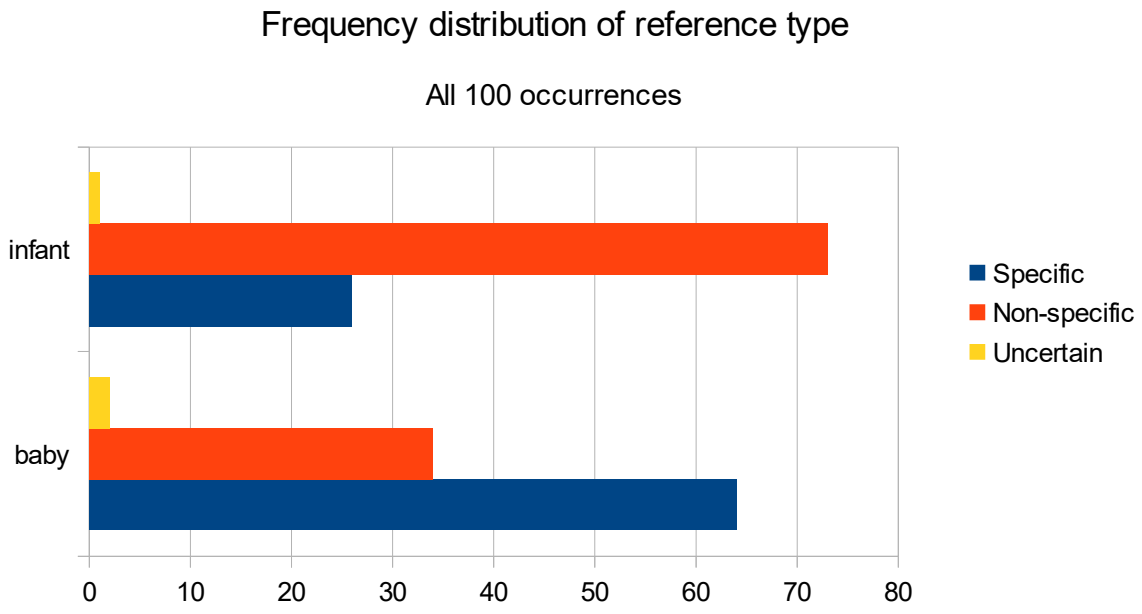

Figure 1: Frequency distribution of *reference type* for *infant* and *baby*

The frequency distribution of modal construction types can overall be seen as making the epistemological and type referential tendencies pointed out above even clearer. For *infant*, the preference for both intensional epistemological status and non-specific referentiality becomes obvious, as the *intensional-non-specific* construction type corresponds to 43% of all PS, as shown in figure 2 and table 3.

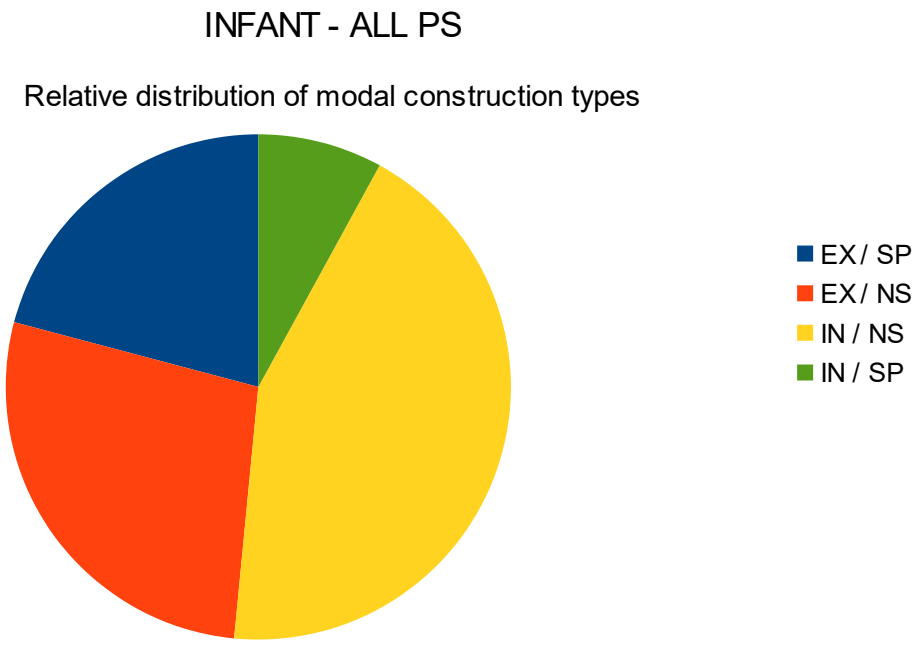

Figure 2: Relative distribution of *modal construction types* for *infant*

Table 3: Distribution of *modal construction types* for *infant*
Number of PS (percentage of total number of PS)

	EX / SP	EX / NS	IN / NS	IN / SP
ALL PS	34 (21%)	45 (28%)	71 (43%)	13 (8%)

For *baby*, the same can be said to be true for its preference for extensional epistemological status and specific referentiality, as the *extensional-specific* construction type comprises more than half, or 52%, of all of *baby*'s PS[38], as shown in figure 3 and table 4. It should (however) also be pointed out that there are substantial differences in the distribution of modal construction types between different PS types for both *infant* and *baby*. For example, processual type PS demonstrate a considerably much higher distribution of *intensional-specific* construction types than non-processual type PS, for both *infant* and *baby*. Also worth mentioning is the huge preference for the *extensional-non-specific* construction type for the (A) + (A) PS type for *infant*, resulting in the considerably much higher frequency distribution of this construction type for *infant* as a whole, as compared to when considering in isolation processual and non-processual type PS for *infant*[39] (cf.

38 It should be mentioned, though, that the relative distribution of specific referentiality is slightly higher when considering all of *baby*'s PS (67%), than when considering *baby*'s *instantiations* (64%).

39 For *infant*, the *extensional-non-specific* modal construction type comprises 20 of 29, or 69% of, PS for the (A) + (A) PS type. This very high frequency distribution for the (A) + (A) PS type can be said to, so to speak, *drive up* the

section 4.2.1. and its subsections).

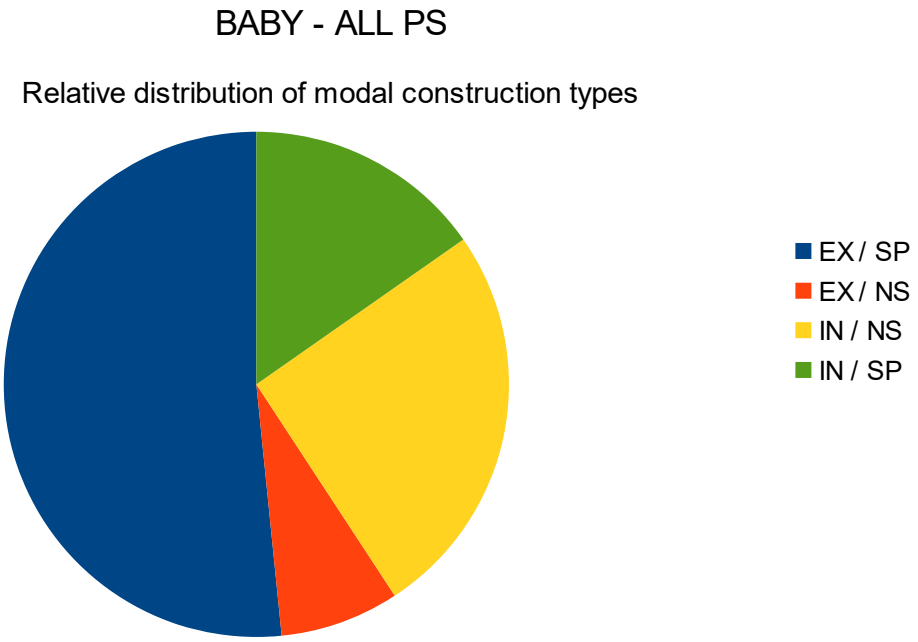

Figure 3: Relative distribution of *modal construction types* for *baby*

Table 4: Distribution of *modal construction types* for *baby*
Number of PS (percentage of total number of PS)

	EX / SP	EX / NS	IN / NS	IN / SP
ALL PS	81 (52%)	12 (8%)	40 (25%)	24 (15%)

Since measuring the frequency distribution of modal construction types effectively corresponds to two-dimensionally representing the distribution of modal values, it provides a means to construe the type referential and epistemological preferences of *infant* and *baby* as relativised to one another. That is, the distribution of one kind of modal value can be interpreted relative to the distribution of the other. As is shown in table 5, non-specific referentiality is not only, by far, the most common type referential value for *infant* as a whole, but also the most common type referential value for both *infant*'s epistemologically intensional, as well as extensional, construction types, comprising 84 and 57 percent of the two epistemological values' respective construction

overall (for all PS types) frequency distribution of the *extensional-non-specific* construction type , resulting in, among other things, an overall frequency distribution of 28%, as shown in table 3. However, if one disregards the (A) + (A) PS type, and instead only considers processual and non-processual type PS (which together make up 82% of all of *infant*'s PS), the frequency distribution of the *extensional-non-specific* construction type is considerably lower, corresponding to only 19% of all processual and non-processual type PS for *infant*.

types[40]. Conversely, *infant*'s practically even distribution of epistemological status is reflected in the opposing epistemological preferences of its referentially specific and non-specific construction types. Whereas referentially non-specific construction types show a clear preference for intensional epistemological status (61% being epistemologically intensional), the opposite holds for referentially specific construction types, which instead favour extensional epistemological status (72% being epistemologically extensional). In other words, *infant* is overall primarily type referentially non-specific, and typically (with roughly a 3:2 ratio) its referentially non-specific instantiations form part of epistemologically intensional PS. However, when being instantiated as a referentially specific token, *infant* is instead most often used in epistemologically extensional PS.

Table 5: Relativisation of modal values for *infant*

Type referential composition of epistemological values	**SP / NS (%)**
Epistemologically *extensional*	**43 / 57**
Epistemologically *intensional*	**16 / 84**

Epistemological composition of type referential values	**EX / IN (%)**
Type referentially *specific*	**72 / 28**
Type referentially *non-specific*	**39 / 61**

For *baby*, the relativisation of modal value frequency distributions (i.e., frequency distribution of modal construction types) points to correlations both between extensional epistemological status and specific referentiality, as well as intensional epistemological status and non-specific referentiality, as indicated in table 6. That is, the frequency distribution of modal construction types shows that not only extensionality and specificity correlate, but also intensionality and non-specificity. Although *baby* as a whole demonstrates a clear preference for type referential specificity, factoring in epistemological status shows that this actually only holds true for extensional construction types (being 87% referentially specific), whilst intensional construction types instead favour non-specific referentiality with a ratio of more than 3:2 (62% of

40 Considering **only** processual and non-processual PS, however, the SP:NS ratio for *infant*'s epistemologically extensional PS changes completely, instead yielding a 57:43 ratio in favour of specific referentiality, whilst the corresponding ratio for intensional PS does not change at all (also demonstrating a SP:NS ratio of 16:84).

intensional construction types being referentially non-specific). Similarly, referentially specific and non-specific instantiations of *baby* demonstrate opposing epistemological preferences (each with a ratio of more than 3:1), even though *baby* as a whole has a clear (3:2) preference ratio for extensional epistemological status (table 2, above). In fact, referentially specific and non-specific tokens of *baby* manifest exactly the same, although mutually opposite, degree of epistemological preference; referentially specific instantiations being 77% extensional, and non-specific ones 77% intensional. Altogether, *baby* would thus mainly be referentially specific and form part of epistemologically extensional PS (as indicated above; figure 1 and table 2), yet at the same time manifesting a clear instantiative correlation between epistemological status and reference type, resulting in the *intensional-non-specific* construction type being the second most common one (after the *extensional-specific*).

Table 6: Relativisation of modal values for *baby*

Type referential composition of epistemological values	**SP / NS (%)**
Epistemologically *extensional*	**87 / 13**
Epistemologically *intensional*	**38 / 62**

Epistemological composition of type referential values	**EX / IN (%)**
Type referentially *specific*	**77 / 23**
Type referentially *non-specific*	**23 / 77**

4.2. Distribution of modal values and modal construction types per semantic prosody for *infant* and *baby*

In analysing the distribution of modal values and construction types *per semantic prosody*, only processual and non-processual type PS are considered. Since (A) + (A) type PS typically correspond to deconstructions such as, for example, **(A)** [FEMALE] + **(A)** *token*, derived from expressions such as, for example, *As an infant, she …* , or *she is a baby*, semantic prosody seems generally not to be applicable to (A) + (A) type PS. Therefore, only processual and non-processual type PS are

considered in the analysis of the distribution of modal values and construction types per semantic prosody.

The numbers given below are calculated by applying the formula (number of *core* PS + (number of *peripheral* PS / 2)), and, hence, yield results which do not exclusively consist of integers. Since judging a PS as prosodically peripheral results in it being *ambivalent* in terms of its *registered* semantic prosody; it being either (1) *possibly inconspicuous* and *possibly positive*, or (2) *possibly inconspicuous* and *possibly negative*, the number of *registered* prosodically peripheral PS is double that of the *actual* number of PS which it is derived from (and corresponds to), and is therefore divided by two. That is, although this formula does not provide the actual number of PS for the three prosodic values (*inconspicuous*, *negative*, and *positive*), it does at least result in the total number of PS being correct, and, hence, guarantees (a) the accuracy of the relative distribution of any modal construction type not having any PS deemed prosodically peripheral, as well as, (b) statistically equal estimates of those construction types that do have prosodically peripheral PS[41].

The frequency distribution of *prosodic values* for *infant* and *baby* are given in tables 7 and 8, respectively. In addition to the relative distribution of each prosodic value to the total number of PS (given in percentages), tables 7 and 8 also provide the number of PS for each construction type per prosodic value (according to the formula described above). In addition to the excluded (A) + (A) type PS, another 3 PS for *infant*, and 4 PS for *baby*, are also removed from consideration, since these all have at least one modal value deemed *uncertain*[42]. This means the number of PS considered in tables 7 and 8 is reduced from 166 to 134 for *infant*, and from 161 to 145 for *baby*, compared to the numbers given in table 1 (in section 4.1.).

41 That is, if a PS is deemed *prosodically peripheral*, i.e., *possibly* being either *positive*, or *negative*, that PS will be registered as **both** 'possibly positive / negative' and 'possibly inconspicuous'. Considering PT in isolation, this *double-registration* does not pose a problem. However, when calculating the *relative* frequency distribution of modal construction types per semantic prosody, this kind of double-registration means that construction types with fewer (than average) prosodically peripheral PS become underrepresented (and vice versa). For example, if the total number of PS is 100, and the four construction types each have 20 *core* PS, and two construction types *each* have another 20 PS judged as peripheral, the number of *registered* PS reaches 120. This, however, would result in the two construction types *without* any peripheral PS being relatively underrepresented, since their 20 core PS (each) would correspond to only 16.66%, instead of 20 percent, of the registered number of PS. Hence, in order to avoid having to distinguish between *total* and *registered* number of PS, a formula such as the one given provides a simple (albeit *simplistic*) means to maintain (or secure, at least to *some* degree) the integrity of a set's *relative distribution* of *actual* PS.

42 For *infant*, there are 3 PS deemed both epistemologically and type referentially *uncertain* (marked ' ? / ? '), and for *baby* there are 3 PS judged 'EX/ ?', and 1 PS judged 'IN/ ?'.

Table 7: Frequency distribution of *prosodic values* for *infant*

***Processual* and *non-processual* type PS**

(total number of *core* prosodic PS + (total number of prosodically *peripheral* PS / 2)) = 134 PS

	EX/SP	EX/NS	IN/NS	IN/SP	% of total number of PS
Positive prosody	0	2.5	4.5	0	**5.22%**
Negative prosody	10	4.5	32.5	10	**42.54%**
Inconspicuous prosody	23	18	27	2	**52.24%**

Table 8: Frequency distribution of *prosodic values* for *baby*

***Processual* and *non-processual* type PS**

(total number of *core* prosodic PS + (total number of prosodically *peripheral* PS / 2)) = 145 PS

	EX/SP	EX/NS	IN/NS	IN/SP	% of total number of PS
Positive prosody	12.5	2	8	6	**19.66%**
Negative prosody	10.5	2.5	4.5	4	**14.83%**
Inconspicuous prosody	54	5.5	24.5	11	**65.52%**

As shown in tables 7 and 8, the set of PS deemed prosodically inconspicuous comprises more than half of all (processual and non-processual) PS for both *infant* and *baby*. For *baby*, the set of prosodically inconspicuous PS is more than 3 times larger than both that of the prosodically negative, and that of the prosodically positive, PS (individually), comprising nearly two thirds of all PS. For *infant*, however, the set of prosodically inconspicuous PS is only about 20% larger than that of prosodically negative PS, and together these two sets make up almost all of *infant*'s PS, whilst the set of prosodically positive PS only constitutes roughly 5 percent of the total number of PS[43]. For *baby*, the number of prosodically positive and prosodically negative PS can instead be said to be fairly equal (although there are more than 30% more prosodically positve than negative PS), compared to the number of prosodically inconspicuous PS.

43 Since the set of prosodically positive PS for *infant* merely corresponds to 4 core and 6 peripheral PS, any conclusions drawn from this set should obviously be taken with a good grain of salt.

Since tables 7 and 8 do not provide the distribution of core and peripheral PS separately, it may also be worth mentioning that *infant* and *baby* show similar distributive patterns (i.e., *core*:*peripheral* PS ratios) for both prosodically conspicuous and inconspicuous PS. For prosodically positive PS, the *core*:*peripheral* PS ratio is 0.56 for *baby*, and 0.67 for *infant* (although, of course, *infant* only has 4 core and 6 peripheral PS registered as prosodically positive). For prosodically negative PS, on the other hand, the ratios are reversed, i.e., there are more core than peripheral PS, with a *core*:*peripheral* PS ratio of 3.8 for *baby*, and 13.75 for *infant*. The same relation also holds for prosodically inconspicuous PS, there being more core than peripheral PS for both *infant* and *baby*, respectively demonstrating ratios of 6.5 and 2.47.

As shown in tables 7 and 8, the *relative* distribution of modal construction types differs between prosodic values for both *infant* and *baby*. These differences in the relative distribution of construction types can be seen as being illuminated in figures 5 and 6, providing the relative distribution of modal construction types for the two prosodic values inconspicuous and negative for *infant*[44], and figures 7, 8, and 9, showing the relative distribution of modal construction types for all three prosodic values (*inconspicuous, negative, and positive*) for *baby*.

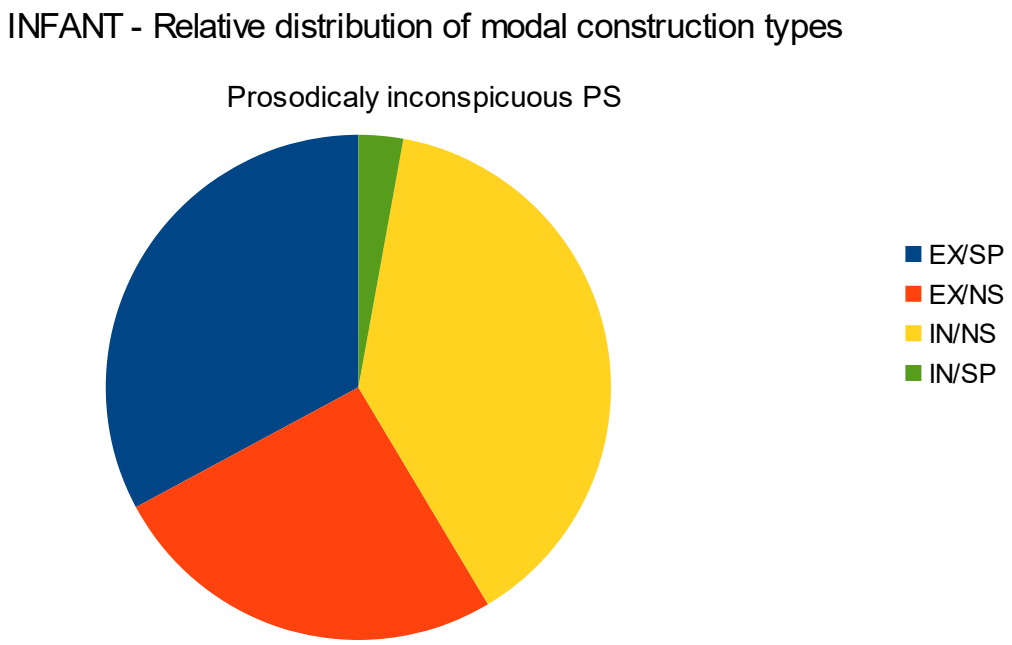

Figure 5: Relative distribution of modal construction types for prosodically *inconspicuous* PS for *infant*

44 Since the number of prosodically *positive* construction types only consists of 4 *core* and 6 *peripheral* PS for *infant*, prosodically *positive* PS are disregarded, the set being seen as too small to constructively consider.

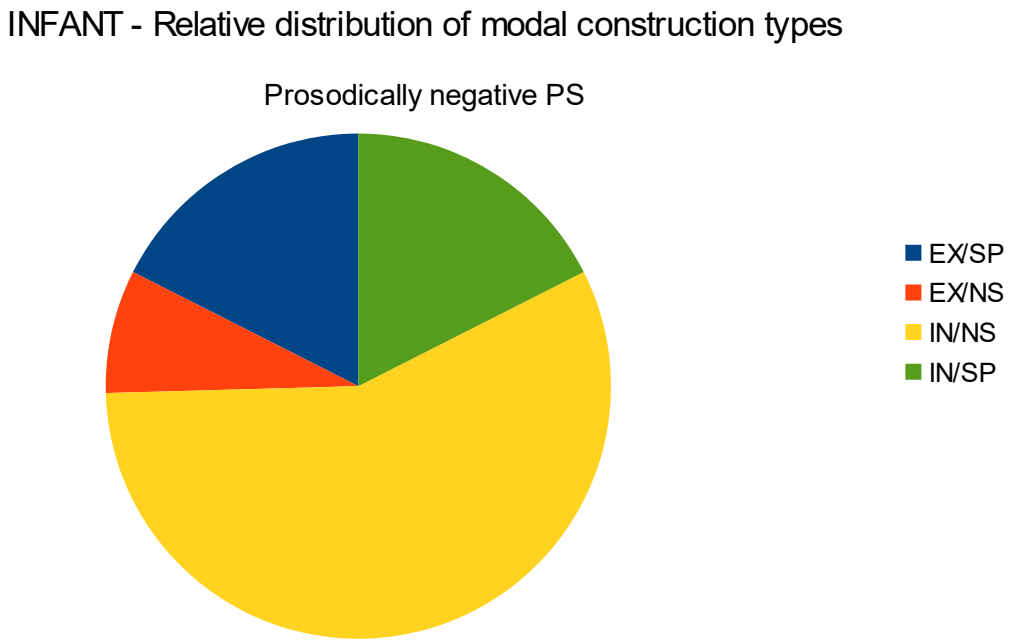

Figure 6: Relative distribution of modal construction types for prosodically *negative* PS for *infant*

As made clear by comparing figure 5 and 6, there does for *infant* seem to exist a correlation between conspicuous semantic prosody and epistemological status. More precisely, the *relative* distribution of epistemologically intensional construction types is evidently higher for prosodically negative than for prosodically inconspicuous PS. Interestingly, the relative distribution of reference type seems unaffected by the differing prosodic values, even though the type referential composition in the distribution of epistemological status clearly changes as a result of prosodic variance, particularly for epistemologically intensional PS.

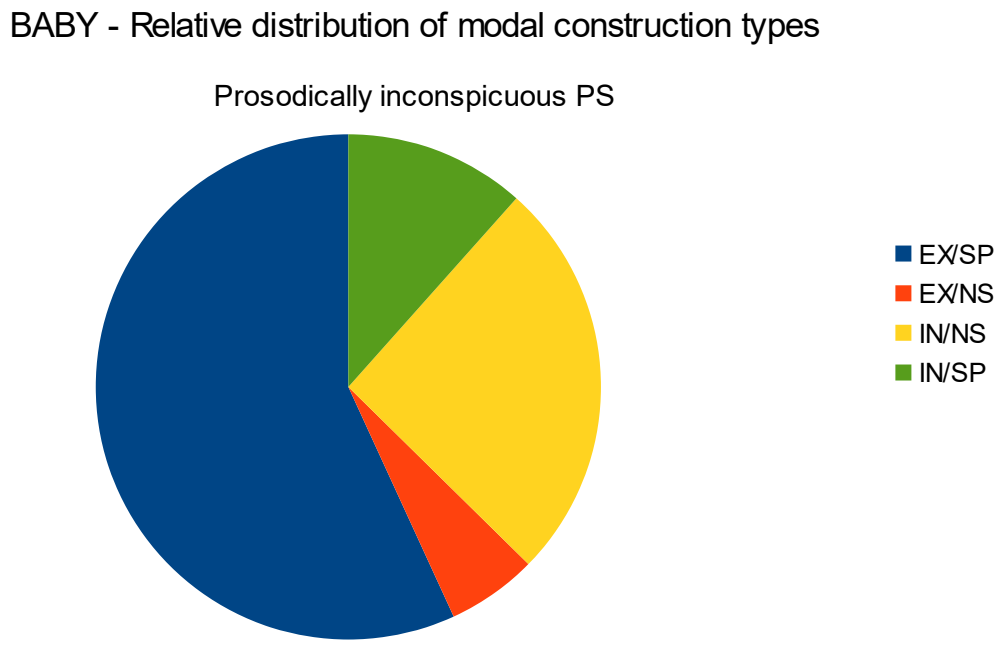

Figure 7: Relative distribution of modal construction types for prosodically *inconspicuous* PS for *baby*

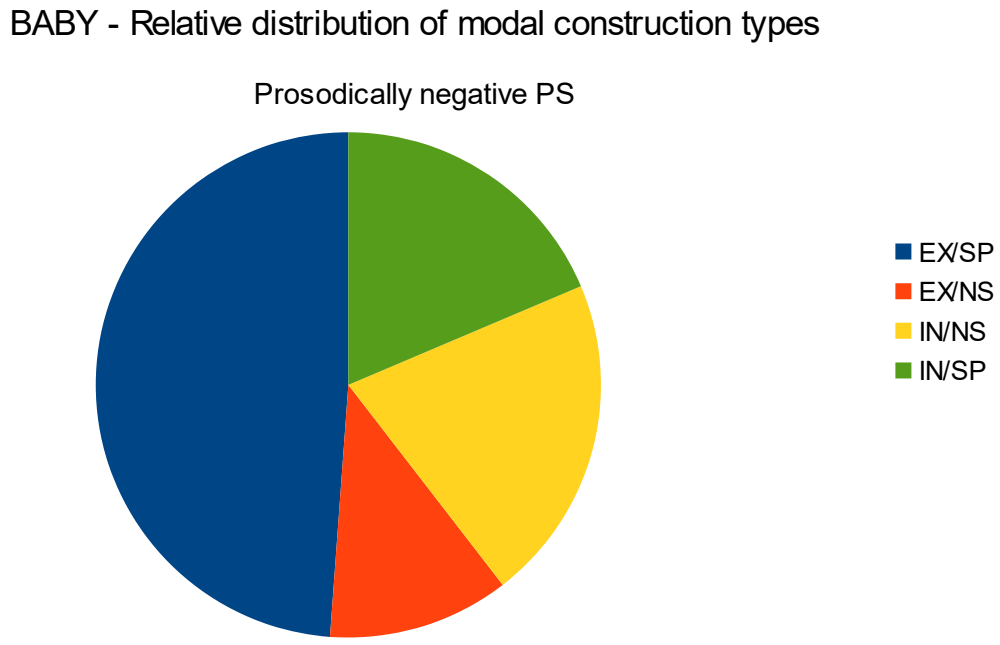

Figure 8: Relative distribution of modal construction types for prosodically *negative* PS for *baby*

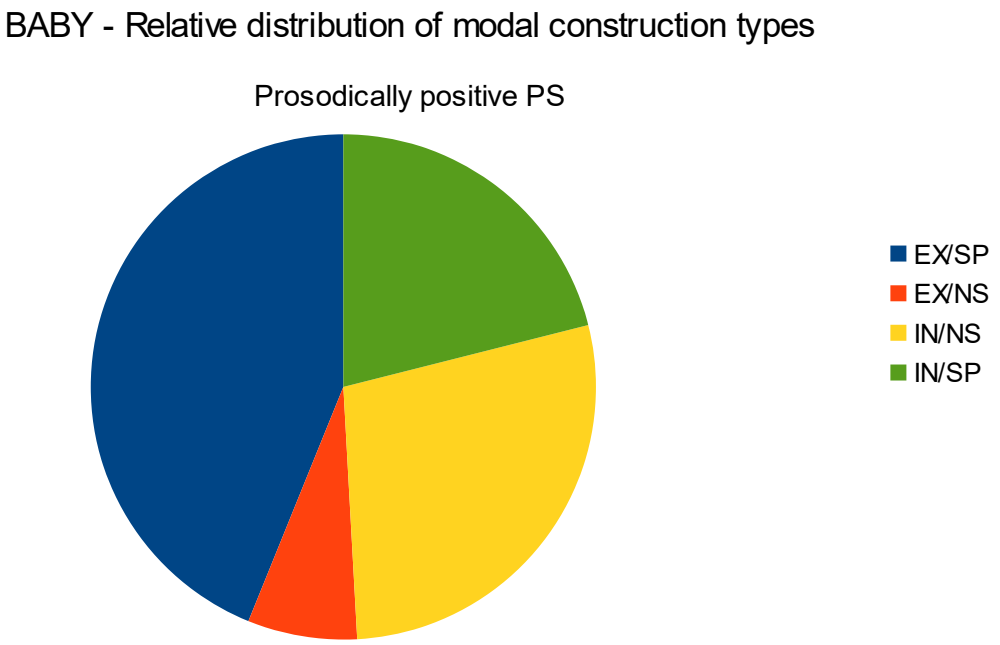

Figure 9: Relative distribution of modal construction types for prosodically *positive* PS for *baby*

Figures 7, 8, and 9 demonstrate a considerably less strong correlation between prosodic conspicuity and increasing intensionality for *baby*, than figures 5 and 6 do for *infant*, although there does seem to exist such a correlation also for *baby* (at least with respect to the difference between prosodically inconspicuous and positive PS, and the epistemological composition of type referentially specific construction types). Just as for *infant*, figures 7, 8, and 9 point to no (or very little) correlation between reference type and changing prosodic values for *baby*. Overall, figures 7, 8, and 9 would seem to indicate less of a (clear) relationship between epistemological status and semantic prosody for *baby*, than what figures 5 and 6 could be taken to suggest is the case for *infant*.

4.2.1. Relative distribution of modal values and construction types per prosodic value for *infant*

Sections 4.2.1.1. to 4.2.1.4. provide short commentaries on the numbers (data) provided in table 9; the relative distribution of modal construction types *per prosodic value* for *infant*. As in the previous section, the set of prosodically positive PS is largely disregarded due to the very limited number of PS that it comprises. Tables 10 and 11 (below) provide detailed relativisations of the distribution of modal values given in table 9.

Table 9: Relative distribution of modal construction types per *prosodic value* for *infant*

***Processual* and *non-processual* type PS**

((total number of *core* prosodic PS + (total number of prosodically *peripheral* PS / 2)) = 134 PS)

	EX / SP	EX / NS	IN / NS	IN / SP
Inconspicuous prosody (Total number of PS = 70)	33% (23)	26% (18)	38% (27)	3% (2)
Negative prosody (Total number of PS = 57)	17.5% (10)	8% (4.5)	57% (32.5)	17.5% (10)
Positive prosody (Total number of PS = 7)	0% (0)	36% (2.5)	64% (4.5)	0% (0)

4.2.1.1. Distribution of epistemological status per prosodic value

For *infant*, prosodically conspicuous (i.e., both positive and negative) PS demonstrate a preference for intensional epistemological status with a ratio of up to as much as 3:1, whereas the opposite holds for prosodically inconspicuous PS, instead manifesting a clear preference for extensional epistemological status. For PS deemed prosodically negative, 75% are epistemologically intensional, whilst the corresponding number for prosodically positive PS is 64%. For prosodically inconspicuous PS, the frequency distribution is the opposite, with an *extensional*:*intensional* ratio of almost 3:2; 59% of PS being extensional and 41% being intensional.

4.2.1.2. Distribution of reference type per prosodic value

The distribution of reference type per prosodic value gives identical frequency distributions for prosodically inconspicuous and negative PS, respectively corresponding to *specific*:*non-specific* ratios of 36:64 and 35:65. For prosodically positive PS, this general preference for non-specific referentiality is even stronger, with all (although the set only consits of 4 core and 6 peripheral) PS being type referentially non-specific.

Table 10: Epistemological composition of type referential values per prosodic value for *infant*

Prosodically inconspicuous PS	**EX / IN (%)**
Type referentially *specific*	**92 / 8**
Type referentially *non-specific*	**40 / 60**

Prosodically negative PS	**EX / IN (%)**
Type referentially *specific*	**50 / 50**
Type referentially *non-specific*	**12 / 88**

4.2.1.3. Epistemological composition of type referential values per prosodic value

Just as for *infant* as a whole (table 5, section 4.1.), the epistemological composition of type referential values *per prosodic value* would seem to suggest seeming correlations between type referential specificity and epistemological extensionality, as well as, type referential non-specificity and epistemological intensionality. However, in addition to these modal value correlations, the numbers in table 10 also indicate a seeming correlation between prosodic conspicuity and an increasing distributive preference for intensional epistemological status, for referentially specific and non-specific construction types alike. That is, for both referentially specific and non-specific construction types, PS deemed prosodically negative manifest considerably stronger preferences for epistemological intensionality than their prosodically inconspicuous counterparts.

4.2.1.4. Type referential composition of epistemological values per prosodic value

Since (A) + (A) type PS are **not** considered in the analysis of the distribution of modal values and construction types per semantic prosody, the type referential composition of the epistemological

status of *infant*'s modal construction types given in table 11 differs fundamentally from that given in table 5 (in section 4.1.). That is, as pointed in section 4.1., the huge preference among *infant*'s (A) + (A) type PS for the *extensional-non-specific* construction type makes the *overall* type referential composition of epistemological status for *infant* differ significantly from that of processual and non-processual type PS considered in isolation. In fact, and as shown in table 11, there would also for infant (just as for baby) seem to exist a correlation between epistemological extensionality and type referential specificity, as well as, epistemological intensionality and type referential non-specificity. Interestingly, there would also seem to exist a correlation between prosodic conspicuity and an increasing distributive preference for referential specificity. That is, for both epistemologically extensional and intensional construction types, a prosodically negative value results in an increasing preference for type referential specificity.

Table 11: Type referential composition of epistemological values per prosodic value for *infant*

Prosodically inconspicuous PS	**SP / NS (%)**
Epistemologically *extensional*	**56 / 44**
Epistemologically *intensional*	**7 / 93**

Prosodically negative PS	**SP / NS (%)**
Epistemologically *extensional*	**69 / 31**
Epistemologically *intensional*	**24 / 76**

4.2.2. Relative distribution of of modal values and construction types per prosodic value for *baby*

Sections 4.2.2.1. to 4.2.2.4. provide short commentaries on the numbers (data) provided in table 12; the relative distribution of modal construction types per prosodic value for *baby*. Tables 13 and 14 (below) provide detailed relativisations of the distribution of modal values given in table 12.

Table 12: Relative distribution of modal construction types per *prosodic value* for *baby*

***Processual* and *non-processual* type PS**

((total number of *core* prosodic PS + (total number of prosodically *peripheral* PS / 2)) = 145 PS)

	EX / SP	EX / NS	IN / NS	IN / SP
Inconspicuous prosody (Total number of PS = 95)	57% (54)	6% (5.5)	26% (24.5)	11% (11)
Negative prosody (Total nuber of PS = 21.5)	49% (10.5)	11.5% (2.5)	21% (4.5)	18.5% (4)
Positive prosody (Total number of PS = 28.5)	44% (12.5)	7% (2)	28% (8)	21% (6)

4.2.2.1. Distribution of epistemological status per prosodic value

For *baby*, prosodically inconspicuous PS manifest a preference ratio for extensional epistemological status very similar to that of *infant* (see section 4.2.1.1.), with 63% of prosodically inconspicuous PS being epistemologically extensional for *baby*. Unlike for *infant*, however, the prosodically conspicuous PS do not demonstrate an epistemological preference for intensionality (but, if any, for extensionality). For *baby*, prosodically negative PS show a just as strong a preference for extensional epistemological status as prosodically inconspicuous PS, with 61% of prosodically negative PS being extensional, whilst prosodically positive PS are equally extensional (51%) and intensional (49%).

4.2.2.2. Distribution of reference type per prosodic value

Interestingly, all three prosodic values demonstrate strikingly similar type referential distributive patterns for *baby*, with all three of them having a preference ratio of roughly 2:1 in favour of referential specificity (68, 67, and 65 percent being type referentially specific, for prosodically inconspicuous, negative, and positive PS, respectively). Compared to *infant*, *baby* thus manifest a completely *opposite* distributive pattern for reference type, a pattern which, furthermore, is consistent regardless of varying prosodic values.

4.2.2.3. Epistemological composition of type referential values per prosodic value

As shown in table 13, factoring in semantic prosody into the epistemological composition of the type referential values for *baby* can by and large be said to point to the same correlation between specificity and extensionality, and non-specificity and intensionality, manifested by *baby* as a whole mentioned in section 4.1. (see table 6). That is, semantic prosody does not seem to impact said correlations other than in terms of *degree*, as the *polarity* of epistemological preferences for referentially specific and non-specific construction types do not differ between prosodic values. There is, however, a decrease in the relative degree of that polarity for prosodically conspicuous PS compared to inconspicuous PS. This is particularly true for referentially specific construction types which are noticeably less extensional, and/or more intensional, as the prosodic value changes from inconspicuous to negative and/or positive. With regard to type referentially non-specific construction types, the same tendency would seem to hold for at least prosodically negative PS, although it must be pointed out that that set is very small (consisting of only 6 core and 2 peripheral PS (cf. table 12)), and, consequently, any conclusions drawn from it are fraught with a great deal of uncertainty.

Table 13: Epistemological composition of type referential values per prosodic value for *baby*

Prosodically inconspicuous PS	**EX / IN (%)**
Type referentially *specific*	**83 / 17**
Type referentially *non-specific*	**18 / 82**

Prosodically negative PS	**EX / IN (%)**
Type referentially *specific*	**72 / 28**
Type referentially *non-specific*	**36 / 63**

Prosodically positive PS	**EX / IN (%)**
Type referentially *specific*	**69 / 31**
Type referentially *non-specific*	**20 / 80**

4.2.2.4. Type referential composition of epistemological values per prosodic value

Also with regard to the type referential composition of epistemological values, the above (in section 4.2.2.3.) mentioned correlations between specificity and extensionality, and non-specificity and intensionality, hold true for all three prosodic values, albeit only marginally for intensional construction types with a negative semantic prosody. That is, as shown in table 14, regardless the prosodic value, extensional construction types prefer type referential specificity, whilst intensional construction types prefer type referential non-specificity. However, similar to what is the case with

the epistemological composition of reference type, prosodically conspicuous PS manifest a less strong preference for their correlative modal (type referential) value than prosodically inconspicuous PS. In fact, for both prosodically negative and positive PS, intensional construction types demonstrate a considerably more even type referential composition than their prosodically inconspicuous intensional counterparts.

Table 14: Type referential composition of epistemological values per prosodic value for *baby*

Prosodically inconspicuous PS	**SP / NS (%)**
Epistemologically *extensional*	**91 / 9**
Epistemologically *intensional*	**31 / 69**

Prosodically negative PS	**SP / NS (%)**
Epistemologically *extensional*	**81 / 19**
Epistemologically *intensional*	**47 / 53**

Prosodically positive PS	**SP / NS (%)**
Epistemologically *extensional*	**86 / 14**
Epistemologically *intensional*	**43 / 57**

5. Discussion

The Discussion section comprises two separate but related subsections. First, in section 5.1., the results presented in the Results section (section 4) are discussed in relation to the thesis' object of study; the potential grammatical effects of affect. Second, in section 5.2., certain issues with the theoretical framework and method used in the PSA's analysis of semantic prosody are discussed in some detail.

5.1. General discussion of the results of the PSA

Given what could be referred to as a *relational* view on meaning, outlined in section 2.2.; that the discrete meaning of a lexical item exists *in and through* its instantiated expressions, the results presented in section 4.2. would seem to corroborate Cruse's claim (1986: 275-276) that *baby* possesses an expressive potential for positive affective meaning which *infant* lacks (see section 2.4.). That is, as shown in tables 7 and 8 (in section 4.2.), *baby* manifests a considerably higher frequency distribution of being instantiated in prosodically positive PS than *infant*. In addition, *infant* exhibits a frequency distribution of prosodically negative PS almost as high as its distribution of prosodically inconspicuous PS, and could therefore also in that regard be said to differ significantly from the markedly positive instantiative potential displayed by *baby*. All in all, these numbers would seem to be pretty much in line with what can be said to have been expected, given the general outline of the use and meaning, and perhaps in particular Bradley & Lang's (1999) measurement of the affective valencies, of *infant* and *baby* in section 2.4.[45].

Based on the assumption that the difference in affective meaning between *infant* and *baby* outlined in section 2.4. held true, it was also speculated (in section 2.4.) that other grammatical differences between *infant* and *baby* could be influenced by (or be due to) their diverging affective meanings. Although such a general explanatory model did (and still *does*) seem, not least beforehand, very tempting, the results yielded by the PSA can only be said to provide limited, or at best partial, indications of support for such an hypothesis, at least in its most general sense. That is, although, for example, the PS in which *infant* is instantiated clearly manifest a correlation between prosodic conspicuity (or rather, *negativity*) and an increasing frequency distribution of intensional

45 Given *infant*'s very strong distributive preference for prosodically negative PS, one may perhaps question the validity of a *relational* view on meaning; i.e., if *infant* is perceived as affectively positive (as Bradley & Lang's figures show), and yet so grossly overrepresented in prosodically negative PS (relative to *baby*), how can a *relational* view on meaning possibly hold true? The short answer would obviously have to be that the *central* semantic content of **both** *infant* and *baby* corresponds to their synonymous definitions, as given in a dictionary, such as the OED; effectively corresponding to 'a very young child', and that it is *this* semantic content which carries much (most?) of the shared positive affective meaning of both *infant* and *baby*.

epistemological status, the nature of such a correlation; i.e., between prosodic conspicuity and a certain epistemological status, seems much more complex in the case of *baby*. With regard to the distribution of reference type, the results point to even more subtle, and/or complex, correlations, for both *infant* and *baby*. It is true, however, that affective meaning, or more precisely, prosodic variance, can be shown to *relate to*, and, thus, *possibly* influence, the distribution of both epistemological status and reference type, both for *infant* and *baby*, albeit in ways that seem somewhat different between the two lexical items.

As already mentioned in section 4.1. (see figure 1.), there is a fundamental difference with regard to type referential preference between *infant* and *baby*. In addition to it being tempting to relate this difference to the description of *infant* as a *formal* means of reference (to 'a very young child'), and *baby* as an *intimate* means of reference (see section 2.4.), the dissimilarity would also point to *infant* and *baby* commonly representing two fundamentally different kinds of conceptual constructs, respectively corresponding to two different kinds of model-theoretic entities: *predicate terms* and *individual terms* (see, e.g., Dowty, Wall & Peters 1981). That is, the type referentially non-specific instantiations (typical of *infant*) correspond to predicates, i.e., *dependent* elements (similar to adjectives), whereas the type referentially specific instantiations (typical of *baby*) correspond to what Löbner (2011) calls (*functional* and) *individual* nouns, identifying a particular, *unique*, individual. Still, this type referential difference between *infant* and *baby* would seem largely *unrelated* to the two lexical items' affective meaning differences, as the *overall* frequency distributions of reference type do not vary with changing prosodic values, for neither *infant* nor *baby* (see section 4.2.1.2. and 4.2.2.2., respectively). Nonetheless, and as pointed out above, for both *infant* and *baby*, looking more closely at how type referential distribution relates to prosodic conspicuity does reveal seeming correlations between the two means of grounding: For *infant*, there is a marked increase in the relative distribution of type referentially specific tokens when instantiated in prosodically negative PS, whereas for *baby*, prosodic conspicuity clearly seems to result in decreasing degrees of modal value polarity (see sections 4.2.1.4. and 4.2.2.4., respectively).

Considering epistemological status, for *baby*, the manner in which its distribution seems related to affective meaning could very much be said to parallel the nature and extent of the relationship described above between *baby*'s distribution of reference type and prosodic conspicuity (cf. section 4.2.2.3.). Simply put, for *baby*, the overall relationship between epistemological status and affective meaning can be said to seem fairly evident, yet limited. For *infant*, however, its high frequency distribution of epistemologically *intensional* PS (relative to *baby*) seems closely related to its high frequency distribution of prosodically *negative* PS. That is, for *infant* there is a rather obvious correlative relationship between prosodic conspicuity (which in the case of *infant* almost

entirely means negative semantic prosody) and increasing epistemological intensionality (both on the whole, and when considering the epistemological composition of the type referential distribution; section 4.2.1.3., table 10.). *In itself*, this apparent correlation between negative semantic prosody and an increasing distribution of epistemologically intensional PS could be seen as providing potential support in favour of both (1) the idea that affective meaning *may* impact grammar, and (2) that, therefore, also non-affective *discrete* semantic properties of a lexical item *may* be influenced by the lexical item's affectively (or rather, prosodically) instantiative totality. That is, although this correlation in no way proves that prosodic negativity be the reason for the distributive increase of epistemologically intensional PS, it undoubtedly allows for the idea to be entertained as an hypothesis. In the case of *infant*, this would *then* mean that the difference in affective meaning between *infant* and *baby* described above to some extent also account for the overall difference in epistemological status between them (cf. section 4.1., table 2.). The problem with such an hypothesis is of course that *baby* only demonstrates such a correlative pattern between semantic prosody and epistemological status to a very limited extent; it only holds true for the overall frequency distribution of epistemological status for prosodically positive PS, which, furthermore, have a very high degree of PS deemed peripherally (i.e., only *potentially*) prosodically conspicuous (positive). In the case of *baby*, the principal correlative tendency for prosodic conspicuity instead seems to be decreasing degrees of polarity in the *extensional-specific* and *intensional-non-specific* modal value preferences manifested by *baby* (and *infant*) as a whole (see section 4.2.2.3. and 4.2.2.4.).

The results provided by the PSA must, consequently, be said to be inconclusive with regard to the (exact) nature of the correlative patterns of changing prosodic values. That is, although the results of the PSA would seem to corroborate the claim made by Hunston (1994: 197), mentioned in section 2.3., that epistemological status and the *good – bad* parameter (i.e., semantic prosody) are (inextricably) linked, the results also indicate that this holds true for the instantiations of *infant* and *baby* in quite different ways. Ultimately, rather than providing any answers, the results yielded by the PSA would instead have to be seen as raising a number questions, both with regard to the design of the PSA and the understanding of affective meaning on which it is based.

5.2. Discussion concerning the PSA's analysis of *semantic prosody*

In analysing the results of the PSA, it gradually became clear that there were certain issues concerning the analysis of semantic prosody, both with regard to the design of its method, as well as some of the theoretical premises on which it rested, which, in their current form, could not be

described as anything but problematic. Since the results yielded by the PSA to some extent must be said to be inconclusive (as described in the previous section), it seemed reasonable to examine *if*, and, in such a case, *how*, these issues may have contributed to the inconclusiveness of the results. Therefore, this sections aims at critically examining the PSA's analysis of semantic prosody and its potential impact on the inconclusiveness of the results, as well as outlining ways in which the study of affective meaning could be improved.

The perhaps, in itself, most obvious problematic issue with the analysis of semantic prosody would have to be the difficulty with which positive prosodic values are identified by the PSA. This is reflected in the *core*:*peripheral* PS ratios for prosodically positive PS which demonstrate values lower than 1 for both *infant* and *baby*, as shown in table 15, below. It should be mentioned, however, that this identificatory issue has been observed and mentioned by others (albeit described in a slightly different way): Xiao & McEnery (2006: 106) writes that "[s]emantic prosodies are typically negative, with relatively few of them bearing an affectively positive meaning", referring back to Louw's remark from 1993 saying that "[t]here seem, *prima facie*, to be more 'bad' prosodies than 'good' ones" (173). Be the distributive relationship between positive and negative semantic prosodies as it may, it does, notwithstanding, seem to be the case that the design of the PSA is such that expressions of positive affective meaning become difficult to, not only decisively determine as being positive, but ultimately *identify*.

Table 15: *core*:*peripheral* PS ratios for *infant* and *baby*

infant	**# of *core* PS**	**# of *peripheral* PS**	***core*:*peripheral* PS ratio**
Prosodically *positive* PS	**4**	**6**	**0.67**
Prosodically *negative* PS	**55**	**4**	**13.75**
Prosodically *inconspicuous* PS	**65**	**10**	**6.5**

baby	**# of *core* PS**	**# of *peripheral* PS**	***core*:*peripheral* PS ratio**
Prosodically *positive* PS	**15**	**27**	**0.56**
Prosodically *negative* PS	**19**	**5**	**3.8**
Prosodically *inconspicuous* PS	**79**	**32**	**2.47**

One possible, and in such a case rather ironic (given the emphasis with which syntax is argued to contribute to *meaning-creation*, in section 2..2.), contributing reason to this identificatory difficulty may be the exclusion of syntactic structuring as a factor in the desconstruction of the clausal instantiations into PS (see section 3.1.) and the subsequent analysis of referential grounding of PS (and their tokens). Still, as argued already in 1977 by Kuno & Kaburaki in their rather famous paper "Empathy and Syntax", the syntactic organisation of an expression seems principally to reflect the *empathy*, roughly in the sense of **non-emotional** *perspective*, as opposed to the (emotional) *sympathy*, of the producer of an expression. That is, the syntax of an expression could be likened to what Kuno & Kaburaki calls a linguistic producer's *camera angle*, and not that producer's affective state, or *feelings*, towards what is referred to by an expressions. In the words of Kuno & Kaburaki, "[i]t is important to distinguish between the concept of empathy defined here as a technical linguistic term and the concept of sympathy" (1977: 629). Although the two may very well coincide, syntactic structuring would, hence, principally convey a linguistic producer's *perspective*, or *camera angle*, and **not** that producer's affective state relative to what is communicated in an expression.

A much more likely reason, then, for this difficulty with identifying positive semantic prosodies would instead seem to be the (relative to the assessment of reference type, see section 3.2.3.) very limited analytic scope of the assessment of a PS' prosodic value. That is, whereas the the reference type of a token is inferred from its entire co-text provided by the COCA (corresponding to roughly 150-170 words), the prosodic value of a PS is determined by (mainly) considering only the *sentence* in which its corresponding clause is instantiated. In part, this apparent flaw is due to the fact that the analysis of semantic prosody was initially but one part of a much wider analysis of *predicative theme*[46] focused not exclusively on affective meaning, but semanto-lexical hyponymic *categories* of PS. In short (and as explained in section 3.2.1.), the assessment of a PS' prosodic value can be said to have been mainly based on the conventional, or *typical*, affective meaning of the sense of the PS' predicate, rather than the particular, *uniquely contextualised*, affective meaning of the PS' corresponding clausal instantiation. Put somewhat differently, whereas the analysis of epistemological status and reference type is on the level of *tokens*, the analysis of semantic prosody can be said to be on the level of *type*.

Although there does not seem to be any apparent problem in identifying prosodically negative PS, it would, nonetheless, seem reasonable to assume that the limited analytical scope in

46 In short, the analysis of *predicative theme* was intended to examine potential differences with respect to *categories*, or *themes*, of PS, in terms of hyponymies. All PS were classified according to its semantically central content as composed by its constitutive lexical items. Semantic prosody, or affective meaning, thus served as a means of classification, fundamentally focusing on expressive *commonalities* between PS.

the assessment of semantic prosody impact not only the identification of positive prosodic values, but in fact the analysis of semantic prosody *as a whole*. This would, in turn, mean that not only the validity of the analysis of semantic prosody, but the *entire* PSA would have to be questioned. Ultimately, the question would seem to be how accurate the *sentence-scoped* analysis can be said to be relative to an analysis which considers the *entire* co-text of each clausal instantiation (and, hence, would have to be considered more detailed) in assessing the semantic prosody, or affective meaning, of each PS' corresponding clausal instantiation.

In order to try to assess the impact which this seeming analytical defect may have had on the analysis of the semantic prosody, two samples of PS with different core prosodic values were selected for prosodic re-analysis focusing on the PS' *entire* co-text. The re-analysis of these two samples examined the *uniquely instantiative* prosodic value of each PS' corresponding clausal instantiation relative to its co-text. In practice, this meant attempting to infer the semantic prosody (or affective meaning) of the PS relative to the assessed semantic prosody (-ies) of its co-text. The first sample comprises *all* 15 PS deemed to be *core* instantiations of a *positive* semantic prosody for *baby* in the PSA, and consists of both *processual* and *non-processual* PS at a ratio of about 1:1. This sample includes PS with predicates (dependent elements) such as love, coddle, and happy. The second sample is made up by 15 randomly chosen (of the totally 55) PS judged as being *core* instantiations of a *negative* semantic prosody for *infant* in the PSA, also consisting of both *processual* and *non-processual* PS at a ratio of roughly 1:1. This prosodically negative sample includes (partial) PS such as kill, disabled, and murder + of. The results of the prosodic re-analysis are given in tables 16 and 17, below. The " / " should be read as *but*, meaning that, for example, 6 of the 15 PS initially judged as being *core* instantiations of a positive semantic prosody for *baby* in the PSA were instead deemed to express an 'uncertain, **but** likely positive' semantic prosody (see table 16).

Table 16: Prosodic re-analysis of *baby*'s 15 *core positive* PS

Prosodic value	Number of PS	Epist. status	Ref. type
		EX / IN	SP / NS
Very likely positive	5	3 / 2	4 / 1
Uncertain / Likely positive	6	2 / 4	3 / 3
Uncertain / Possibly inconspicuous	4	4 / 0	4 / 0

Table 17: Prosodic re-analysis of 15 of *infant*'s *core negative* PS

Prosodic value	Number of PS	Epist. status	Ref. type
		EX / IN	SP / NS
Very likely negative	7	1 / 6	3 / 4
Uncertain / Likely negative	1	0 / 1	1 / 0
Uncertain	3	2 / 1	2 / 1
Uncertain / Possibly inconspicuous	4	0 / 4	0 / 4

Since the two samples are relatively small (roughly corresponding to about 10% of the total number of PS analysed for *infant* and *baby* in the PSA, respectively), the results of the prosodic re-analysis can obviously only be taken as *potential* indications. For this reason, and also due to the fact that all of the PS that were not judged as being 'very likely' instantiations of a conspicuous semantic prosody were primarily deemed to display an 'uncertain' prosodic value, there would seem to be little meaning in speculating about what the distribution of modal values may suggest. What does need to be addressed, however, is the staggeringly high degree of *uncertainty* in the re-analysis' assessment of semantic prosody for PS previously deemed to possess *conspicuously* positive and negative prosodic values. In terms of *consistency* of results, the prosodic re-analysis must, therefore, be acknowledged as seriously questioning the PSA's classification of *core* instantiations as being “definite, and without any doubt, prototypical instantiation of that prosodic value” (see section 3.2.1.). As tables 16 and 17 show, roughly half to two-thirds of the re-analysed PS' prosodic values were judged as being impossible to determine with any real certainty. In fact, **none** of the PS prosodically re-analysed could at closer inspection be deemed as *decisively* expressing a certain semantic prosody (the highest degree of certainty attained instead being that a certain PS would correspond to a *very likely* expression a certain prosodic value). The fundamental reason as to why such a large number of PS were deemed prosodically 'uncertain' in the re-analysis was quite simply because there could not be said to exist enough information in the (co-)texts themselves in order to *decisively* determine their respective PS' prosodic values. Instead, what the prosodic re-analysis seems to point to is that a widening of analytical focus, contextualising a lexical item's *typical* prosodic value relative to its instantiative co-text, in most cases seem to result in prosodic *uncertainty*.

If one chooses to see the initial analysis of semantic prosody in the PSA as *type-focused*, and the prosodic re-analysis as *token-focused*, these results would have to be considered as being fairly within the bounds of what could be said to have been expected. Still, there are several implications of this *inconsistency* between the results of the PSA's initial *sentence-scoped type-level* prosodic analysis and the *co-text-scoped token-level* prosodic re-analysis that should be addressed: First of all, with regard to the PSA,

(1) if the results of the re-analysis are representative of what would be yielded from such a co-text-scoped re-analysis of the entire material, the PSA's entire sentence-scoped analysis of semantic prosody would have to be considered as being fundamentally flawed, at least if one considers the (affective) meaning of lexical items as being fundamentally context-dependent.

(2) If the PSA's analysis of PS' semantic prosody is flawed, then the results of the *entire* PSA would consequently have to be considered as being compromised. This would, in turn, obviously seem a potential, or even *likely*, reason for (or at least contributing factor to) the inconclusiveness of the results of the PSA.

Second, with regard to some of the theoretical premises on which the PSA rests,

(3) if one accepts a *context-dependent* (i.e., *relational*) view of meaning as being true (as has been done in this thesis, see section 2.2.), then the central question would seem to be how affective meaning on the level of *type* relates to affective meaning on the level of *token*. For example, how does one determine the *token-level* affective meaning of a lexical item (i.e., when it is actually being *used*) which in itself (in isolation; on the level of *type*) clearly seems prosodically conspicuous, as is the case with, e.g. *wonderful*, *awful*, and *beautiful*? In other words, how does one *quantify* affective meaning?

This problematisation of the relation between the levels of *type* and *token* also seems to raise serious doubts about the practicability of analysing *only* written text when studying affective meaning. That is, as already mentioned above, the basic reason why such a large number of PS were judged prosodically *uncertain* in the prosodic re-analysis is simply that written text does not seem, at closer scrutiny, to communicate affective meaning with any reliable degree of transparency. Instead, there would seem to exist a need to consider contextual information *outside* the written

text. Hence, since written text would seem generally insufficient for determining the prosodic value of a linguistic expression, at least with any certainty, and on the level of *token*, the question would seem to be what sort of information outside a written text that would be needed in order to be able to reliably assess a linguistic expression's affective meaning.

As already mentioned in section 2.3., expression of affective meaning is probably most commonly associated with non-lexical communicative features, such as *tone of voice* and *facial gestures*. According to Poyatos (1993), conventionalised communication, or *language*, needs to be understood as fundamentally being a *triple-structure* constituted by a communicative interdependency[47] of [lexical items (and/or grammar)] and *paralinguistic* and *kinesic* features[48]. Non-lexical means of expression, such as tone of voice and facial gestures, are simply so communicatively ubiquitous that they must be understood as being intrinsic and constitutive to both *meaning* and *language*. The morpho-syntactic arrangement (i.e., the instantiation of the lexicon – grammar continuum, see section 2.2.) would in itself quite simply be insufficient for communicating the affective content which ultimately, i.e., in every communicative instance, is what suffuses such arrangements with *meaning* (1993: 125)[49]. Simply put, according to Poyatos, that which is typically understood as *language*, would not be *language*, were it not for the non-lexical means of affective expression which in effect discursively grounds lexical (linguistic) production, and these non-lexical means of affective expression are paralinguistic and kinesic forms of expression.

There is indeed research showing that both paralinguistic and kinesic features do impact meaning: With regard to *gestures*, Cassell, McNeill & McCullough famously showed that when lexical content is accompanied by gestures language comprehension involves the *integration* of information conveyed via speech and gestures (1998: 20-21). Similarly, Nygaard & Lunders has presented data which seems to indicate that emotionally conspicuous tone of voice impacts the interpretation of words, and that it too is an integrated part of linguistic processing (2002: 591). In fact, Poyatos' framework would fit rather nicely with the notion of the perceived abstract meaning of a lexical item as corresponding to its expressional totality (or potential), as described in section 2.2.. That is, the *discrete* meaning of (the sense of) a lexical item would quite simply be understood

47 Cf. the idea of linguistic symbols as developing together with the perceptual symbols which they designate (see section 2.1.).

48 In brief, *paralanguage* can be said to correspond to the non-phonemic acoustic properties of language, and *kinesics* to conscious and unconscious gestures and body movements, both of which typically conveying *attitudinal* semantic content (Poyatos 1993: 130-134).

49 Cruse (1986) says very much the same thing about what it actually is that, so to speak, gives *meaning* to meaning; “Every communicative utterance must transmit as part of its meaning an indication of intended propositional attitude. Without this, an utterance would be communicatively dead – it would resemble a proposition 'entertained' by a logician. The expression of propositional attitude has the effect of, as it were, energising a proposition” (274).

as encompassing also the abstracted sum of paralinguistic and kinesic information associated with that lexical item's expression. Similar to how the lexical, or textual, context in which a lexical item is instantiated is taken to, as it were, *rub off* on that lexical item, so would the information of paralinguistic and kinesic features associated with that lexical item's instantiation also become part of its *meaning*.

Poyatos' framework does indeed seem to provide a viable way forward in attempting to study and understand affective meaning, and how its *type*- and *token-level* meanings relate to one another. What the (inconclusive) results of the PSA, together with the prosodic re-analyses of PS, most centrally seem to point to, is probably the need to more clearly *define* affective meaning. This would, then, likely be the equivalent of improving the understanding of how paralinguistic and kinesic information fit together with what is perceived as a lexical item's affective meaning on the level of both *type* and *token*.

6.Conclusion

Choosing to see the affective meaning of the sense of a lexical item as determined principally by *how it is used* (i.e., on the level of *token*), instead of inferring it from that sense's *typical* semantic prosody (i.e., *type-level*) would seem to point to the need to venture outside the written text and perhaps even the conventional understanding of what (*human*) *language* actually is. If one aims to better understand how affective meaning relates to grammar and language at large, it would certainly seem as if the sort of *type-level* analysis undertaken in this thesis would have to be considered defective. For this reason, the results suggesting correlative patterns between semantic prosody and epistemological status, and the indications of the lack of such patterns between semantic prosody and reference type, would have to be considered fundamentally compromised, or, at best, relevant only to an analysis of affective meaning on the level of *type*. Instead, what appears to be needed in order to successfully study and start comprehending the linguistic role of affective meaning would primarily seem to be defining the relationship outlined as the difference between affective meaning's *type* vs. *token* qualities, and how these relate to the meaning of lexical items.

References

Barsalou, Lawrence W. 1999. "Perceptual Symbol Systems". *Behavioral and Brain Sciences* 22, 577–660.

Bradley, M.M.; Lang, P.J. (1999). *Affective norms for English words (ANEW): Stimuli, instruction manual and affective ratings*. Technical report C-1, Gainesville, FL. The Center for Research in Psychophysiology, University of Florida.

Cassell, Justine; McNeill, David; McCullough; Karl-Erik. 1998. "Speech-Gesture Mismatches: Evidence for One Underlying Representation of Linguistic and Nonlinguistic Information". *Pragmatics & Cognition*, 6:2.

COCA (n.d.) Retrieved August 15, 2017 from http://corpus.byu.edu/coca/

COCA on spoken corpus (n.d.) Retrieved August 15, 2017 from http://corpus.byu.edu/coca/help/spoken.asp

Cruse, D.A. 1986. *Lexical Semantics*. Great Britain: Cambridge University Press.

Davies, Mark. 2009. "The 385+ million word *Corpus of Contemporary American English* (1990–2008+): Design, architecture, and linguistic insights". *International Journal of Corpus Linguistics* 14:2, 159-90.

Davies, Mark. 2010. "The Corpus of Contemporary American English as the first reliable monitor corpus of English". *Literary and Linguistic Computing* Vol. 25, No. 4, 447-64.

Dowty, D.; Wall, R.; Peters, S. 1981. *Introduction to Montague Semantics*. The Netherlands: Kluwer Academic Publishers.

Duncan, Seth; Feldman Barrett, Lisa. 2007. "Affect is a form of cognition: A neurobiological analysis". *Cognition and Emotion* 21:6, 1184-1211.

Gamut, L.T.F. 1991a. *Logic, Language, and Meaning: Volume I, Introduction to Logic*. United States of America: The University of Chicago Press.

Gamut, L.T.F. 1991b. *Logic, Language, and Meaning: Volume II, Intensional Logic and Logical Grammar.* United States of America: The University of Chicago Press.

Halliday, M.A.K.; Matthiessen, C. 2004. *An Introduction to Functional Grammar.* (3rd ed.). London: Arnold.

Hunston, Susan. 1993. "Evaluation and ideology in scientific writing". In Ghadessy, Mohsen (ed.). *Register Analysis: Theory and Practice*. Great Britain: Pinter Publishers.

Hunston, Susan. 1994. "Evaluation and organization in a sample of written academic discourse". In Coulthard, Malcolm (ed.). *Advances in Written Text Analysis*. Great Britain: Routledge.

Hunston, Susan. 2000. "Evaluation and the Planes of Discourse: Status and Value in Persuasive Texts". In Hunston, Susan; Thompson, Geoff (eds.). *Evaluation in Text: Authorial Stance and the Construction of Discourse*. Great Britain: Oxford University Press.

Hunston, Susan. 2011. *Corpus Approaches to Evaluation: Phraseology and Evaluative Language*. New York: Routledge.

Kuno, Susumu; Kaburaki, Etsuko. 1977. "Empathy and Syntax". *Linguistic Inquiry*, vol. 8: 4, 627-672

Langacker, Ronald W. 2008. *Cognitive Grammar: A Basic Introduction*. New York: Oxford University Press.

Leech, Geoffrey. 1981. *Semantics: The Study of Meaning*. (2nd ed). England: Penguin Books Ltd.

Louw, Bill. 1993. "Irony in the text or insincerity in the writer: The diagnostic potential of semantic prosodies". In Baker, M.; Francis, G.; Tognini-Bonelli, T. (eds.). *Text and technology: In Honour of John Sinclair.* Amsterdam: John Benjamins.

Lyons, John. 1995. *Linguistic Semantics: An Introduction*. Great Britain: Cambridge University Press.

Löbner, S. 2011. "Concept Types and Determination". *Journal of Semantics* 28, 279-333.

Morley, John; Partington, Alan. 2009. "A Few *Frequently Asked Questions* about semantic – or evaluative prosody*". *International Journal of Corpus Linguistics* 14:2, 139-158.

Nygaard, Lynne C.; Lunders, Erin R.. 2002. “Resolution of lexical ambiguity by emotional tone of voice”. *Memory & Cognition*, 30 (4), 583-593.
OED on *babe* (n.d.) Retrieved August 15, 2017 from http://www.oed.com.ezproxy.ub.gu.se/view/Entry/14208?redirectedFrom=babe#eid
OED on *baby* (n.d.) Retrieved August 15, 2017 from http://www.oed.com.ezproxy.ub.gu.se/view/Entry/14250?rskey=CJsVKr&result=1#eid
OED on *infant* (n.d.) Retrieved August 15, 2017 from http://www.oed.com.ezproxy.ub.gu.se/view/Entry/95211?rskey=TAInH6&result=1#eid
OED on *-y | -ie suffix* (n.d.) Retrieved August 15, 2017 from http://www.oed.com.ezproxy.ub.gu.se/view/Entry/231083#eid14065960
Osgood, Charles E. 1957. *The Measurement of Meaning*. Urbana, IL: University of Illinois Press.
Palmer, F.R. 1986. *Mood and Modality.* Cambridge, UK: Cambridge University Press.
Potts, Christopher. 2007. “The Expressive Dimension”. *Theoretical Linguistics* 33-2, 165-198.
Poyatos, Fernando. 1993. *Paralanguage: A Linguistic and Interdisciplinary Approach to Interactive Speech and Sound*. The Netherlands: John Benjamins Publishing Co.
Russell, James A.; Feldman Barrett, Lisa. 1999. “Core Affect, Prototypical Emotional Episodes, And Other Things Called *Emotion*: Dissecting the Elephant”. *Journal of Personality and Social Psychology* Vol. 76, No. 5, 805-819.
Sinclair, John. 2004a. “The search for units of meaning”. In Sinclair, John; Carter, Ronald (eds.). *Trust the Text: Language, corpus and discourse*. Great Britain: Routledge, 24-48.
Sinclair, John. 2004b. “The lexical item”. In Sinclair, John; Carter, Ronald (eds.). *Trust the Text: Language, corpus and discourse*. Great Britain: Routledge, 131-148.
Stubbs, Michael. 1996. *Text and Corpus Analysis: Computer-assisted Studies of Language and Culture*. Great Britain: Blackwell Publishers Ltd.
Stubbs, Michael. 2001. *Words and Phrases: Corpus Studies of Lexical Semantics*. Great Britain: Blackwell Publishers Ltd.
Taylor, John R. 2003. *Linguistic Categorization*. (3rd ed.). New York: Oxford University Press.
Thompson, Geoff; Hunston, Susan. 2000. “Evaluation: An Introduction”. In Hunston, Susan; Thompson, Geoff (eds.). *Evaluation in Text: Authorial Stance and the Construction of Discourse*. Great Britain: Oxford University Press.
von Fintel, Kai; Heim, Irene. 2011. *Intensional Semantics* [lecture notes]. Retrieved September 21, 2017 from http://web.mit.edu/fintel/fintel-heim-intensional.pdf
Xiao, Richard; McEnery, Tony. 2006. “Collocation, Semantic Prosody, and Near Synonymy: A Cross-Linguistic Perspective”. *Applied Linguistics* 27:1, 103-129.