Dylan Glynn
University of Leuven

CONCEPT DELIMITATION, FRAME SEMANTICS, AND PRAGMATIC IMPLICATURE.
Issues for the usage-based study of metonymy

1. Preamble

Cognitive Linguistics has recently brought metonymy and part-whole referencing to the fore of research. Although we accept the work of Lakoff (1987) on conceptual metonymy and Langacker (2000) on the processing of part-whole references, their apparatuses do not adequately explain many instances of metonymic expression in natural language use. This short-coming, we argue, results from a lack of rigorous method in concept defini-tion. In real discourse, much meaning is inferred from context and implica-ture is often coded metonymically. The "perceptual" basis of Langacker's hypothesis and the "idealised" nature of Lakoff apparatus do not readily capture such linguistic structure.

In an attempt to resolve this weakness, we propose a method for 'de-fining', and thus delimiting, an idealised model or domain-matrix, which integrates Lakoff's idealised models and Langacker's reference-point con-structions. The proposed definition is based on research in Frame Seman-tics (Fillmore 1985) and employs the notion of conceptual-pragmatic condi-tions that enable the frame to capture the semantics unique to a given situation context. This definition model is flexible and allows us to properly include the variables of 'real-world' context that are basic to Pragmatic Im-plicature. The key to integrating Langacker's theory of part-whole process-ing and Lakoff's study of cognitive models is the theory of entrenchment (Langacker 1987).

This combined method is tested in a small case study using found data. The results demonstrate success in explaining metonymic references, as well as support the work of Panther & Thornburg (1997, 1998, 1999a, 2003), Mendoza & Campo (2002, & Velasco 2003a, 2003b, & Hernández 2003, & Pérez 2003), and Peña Cervel (2003a) who have begun the diffi-

cult task of explaining the interaction between situation-context and meto-
nymic structure.[1]

2. Theoretical Apparatus. Lakoff's Idealised Models and Langacker's Entrenched Domains.

The two basic theories for explaining partial reference in cognitive seman-
tics are: (i) Lakoff's (1987: chapter 4) Cognitive Model with its corres-
ponding theory of cross-reference mapping and part-whole mapping and
Langacker's (1987: chapter 4) Domain Matrix and the corresponding theo-
ries of "active zone" (Langacker 1990: chapter 7) and "reference-point
constructions" (Langacker 2000: chapter 6). Both of these theories make
use of an artificial distinction in order to distinguish the study of "shared-
conventionalised" structures of a speech community from what a speaker -
hearer may do with those structures. Lakoff's Cognitive Models are
"idealised", which means that they are not necessarily present in any
speaker's mind, but are abstract generalisations for a speech community
that any speaker may make use of. Similarly, Langacker's theory of "en-
trenchment" artificially maintains a distinction between conventionalised
and creative language. Both ideas are close to Chomsky's "competence" -
"performance" distinction as well as the *langue-parole* distinction of the de
Saussure tradition. In these terms, "entrenched" form-meaning pairs are the
learnt structures that have become automated for the individual and Lak-
off's models are generalisations about semantic relations that are shared by
members of a speech community. The main advantage over the American
and European Structuralist traditions of *Ergon - Langue - Competence* is
how these theories are used rather than the theories *per se*. Lakoff's
idealised structures are abstract conceptual-cultural sets of relations which
may be employed (but not necessarily) in language structure. They explain
some, indeed a great deal, of the semantic systematicity in language but are
not argued to represent a grammar of semantics. Likewise, Langacker's
entrenchment is not shared-code to be put on a pedestal and studied like a
museum piece, it is a dynamic result of successful speech-events, or utter-
ances: the more often an individual is exposed to a sensible form-meaning
pair, the more it becomes routinised for that individual. When this is ex-
tended to a speech community, we have a shared knowledge network of

---

[1] Cf. Panther & Thornburg (2006) for a summary of the work in this field.

"entrenched" symbolic-units. These two theories allow us to not only cross the infamous *langue-parole* bridge, but also show that there never was a need to cross the bridge at all. Language function, pragmatics, discourse structures, and sociolinguistic concerns all fall under the rubric of encyclopaedic semantics and are part of a what a speaker needs to know in order to successfully use a form-meaning pair.

By eliminating the *langue-parole* distinction, Cognitive Linguistics has successfully freed itself from artificial limits imposed on the object of study in the Structuralist era, but it has done this at a cost. It is theoretically sound that the object of study in linguistics should have no clear boundaries since there is no reason *a priori* that language has clear boundaries. However, analytically this makes the task of maintaining scientific rigour and experiment repeatability all the more difficult. In simple terms, what data do we need to take into account when we perform an experiment? Of course this is the question any scientist must ask before any analysis, but it is one that is all more the slippery in the realm of social sciences. We will see, below, that failure to properly understand the impact of Cognitive Linguistics' theoretical stand on methodology is at the heart of most of the problems involved in the study of metonymy. This does not at all question the theoretical position of Cognitive Linguistics, but underlines the need to properly develop analytical apparatuses that can handle the complexity of the object of study.

It must be remembered that conceptual metonymy is *a priori* an onomasiological study. We begin with a concept and ask what "parts" of that concept, and their corresponding linguistic *signifiants*, may be used to stand for that concept. Whether we are looking at lexical or grammatical forms, our point of departure is the concept itself. The importance and problems of onomasiological methodology in Cognitive Linguistics have been investigated by Geeraerts (1999, 2000, 2005, & al. 1994, forthc.) and Glynn (2004a, 2005, 2006). One fundamental problem is that of concept definition and distinction, a problem that any methodologically rigorous approach to conceptual metonymy must confront.

3. Problematic: Lexis, Praxis, Concepts, and Implicature.

Let us now consider some examples of utterances taken from the Internet, both the Google Usenet archive and the World Wide Web, that express SORRY-FORGIVE.

(1) a. I guess what i am trying to say is that I am not upset at all. Actually I look back and it is funny.. Nothing is wrong and please dont worry about it. <8imukrivv1@ins21.netins.net>

   b. I offered and then got upset when i had to put shit in my trunk.. At this point I consider this a non issue. Hell I had a great time with everyone. So i say fuck it. <8imukrivv1@ins21.netins.net>

   c. Please don't worry about it, Bill. I was ultra sensitive when all this started and I reacted badly. As far as I am concerned, you have never been anything other than nice to me. <1998051513460200.JAA16519@ladder03.news.aol.com>

   d. Alan PRIVATELY whispers to Zaphod: hey babe, its okay......we are friends, okay...no problem...please dont worry about it.....Your okay, Im okay.....smile........ <Xns95266AC8EC1Bspamspamsnuhspam3@207.14.113.17>

   e. I'm lucky to hear from so many people on a daily basis. I can't always keep up with it, and for that I'm a shit. <http://www.ejshea.com/2003_10_19_blogarchive.htm>

   f. She is one of my all time favorites. I didnt mean to include her on the list. My mistake.... ...<rec.arts.movies.erotica>

   g. In the midst of pointing out that I usually don't overreact, I um, er.. well, sort of *mumbleoverreactedmumble*. <alt.folklore.urban>

We see immediately that although these utterances clearly express regret and are apologies to various degrees, upon what grounds do we judge them thus. There are few lexical clues that we could use to tie them to this concept since most of the semantic structure is implied.

   In the first example, the speaker is assuring the interlocutor that he or she is no longer upset about some unknown wrongdoing. We can assume

that the interlocutor did some wrongdoing to the speaker who is now saying that this is no longer a problem between them. In this way, the utterance serves as a type of forgiveness. However, what lexical clues or entrenched linguistic structures allow us to suppose this? At no stage does the speaker actually forgive the interlocutor. A cognitive analysis would argue that the speaker refers to parts of the Cognitive Model FORGIVE and these parts of the Cognitive Model stand for the speech act of FORGIVE. This is, essentially, a re-wording of the theory of Pragmatic Implicature. However, since idealised Cognitive Models represent quite 'fixed' cultural sets of information and relations shared by members of a speech community, we should able to give a more precise description of this part-whole reference, or implicature. We have, however, no means for determining what the Cognitive Model in question consists of nor what linguistic structures would be typically used to refer it. Examples (1a) through (1g) highlight similar limitations with our current descriptive model.

For instance, in examples (1e) -(1g), the speakers acknowledge they are wrong, assumedly a basic part of the Cognitive Model of APOLOGISE. However, our judgement on the relationship between 'being wrong' and an apology is entirely subjective since there is no lexical content that denotes the speech act of APOLOGY. If this kind of implicature is to be properly treated by Cognitive Semantics and conceptual metonymy theory, we need a model that can offer a clear definition of the model and its parts.

Such problems of dealing with discourse phenomena and metonymy have already been considered from a cognitive perspective. Indeed, Panther & Thornburg (1998: 762-767) offer similar examples where a given Cognitive Model is instantiated not through direct reference, but Pragmatic Implicature. However, as Panther and Thornburg demonstrate, simply identifying a model and its parts does not suffice since there exist different metonymic "layers" to which an implicature may refer. Indeed they propose a continuum between true metonymic references where a concept stands for another concept and "indexical references" where a concept "points to" another concept (Panther & Thornburg 1998 764-765). We will return to this proposal below, but in order to understand the phenomenon at hand, we can take the example of self-defamation. This concept is a common part of apologising and integral to the expression of this concept since it is an implicature for "I accept the blame". Thus, self-defamation 'points to' (indexically) accepting wrongness, which 'stands for' (metonymically) the Cognitive Model APOLOGY. This added complexity is visible in the following examples.

(2) a. YES I'M A PRAT!!!!!! SORRY!!! As loads of you have noticed I put the HOWARD'S ALIAS show on the wrong date on the site. It has now been changed sorry for ...

b. "I've never lied to you...I may not have told you things I know because, well, I'm a prat..." There's my Draco with his detached analysis of himself again! Recognizes he was a prat, but doesn't apologize for being one. <http://adultfan.nexcess.net/aff/review.php?set=read&no=5441763 61>

Note that in (2b) the speaker rejects this metonymic (or indexical) reference to a metonymic reference for APOLOGY and indeed rejects this as "not fulfilling" the speech act requirements for apologising.

This is not to say there are not common lexical structures that are used, recurrently, in Pragmatic Implicature. There exist many hedges and other discourse strategies that are frequently used in apologising. For example, the well known *I didn't mean to*... which is used to deflect blame, is typical of apologetic utterances.

(3) I didnt mean to start an arguement. I think ... matter. Anyway, I am sorry to start an arguement, Im sorry if you didnt like my reply. It ... <rec.aquaria.marine.misc>

Moreover, certain discourse markers are also commonly used in apologies. For example:

(4) a. ... Um, er, well, uh...none really. Sorry. <soc.motss>

b. Um, er, well, I'm REALLY sorry about this. Really I am. Really! (pause ... <rec.food.drink.coffee>

c. What's the pitch on the roof? Um, er, well, I don't know. Sorry. I can guess from my foggy recollection and say about 2 in 12. <rec.equestrian>

Upon what grounds can we say that the discourse marker "um, er, well", for example, is expressing a conceptual structure that belongs to the Cognitive Model of SORRY, if indeed it does? In the above example, the discourse

marker is used to indicate hesitation, and in this written form, it is overtly and consciously chosen to indicate this. It is a humorous devise to indicate that the speaker has been "caught out" and being "caught out" is part of being wrong, a basic part of any apology.

However, even with such lexical clues, we have no descriptive model that adequately combines this type of on-line discourse structure with Lakoff's Idealised Cognitive Models. Although Langacker's theories of active zones and reference-point constructions may explain what the speakers are doing conceptually in their processing of such utterances, neither of these theories offer a descriptive model that captures generalities about such structures. Put simply, at a theoretical level, this type of implied APOLOGY is captured by the Active Zone of a Cognitive Model, but in analytical terms, its description is a very tricky procedure, so tricky in fact that that it is difficult to make generalisations about implicature structure in Cognitive Linguistic terms. Some research has made inroads here (cited in section 1), bringing different theories such as Relevance Theory and Pragmatic Implicature into Cognitive Linguistics. However, until we have a quantifiable method for determining the composition of abstract conceptual categories (such as Cognitive Models or Domain Matrixes), we cannot describe in rigorous terms such discursive structures.

4. Methodological Response. Model-matrix definition and delimitation

At stake is essentially an issue of definition and delimitation: we have no quantifiable means for telling what a given concept entails or how to distinguish it from other concepts. This is a general problem for all onomasiological research in Cognitive Linguistics, from Conceptual Metaphor study, to Frame Semantics, and field semantics. Moreover, this issue is the basis of the metaphor-metonymy, or similarity-contiguity, debate as presented by Goossens (1990), Croft (1993), Mendoza (2000), Geeraerts (2002), and Glynn (2005). Obviously, the problem of concept definition has not gone unnoticed and is the basis for much discussion in the community. Some have tried to resolve the problem through establishing a *tertium comparationis*, such as Lehrer (1982), Schmid (1993), Geeraerts & al. (1994), and Lewandowska (1999). However, such an approach is wrought with theoretical problems, as stressed by Kleiber (1994), Geeraerts (1997), and Glynn (2004c, f.c.). Furthermore, and perhaps most importantly, this approach is necessarily restricted to those concepts with grounded perceptual referents where, obviously, most concepts are abstract without any

Lebenswelt designatum (q.v. Glynn 2005). In such a situation, it seems the only solution is to develop a more rigorous method of intensional definition. Attempts at such an intensional method for concept definition in Cognitive Linguistics vary widely. Grady (1997), Clausner & Croft (1997), and Glynn (2002) turn to more detailed study of conceptual structure *per se*, where Fischer (2000), Schmid (2000), and Frohning (2005) successfully use functional criteria. However, a reliable and widely applicable method remains undeveloped. Although the full workings of such an approach are beyond our scope here, we may propose a tentative method and test its ability to capture discourse strategies in metonymic language. In this, we will suppose that a method for defining, and thus delimiting, a Cognitive Model is one important way of improving its analytical power. Such a method should allow us to not only delimit the category but also identify its internal structure and should be applicable to a wide range of concept types.

Idealised Cognitive Models are, for all intents and purposes, culturally rich abstract Semantic Frames. Therefore, perhaps the best method for tying down the Cognitive Model is to turn to some of the analytical techniques used in Frame Semantics. Fillmore's (1985, 2000, 2003, & Atkins 1992) theory of Semantic Frames is not only the basis of much of Lakoff's research, it enjoys a fundamental role in the Cognitive Linguistic project and has been applied by Dirven & al. (1982), Rudzka-Ostyn (1989, 1995), Verschueren (1985) amongst many others. In one of these studies, Verschueren (1985) proposes a method for comparing Semantic Frames across language-cultures. His procedure is simple and effective. Instead of identifying participants and argument relations, one may identify "conceptual-pragmatic conditions". These will often be arguments and argument relations, but not necessarily so. This approach allows frame semantics to be extended to any concept not just event-structures but also allows it to link up with the study of Cognitive Models. Verschueren's pragmatically determined conditions for the Semantic Frame are similar to Lakoff's 'aspects' in his "definition" of the Cognitive Model of SEE (Lakoff 1987: 128) but also the 'elements' used in the construction grammar case study (Lakoff: 462-585). It is also the principle behind the Value Attribute Matrix in current Construction Grammar (Kay & Fillmore 1999, Fillmore 2001, and Glynn 2004b).

Verschueren's proposal is important since it targets the basic methodological weakness of both Frame Semantics and Cognitive Model study: any concept-based study (as opposed to form-based study) must intensionally define its object of study. Underlining the importance and difficulty of accurately defining, and thus delimiting 'domains', is the first step towards

being able to rigorously study their conceptual structures, such as metaphor and metonymy. The pragmatic criteria in Verschueren's (1985: 65ff) work are based on small sets of "speech acts", defined by what he calls "empirical-conceptual conditions." We may adopt his principle by generalising his use of 'speech acts' to the notion of pragmatic schemata. A pragmatic schema is then defined as a set of functionally determined conditions that should be seen as a quantifiable rendition of the different 'clusters' of a 'Cognitive Model', in Lakoff's (1987: 74ff) terms, or different 'domains', of a 'domain-matrix,' in Langacker's (1987: 147) terms. The conditions themselves do not seek to define the concept, but the arguments and argument relations associated with the concept. This does not necessarily entail that the method is restricted to event-based concepts. The nature of a Semantic Frame, as an analytical model, is such that unexpressed arguments must also be accounted for. It is, thus, applicable to all concepts, be they event-based or not. Although this principle is straightforward for concepts such as FORGIVE-SORRY, we may extend its use to concepts such as LOVE or ANGER. Even though such concepts are often associated with nominal profilings, they still necessarily involve backgrounded Actors, Patients, and Actor-Patient relations, which are subsumed in the encyclopaedic semantics of the given frame.

Panther & Thornburg (1998) also draw on the idea of frames in order to define concepts and their internal parts. However, they seek to identify core and peripheral parts of the concept with a single definition and couch their definition in entirely functional terms. Although their approach is powerful in its ability to capture the "metonymic strength" of a Pragmatic Implicature, it is limited by two basic factors. Firstly, drawing on early work in Pragmatics, their frame is defined in terms of a "state of affairs scenario" which entails pre-supposed facts and in turn, possible outcomes. In other words, this functional perspective of pragmatics means that their schema is defined in terms of presuppositions, motivations and results. Although appropriate for speech acts such as REQUEST, and even SORRY-FORGIVE, this may not be readily extended to abstract concepts such as LOVE or ANGER, typical of Conceptual Metaphor research. Secondly, they aim to define the Cognitive Model with a single scenario made up off core and peripheral components. This restricts the frame semantic structure and the possibility of extending the definition to the various profilings or construals that Semantic Frame structure may capture. Thus, their single definition would have troubles handling the difference in conceptual salience, and thus "coreness", of such frame alternations as *buy-sell* or *steal-rob*, typical of Frame Semantic research. Our approach overcomes these two

limitations on the application of the definitional model by proposing 'conceptual-pragmatic schemata' as opposed to a 'functional-pragmatic scenario'. Our conceptual-pragmatic schemata are divided, not into pre-existing conditions, motivational conditions, and outcomes, but into concepts and conceptual relations. This allows the model to be extended to abstract concepts such as LOVE or ANGER. Moreover, the representation of core and peripheral information structures are deferred to different sets of schemata. This method, in turn, may also capture differences in frame construal. This should allow the definitions to work with the main of Frame semantics and its concern for event profiling. This is particularly important since the *core* and *periphery* parts of a model, in Panther & Thornburg's (1998) terms, would imaginably be dependent on the relative construal of the concept. Nevertheless, the pragmatic-conceptual schemata proposed here, may be seen as a refinement, or simplification, of their pragmatic-functional scenarios

Importantly, the conditions described above should be seen as necessary but not sufficient in determining the category. Moreover, the internal structuring of the domain should possess a relative representivity, or prototype structure. With an overt methodology and analytical apparatus for establishing the limits and internal clustering of the frame-model-domain, it should be easier to determine what conceptual category is being referred to by a given utterance.

5. A Test Case for a Semantic Frame-Based Approach to Cognitive Model Definition.

Let us test the efficacy of this method of domain definition and differentiation by re-examining the examples offered above in section 3. Presumably, these examples are all linguistic expressions for the Cognitive Model of FORGIVE-SORRY. For the following pragmatic definitions, 'Sb' represents 'somebody', 'St' represents 'something', and 'C' represents 'condition', that is an element in the idealised make-up of schema or 'model cluster'. For the current purposes, it should not be necessary to investigate the relative conceptual structure of the different schemata. We may identify one schema as basic because of its generality. This does not mean to suggest that it represents the paragon, prototype, or stereotype of the concept.

In the description below, the basic schema is seen as basic due to criterial simplicity, and thus hyperonymic status in onomasiological salience.[2]

Pragmatic Schemata for FORGIVE.
BASIC FORGIVE
C1. Sb_1 believes that Sb_2 has done wrong.
C2. Sb_1 holds Sb_2 in bad stead because of C1.
C3. Sb_1 decides that this Sb_2 should no longer be held in bad stead (despite C1).

The first schema is defined by the broadest most basic set of conditions and should capture most if not all FORGIVE events. The second schema that we may refer to as GUILTLESS FORGIVE, represents a more criterially complex yet important part of the cognitive model of forgive

GUILTLESS FORGIVE
C1. Sb_1 believes Sb_2 has done wrong.
C2. Sb_1 holds Sb_2 in bad stead because of C1.
C3. Sb_1 decides that C1 is not true.
C4. Sb_1 no longer holds Sb_2 in bad stead.

The GUILTLESS FORGIVE schema should capture events where an individual is "proven innocent". In other words, where Sb_1 changes opinion on the validity of C1. It is closely related to another model of FORGIVE, where the action deemed 'bad' is not serious, often because it is a technicality or is considered 'not serious' by the person judging the action.

LIGHT FORGIVE
C1. Sb_1 believes that Sb_2 has done wrong.
C2. Sb_1 believes this wrong is not worthy of bad stead.
C3. Sb_1 decides that Sb_2 should not be held in bad stead (despite C1).

Closely related to the concept of FORGIVE is that of APOLOGISE or SORRY. In frame semantic terms, this reverses the foregrounding of the argument structure highlighting the oblique, the 'st' in our terms, of the SORRY scen-

---

[2] Mancebo Francisco (2005), drawing on the work of Peña Cervel (2003b), offers a similar attempt at defining this Semantic Frame-Cognitive Model. She offers a definition using image schemata that captures the illocutionary force involved in FORGIVE.

ario contrary to the FORGIVE frame where the plaintiff is foregrounded, or profiled.

1.1.1. Pragmatic Schema for SORRY

BASIC SORRY
C1. Sb_1 believes he or she has done St that badly affects Sb_2.
C2. Sb_1 expresses regret over C1.

Another schema for this concept that is perhaps more typical, although less criterially basic, we may call APOLOGISE SORRY. This includes a typical motivation for being sorry, often associated with looking for forgiveness.

APOLOGISE SORRY
C1. Sb_1 believes he or she has done something that affects badly Sb_2.
C2. Sb_1 seeks FORGIVENESS for C1.
C3. Sb_1 expresses regret about C1 to obtain C2

Although these schemata represent a preliminary attempt at a definition, we may now see how they allow us to not only categorically say that a given utterance should be handled by a given cognitive model, but enable us to identify which basic part of the model is being referred to metonymically in instances of Pragmatic Implicature.

In the first example (1a), listed in section 3, the model FORGIVE is expressed metonymically several times. The phrases *please don't worry about it*, *I'm not upset at all*, and *I look back and it's funny* are referring to parts, or conditions, of the schema that we identified above. The *it* in the expressions is the St in the schemata for FORGIVE and by referring to St as *funny*; the speaker is fulfilling C2 of the LIGHT FORGIVE schema. This expression is metonymic and it employs the conceptual metonymy PART for WHOLE. Although the speaker does not actually say "what you did is not serious so therefore I forgive you", this is expressed. The same is true of *I'm not upset*. In Panther & Thornburg's (1998) terms, this utterance "points to" the condition that Sb_2 is no longer in 'bad-stead'. This fulfils C3, demonstrating once again a part-whole reference to the definitional schemata of FORGIVE. It must be stressed that both of these sentences could be paraphrased with "I forgive you". However, the speaker chooses to profile certain elements of the model through metonymic reference. This profiling, or highlighting, of a certain active-zone is precisely the conceptual role of reference-point constructions and is an example of why this construct is

invaluable for the study of metonymy. In our investigation, these active-zones are identified by the schema conditions, that is, the principal elements of a cognitive model.

The following example (1b) is a little more complicated. The proposition *I offered and then got upset when I had to put shit in my trunk* implies that the speaker had 'held Sb_2 in bad stead', but later decided that this was erroneous. This would suggest that the GUILTLESS FORGIVE schema is being employed. However, reading further, we get the impression that the speaker is not entirely convinced of what s/he is proposing. Indeed, using our schemata, we have an explanation for this. The two utterances *At this point I consider this a non issue* and *So I say fuck it*, do not fit any of the conditions for the GUILTLESS FORGIVE schema, they do, however, fit perfectly the C3 of LIGHT FORGIVE, that is 'Sb_1 decides that this Sb_2 should not be held in bad stead (despite C1)'. If this is the case, then they are used metonymically to stand for LIGHT FORGIVE. From this, we may deduce that the speaker is not wholly decided on the guilt or guiltlessness of Sb_2, but also that the speaker no longer holds Sb_2 in bad stead. Despite the fact that this information becomes visible when one considers the metonymic structure of the cognitive model being employed, it is important to note that such information is gleaned through the consideration of Pragmatic Implicature, not the metonym *per se*.

Example (1c) is interesting because it entails an inherent contradiction: Sb_1 is telling Sb_2 not to worry about St, and then states that s/he (Sb_1) is to blame. This, it seems, is an interpersonal device. By turning the blame back onto him or herself, Sb_1 could be employing condition C3 of the LIGHT FORGIVE schema, but the following phrase, *As far as I am concerned, you have never been anything other than nice to me* suggests that it is the GUILTLESS FORGIVE that is being instantiated by this utterance. If this were the case, the speaker accepting the blame is a way of expressing C3 of GUILTLESS FORGIVE. Although we can see this as a part-whole representation for the schema, it is only through Pragmatic Implicature that we may deduce that when Sb_1 says s/he is to blame, this entails that Sb_2 is not to blame. Our apparatus has no means for capturing this degree of discourse complexity but it maybe explained using Langacker's theory of active zones. The contradiction set up by the opening phrases; *don't worry about it* (entailing Sb_2 did St wrong) followed by 'self blame' (entailing Sb_2 did nothing wrong), means that the active-zone for the reference-point construction, or metonym, is not clear. In other words, the speaker has identified two domains in the domain matrix as possible actives zones and they are, in a sense, in conflict.

This kind of complexity comes to the fore in the last example (1d), which is both metonymic and implied. In the example, Sb$_1$ expresses SORRY to Sb$_2$ but instead of apologising, he 'tells' his interlocutor to forgive him. In our description thus far, we have avoided the complex frame semantic relationship between SORRY and FORGIVE. The relationship between the two frames is similar to Fillmore's (2003: ch. 6) study on the commercial event-frame, BUY-SELL. Here, the event-frames compliment each other, profiling and back-grounding different participants. In this exchange, the speaker metonymically refers to the domain of FORGIVE to imply an apology. In the terms of our apparatus, in doing this, he switches the roles of Sb$_1$ and Sb$_2$. In simple terms, he tells Sb$_2$ what to say, metonymically, to demonstrate that he is forgiven. Certain discourse markers, such as the tag *okay*, are the cues that this is a request. It seems unnecessary to work through each of the metonymic references in this utterance. The most important point here is that the frame reversal is captured by our conceptual-pragmatic schemata. This type of conceptual profiling must be accounted for in any definitional schema for cognitive models.

Finally, it must be noted that only certain conditions were used in the metonymic references for FORGIVE. From this, one could argue that some sort of active-zone constraint on the reference-point is at play. It makes sense that the condition of 'somebody doing something wrong' cannot be used to stand for FORGIVENESS. Langacker's theory of active-zones and reference-points captures this. This final point is crucial to understanding the internal structure of cognitive models: not any element in the model can stand for the model. This is different to the "metonymic distance" proposed by Panther & Thornburg (1998) but of equal importance. Research in metonymy often underlines such points, but by more overtly defining the cognitive model, we may more easily identify which parts of a given model may function as active-zones.

6. Summary

Although the hypothetical constructs of the cognitive model and the domain matrix (with their corresponding analytical apparatuses of reference-point constructions and the active zone) are useful analytical tools, they do not easily capture the subtleties of real-language use. In order to render these apparatuses more effective in this regard, we need a reliable method for not only differentiating between concepts but for identifying the internal structuring of those concepts. The nature of any intensional definition is

subjective and libel to result in an important amount of analytical errors. Yet, if we are to understand the complexities of discourse and implicature, such a method is necessary. Thus, this method must be as overt and as verifiable as possible. Ideally it should also be quantifiable and applicable to a wide range of phenomena, such as onomasiological lexical fields, be they literal, metaphoric, or metonymic. Taking the principle of a Semantic Frame, that is the arguments and argument relations, and defining these using conceptual-pragmatic criteria, offers just such an intensional method. By taking the conceptual nodes of the concepts, the participants and the relationship between those participants, and defining those, rather than the concept *per se*, we offer a verifiable and overtly rigorous model. This short study demonstrates that such definitions, organised into simple schemata, cannot only adequately define a definitional model, but also its constituent parts. In such terms, Pragmatic Implicature is explained as part-whole metonymic referencing and the parts involved in that referencing are pre-defined, rendering the accuracy of the model checkable. The subjective nature of intensional definitions is unavoidable, thus the overt nature of the definitions presented above, although not designed to represent conceptual reality or linguistic structure, allow us to see immediately weakness in the definition. Importantly, this method could also allow the more quantified approaches of cognitive lexical research to integrate with the study of metonymy.

References

Clausner, T. and W. Croft
    (1997)   "Productivity and schematicity in Metaphors". *Cognitive Science* 21: 247-282.

Croft, W.
    (1993)   "The Role of Domains in the Interpretation of Metaphors and Metonymies". *Cognitive Linguistics* 4: 335-370.

Dirven, R., Goossens, L., Putseys, Y., and E. Vorlat
    (1982)   *The scene of linguistic action and its perspectivization by SPEAK, TALK, SAY, and TELL.* Amsterdam: John Benjamins.

Fillmore, C.
    (1985)   "Frames and the Semantics of Understanding". *Quaderni di Semantica* 6: 222-254

    (2000)   "Describing polysemy: The case of 'crawl.'" In: Y. Ravin and C. Leacock (eds.) *Polysemy*. Oxford: Oxford University Press. 91-110

    (2001)   "Mini-grammars and some time-when expressions in English." In: J. Bybee and M. Noonan (eds.) *Complex Sentences in Grammar and Discourse*. Amsterdam: John Benjamins. 31-60.

    (2003)   *Form and Meaning in Language*. Vol. I. *Papers on Semantic Roles*. Stanford: CSLI.

Fillmore, C. and B. Atkins
    (1992)   "Toward a frame-based lexicon: The semantics of RISK and its neighbours." In: A. Lehrer and E. Kittay (eds.) *Frames, Fields, and Contrasts: New Essays in Semantic and Lexical Organization*. London: Erlbaum. 75-102.

Fischer, K.
    (2000)   *From Cognitive Semantics to Lexical Pragmatics*. Berlin: Mouton de Gruyter.

Frohning, D.
    (2000)   Kausalmarker zwischen Pragmatik und Kognition. Korpusbasierte Funktionsprofile und Analysen zur Variation im Deutschen. Doctoral Dissertation. University of Feiburg.

Geeraerts, D.
    (1997)   *Diachronic Prototype Semantics. A Contribution to Historical Lexicology*. Oxford: Clarendon.

    (1999)   "Beer and semantics." In: L. De Stadler and C. Eyrich (eds.) *Issues in Cognitive Linguistics*. Berlin: Mouton de Gruyter. 35-55.

(2000) "Salience phenomena in the lexicon: A typology." In: L. Albertazzi (ed.) *Meaning and Cognition*. Amsterdam: John Benjamins. 79-101.

(2002) "The interaction of metaphor and metonymy in composite expressions." In: R. Dirven and R. Pörings (eds.) *Metaphor and Metonymy in Comparison and Contrast*. Berlin: Mouton de Gruyter. 435-468.

(2005) "Lectal variation and empirical data in Cognitive Linguistics." In: J. Ruiz de Mendoza and S. Peña Cervel (eds.) *Cognitive Linguistics: Internal Dynamics and Interdisciplinary Interaction*. Berlin: Mouton de Gruyter. 163-189.

Geeraerts, D., Grondelaers, S., and P. Bakema

(1994) *The Structure of Lexical Variation. Meaning, Naming, and Context.* Berlin: Mouton de Gruyter.

Geeraerts, D., Speelman, D., and S. Grondelaers

(forthc.) *Measuring Lexical Standardization*. Oxford: Oxford University Press.

Glynn, D.

(2002) "LOVE and ANGER. The Grammatical Structure of Conceptual Metaphors." *Cognitive Approaches to Figurative Language*. *Style* 36, 541-559.

(2004a) "Cognitive Constructs. Perceptual processing and conceptual categories between mind, language, and culture." In: A. da Silva, A. Torres, and M. Gonçalves (eds.) *Linguagem, Cultura e Cognição: Estudos de Linguística Cognitiva*. Almedina: Coimbra. 247-268

(2004b) "Constructions at the Crossroads. The Place of construction grammar between field and frame." *Annual Review of Cognitive Linguistics* 2: 197-233.

(2004c) "Perception, Lexical Class, and Lexical Variation. Limitations for Cognitive Grammar in the study of lexis." *Anglophonia* 16: 134-150.

(2005) "Conceptual Metonymy - A study in cognitive models, reference-points, and domain boundaries." *Poznań Studies in Contemporary Linguistics* 42: 85-102.

(2006) "Cognitive Lexicology. Questions for an onomasiological approach to lexis". In: M. Amengual (ed.) *Lenguaje en la sociedad de la Información y la Comunicación*. Zaragoza: AESLA.

(forthc.). "Iconicity and the Grammar - Lexis Interface." In: O. Fischer & E. Tabakowska (eds.) *Iconicity in Language and Literature 5*. Amsterdam: John Benjamins.

Goossens, L.
(1990)   "Metaphtonymy: The Interaction of Metaphor and Metonymy in Expressions for Linguistic Action." *Cognitive Linguistics* 1: 323-340.

Grady, J.
(1997)   "THEORIES ARE BUILDINGS Revisited." *Cognitive Linguistics* 8: 267-290.

Kay, P. and C. Fillmore
(1999)   "Grammatical constructions and linguistic generalizations: The *What's X doing Y?* construction." *Language* 75: 1-33.

Kleiber, G.
(1994)   *Nominales. Essaies de sémantique référentielle*. Paris: Colin.

Lakoff, G.
(1987)   *Women, Fire, and Dangerous Things. What categories reveal about the mind*. London: University of Chicago Press.

Langacker, R.
(1987)   *Foundations of Cognitive Grammar* Vol. I. *Theoretical Prerequisites*. Stanford: Stanford University Press.
(1990)   *Concept, Image, and Symbol: The Cognitive Basis of Grammar*. Berlin: Mouton de Gruyter.
(2000)   *Grammar and Conceptualization*. Berlin: Mouton de Gruyter.

Lewandowska-Tomaszczyk, B.
(1999)   "A Cognitive-interactional Model Cross-Linguistic Analysis: New Perspectives on 'tertium comparationis' and the concept of equivalence." In: B. Lewandowska-Tomaszczyk (ed.) *Cognitive Perspectives on Language*. Frankfurt: Peter Lang. 53-76.

Mancebo Francisco, R.
(2005)   "Illocution and cognition: the case of apologies." *Cuadernos de Investigación Filológica* 31.

Panther, K.-U. and L. Thornburg
(1997)   "Speech Act Metonymies." In: W. Liebert, Redeker, G., and L. Waugh (eds.) *Discourse and Perspectives in Cognitive Linguistics*. Amsterdam: John Benjamins. 205-222.
(1998)   "A cognitive approach to inferencing in conversation." *Journal of Pragmatics* 30: 755-769.
(1999)   "The POTENTIALITY FOR ACTUALITY metonymy in English and Hungarian." In: K.-U. Panther and G. Radden (eds.) *Metonymy in Language and Thought*. Amsterdam: John Benjamins. 333-357.
(2003)   "Metonymies as natural inference and activation schemas: The case of dependent clauses as independent speech acts." K.U Panther & L. Thornburg (eds.). *Metonymy and Pragmatic Inferencing*, 127-148. Amsterdam: John Benjamins.

(2006) "Metonymy." In: D. Geeraerts and H. Cuyckens (eds.) *Handbook of Cognitive Linguistics*. Oxford: OUP.

Peña Cervel, S.

(2003a) "Situational metaphors and metonymy." In: C. Inchaurralde and C. Florén (eds.) *Interaction and Cognition in Linguistics*. Frankfurt: Peter Lang. 239-256.

(2003b) *Topology and Cognition: What Image-schemas Reveal about the Metaphorical Language of Emotions*. Munich: Lincom.

Rudzka-Ostyn, B.

(1989) "Prototypes, schemas, and cross-category correspondences: the case of *ask*." In: D. Geeraerts (ed.) *Prospects and Problems of Prototype Theory. Linguistics* 27: 613-61.

(1995) "Metaphor, Schema, Invariance: The Case of Verbs of Answering." In: L. Goossens et al. (eds.) *By Word of Mouth. Metaphor, Metonymy, and Linguistic Action from a Cognitive Perspective*. Amsterdam: John Benjamins. 205-244.

Ruiz de Mendoza, F.

(2000) "The role of mappings and domains in understanding metonymy." In: A. Barcelona (ed.). *Metaphor and Metonymy at the Crossroads*. Berlin: Mouton de Gruyter. 109-132.

Ruiz de Mendoza, F. and J. Otal Campo

(2002). *Metonymy, Grammar, and Communication*. Granada: Comares.

Ruiz de Mendoza, F. and L. Pérez Hernández

(2003) "Cognitive operations and pragmatic implication." In: K.U Panther & L. Thornburg (eds.) *Metonymy and Pragmatic Inferencing*. Amsterdam: John Benjamins. 23-50.

Ruiz de Mendoza, F. and O. Díez Velasco

(2003a) "Patterns of conceptual interaction." In: R. Dirven & R. Pörings (eds.) *Metaphor and Metonymy in Comparison and Contrast.* Berlin: Mouton de Gruyter. 489-532.

(2003b) "High-level metonymy and linguistics structure." In: C. Inchaurralde & C. Florén (eds.) *Interaction and Cognition in Linguistics*. Frankfurt: Peter Lang. 189-210.

Truszczyńska, A.

(2003) "Conceptual metonymy - the problem of boundaries in the light ICMs." *Poznań Studies in Contemporary Linguistics* 38: 221-238.

Verschueren, J.

(1985) *What People Say They do with Words. Prolegomena to an Empirical-Conceptual Approach to Linguistic Action* Norwood: Ablex.